



# PRINCETON PARKING STUDY



DRAFT Key Findings and Issues

Wednesday June 14, 2017

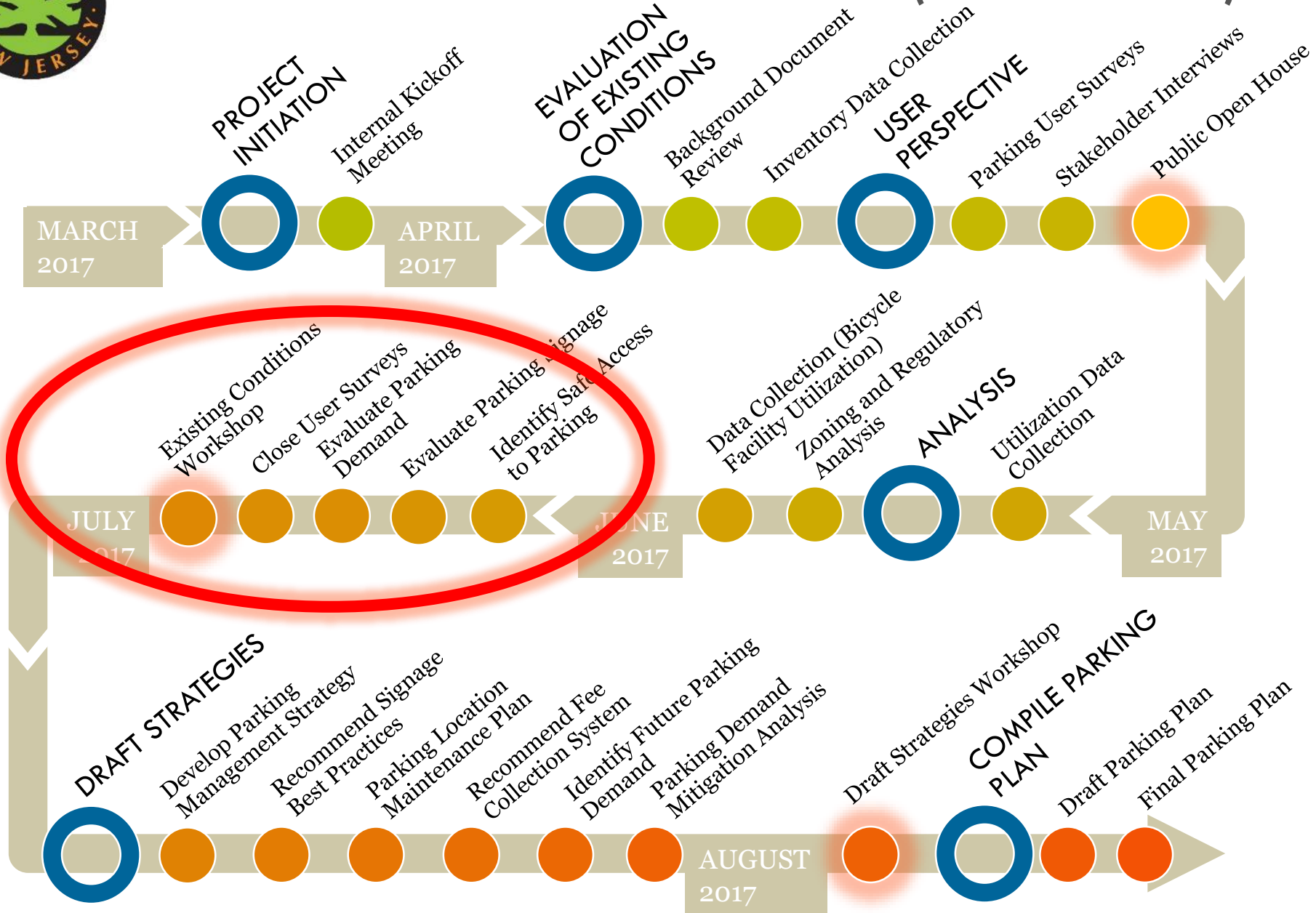


## TODAY'S AGENDA

- Study Overview
- Parking Inventory & Utilization
- Survey & Stakeholder Results
- Key Findings and Issues
- Draft Approaches



# SCHEDULE AND PROCESS (TENTATIVE)



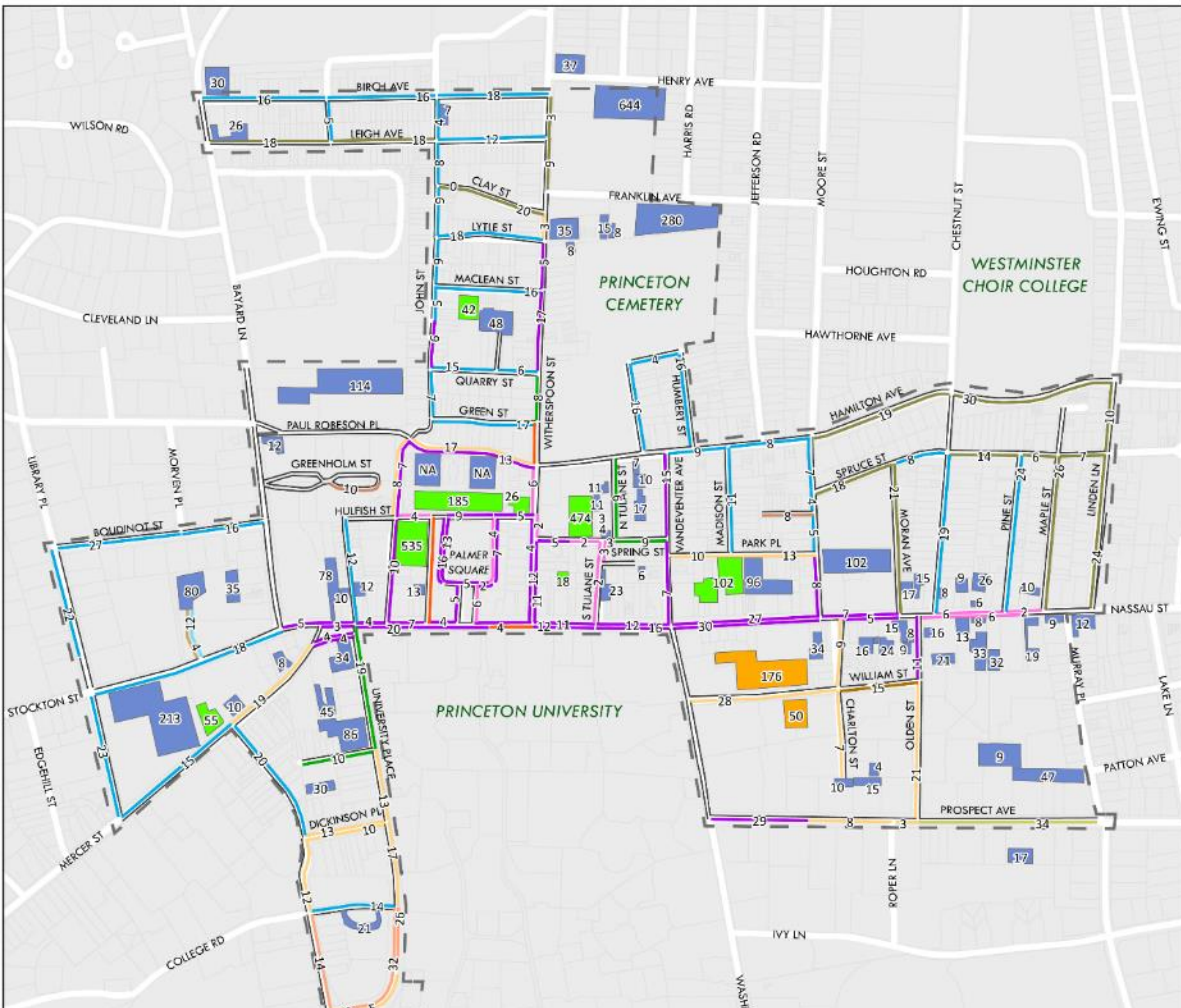


# PROJECT GOALS

- Evaluate parking to **enhance the accessibility and vibrancy** of Princeton's downtown
- **Protect residential neighborhoods near downtown** from detrimental parking effects
- Provide valid **accommodations for cycling and walking**
- Address the **high cost of parking for downtown employees**
- Understand parking **supply and demand** and identify key solutions to **address imbalances**
- Support **economic development, and a vibrant business and downtown** environment

# EXISTING PARKING INVENTORY





• **7,025** Total Parking Spaces  
 • Off Street Spaces: **5,392**  
 • On Street Spaces: **1,633**

Study Area	<b>On Street Parking Regulation</b>	30 Minute Parking Meters*	30 Minute Parking
Restricted	No Parking	2 Hour Parking Meters*	2 Hour Parking
Public	Unregulated, No Parking 2AM-6AM	5 Hour Parking Meters*	14 Hour Parking
Shared	Permit Only	10 Hour Parking Meters*	Loading Zones
	Resident Parking Only	14 Hour Parking Meters*	
	15 Minute Parking Meters*	20 Hour Parking Meters*	
		24 Hour Parking Meters*	

\*Times and prices vary



# ON-STREET PARKING REGULATIONS

Primary Regulation	Sum of Inventory	Percentage
2 Hour Parking	463	28.4%
2 Hour Parking Meters	397	24.3%
Unregulated, No Parking 2AM-6AM	243	14.9%
10 Hour Parking Meters	216	13.2%
14 Hour Parking Meters	72	4.4%
Meter Parking, Unlimited	59	3.6%
5 Hour Parking Meters	55	3.4%
30 Minute Parking Meters	46	2.8%
24 Hour Parking Meters	34	2.1%
Permit or Resident Parking Only	30	1.8%
15 Minute Parking Meters	8	0.5%
14 Hour Parking	6	0.4%
30 Minute Parking	4	0.2%
<b>Grand Total</b>	<b>1633</b>	<b>100.0%</b>

- 44% of off-street spaces are free, publicly available parking
- 54% of on-street spaces are metered public parking
- Only 15% of spaces are “unregulated,” and these are still covered by the overnight parking ban
- Majority of on-street parking is short term:
  - 56% of spaces are limited to 2 hours or less



# ON-STREET PARKING REGULATIONS

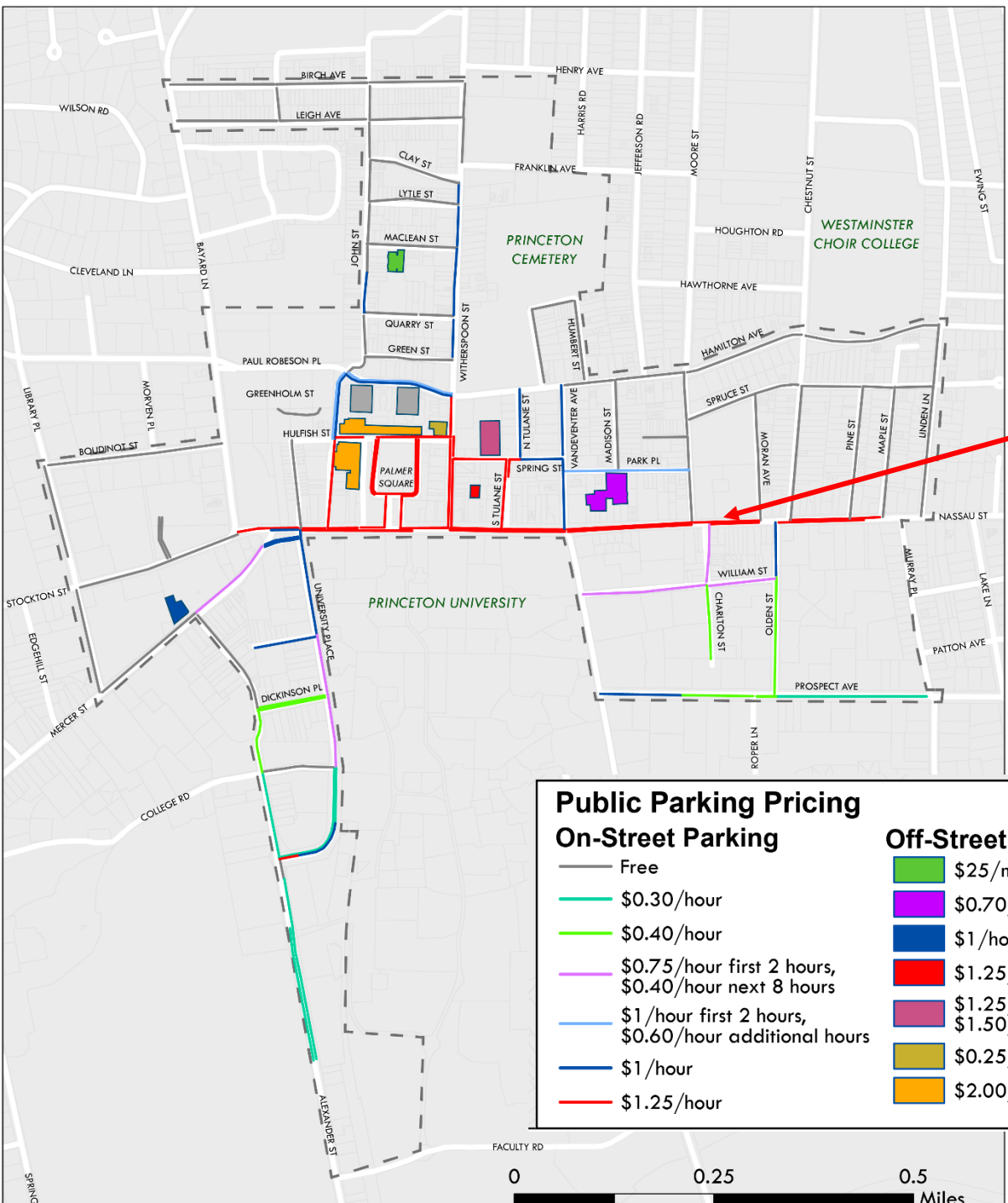
Row Labels	Sum of Inventory
10 Hour Parking Meters	109
10 Hour Parking Meters 8AM-7PM	7
10 Hour Parking Meters 8AM-7PM except Sunday	100
14 Hour Parking	6
14 Hour Parking Meters	72
15 Minute Parking Meters	8
2 Hour Parking	259
2 Hour Parking 8AM-6PM except Sunday	139
2 Hour Parking 8AM-7PM except Sunday	22
2 Hour Parking Meters	191
2 Hour Parking Meters 8AM-7PM except Sunday	46
2 Hour Parking Meters 8AM-8PM except Sunday	35
2 Hour Parking Meters 8AM-6PM except Sunday	6
2 Hour Parking Meters Mon-Sat 8AM-7PM, Sun 1PM-8PM	13
2 Hour Parking Meters Mon-Sat 8AM-8PM, Sun 1PM-8PM	106
2 Hour Parking 8AM-7PM except Sunday	43
24 Hour Parking Meters	34
30 Minute Parking	4
30 Minute Parking Meters	24
30 Minute Parking Meters Mon-Sat 8AM-8PM, Sun 1PM-8PM	22
5 Hour Parking Meters	18
5 Hour Parking Meters 10AM-7PM except Sunday	10
5 Hour Parking Meters 8AM-7PM except Sunday	27
Meter Parking 6AM-2AM	15
Meter Parking Mon-Sat, 6AM-8PM	44
20 Hour Parking, No Parking 2AM-6AM	243
Permit Only	12
Resident Parking Only	18
<b>Grand Total</b>	<b>1633</b>

- Huge variety of sub-regulations!
  - The **28 sub-regulations** make parking more confusing for visitors
- Wider variety of meter prices
  - Prices range from \$0.30/hr to \$1.25/hr
  - Some meters charge \$1.00/hr for the first two hours, and then decrease to \$0.60/hr

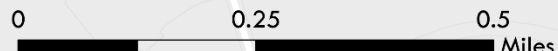


# PARKING PRICING

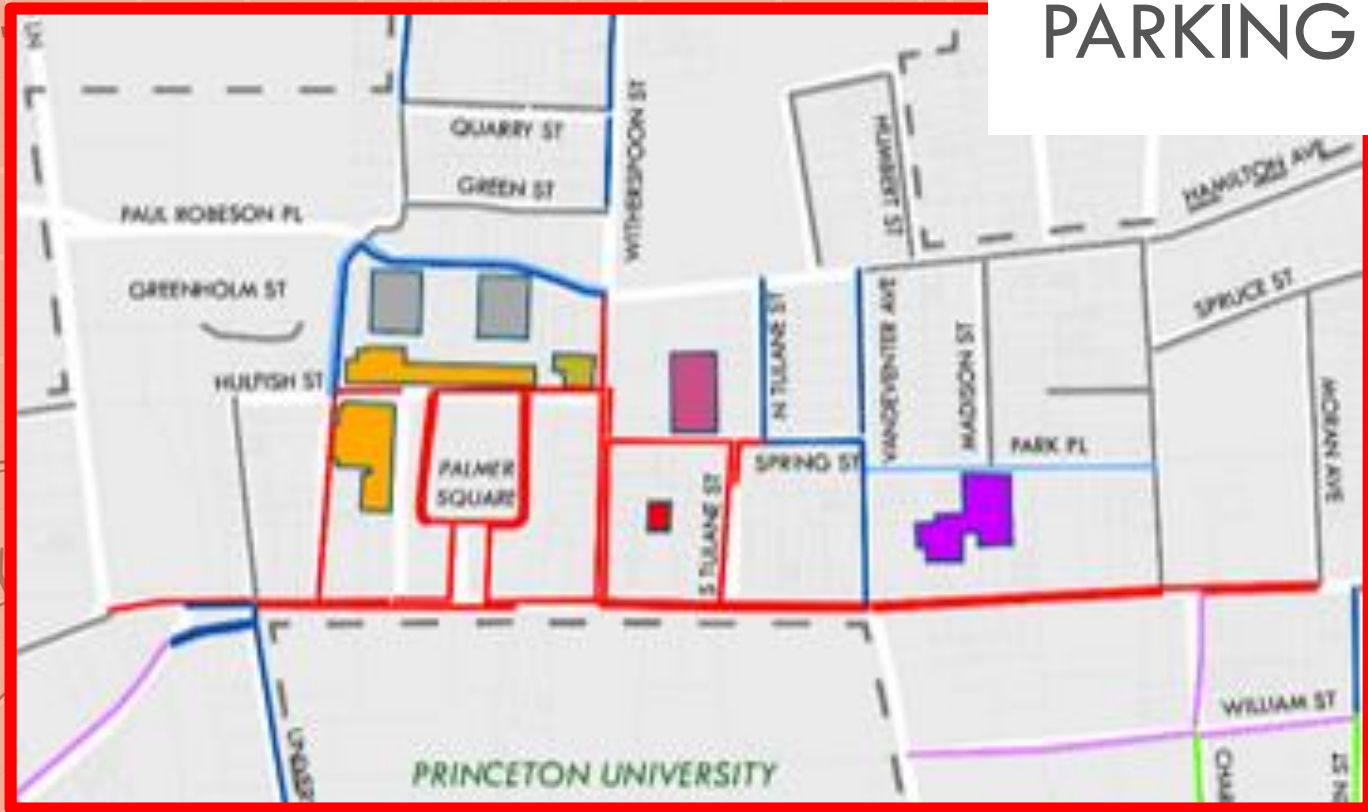
Higher parking rates are concentrated along Nassau Street and Palmer Square



Public Parking Pricing		
On-Street Parking	Off-Street Parking	Study Area
— Free	Green \$25/month	[Dashed Box]
— \$0.30/hour	Purple \$0.70/hour	
— \$0.40/hour	Blue \$1/hour	
— \$0.75/hour first 2 hours, \$0.40/hour next 8 hours	Red \$1.25/hour	
— \$1/hour first 2 hours, \$0.60/hour additional hours	Pink \$1.25/hour first 3 hours, \$1.50/hour additional hours	
— \$1/hour	Olive \$0.25/9 minutes	
— \$1.25/hour	Orange \$2.00/hour	



# PARKING PRICING



## Public Parking Pricing

### On-Street Parking

- Free
- \$0.30/hour
- \$0.40/hour
- \$0.75/hour first 2 hours, \$0.40/hour next 8 hours
- \$1/hour first 2 hours, \$0.60/hour additional hours
- \$1/hour
- \$1.25/hour

### Off-Street Parking

- \$25/month
- \$0.70/hour
- \$1/hour
- \$1.25/hour
- \$1.25/hour first 3 hours, \$1.50/hour additional hours
- \$0.25/9 minutes
- \$2.00/hour



Study Area



# PUBLICLY AVAILABLE PARKING V. PRIVATELY AVAILABLE PARKING

- Publicly Available Parking (Public Parking):
  - Available, paid or unpaid, for open use by the public without limitations beyond pricing and time limits
- Restricted Parking (Private Parking):
  - Available only to specific users such as employees, permit holders, residents of the building, customers of a specific business, etc.
- Shared Parking:
  - Parking with a combination of public and private regulations, such as Princeton University lots which require permits, but open to the public after 5 PM and on weekends



# OFF-STREET PARKING

<b>Parking Type</b>	<b>Sum of Inventory</b>	<b>Percentage</b>
Restricted	2694	<b>50%</b>
Public	1437	<b>26%</b>
Shared	1261	<b>24%</b>
<b>Grand Total</b>	<b>5392</b>	<b>100%</b>

- Most off-street spaces are restricted parking for Princeton University, other businesses and institutions, and private residences
- Shared spaces are either lots with both private and public regulations or Princeton University lots which open to the public after 5 PM and on weekends
- Only 26% of off-street spaces are always publicly available
- All off-street public parking is paid parking
  - Spring Street garage pricing is lower than Chambers Street and Hulfish Street garage pricing



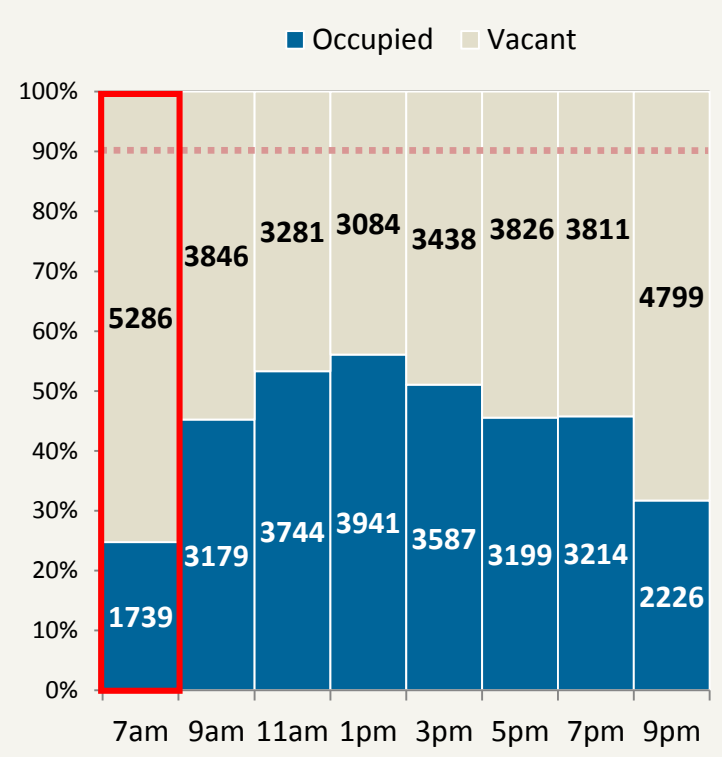
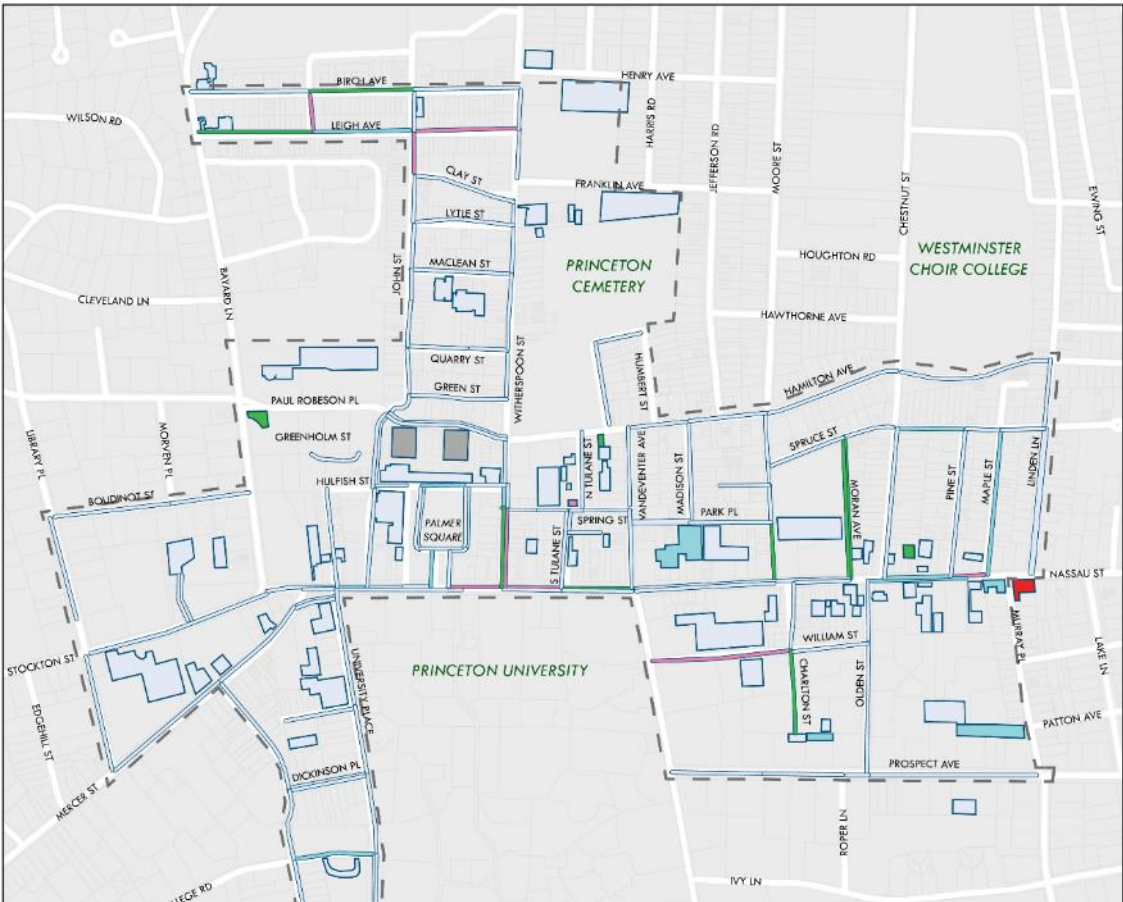
# KEY FINDINGS - INVENTORY

- There are **7,025 spaces** within the Downtown Princeton study area
- All streets have some form of regulation, with 28 sub-regulations
- **54% of on-street parking is priced**, with prices ranging from \$0.30/hour to \$1.25/hour
- **26% percent of off-street parking is publicly available**
- **Over 1,000 publicly accessible spaces are added by Princeton University lots** after 5 PM and on weekends
- **Off-street parking is more expensive**, on average, than on-street parking
  - **Spring Street garage is priced lower** than Chambers Street and Hulfish Street garages
- **2-hour time limits** limit customers ability to stay downtown

# WEEKDAY PARKING UTILIZATION



# Downtown Princeton Parking Utilization, Thursday, 7 AM

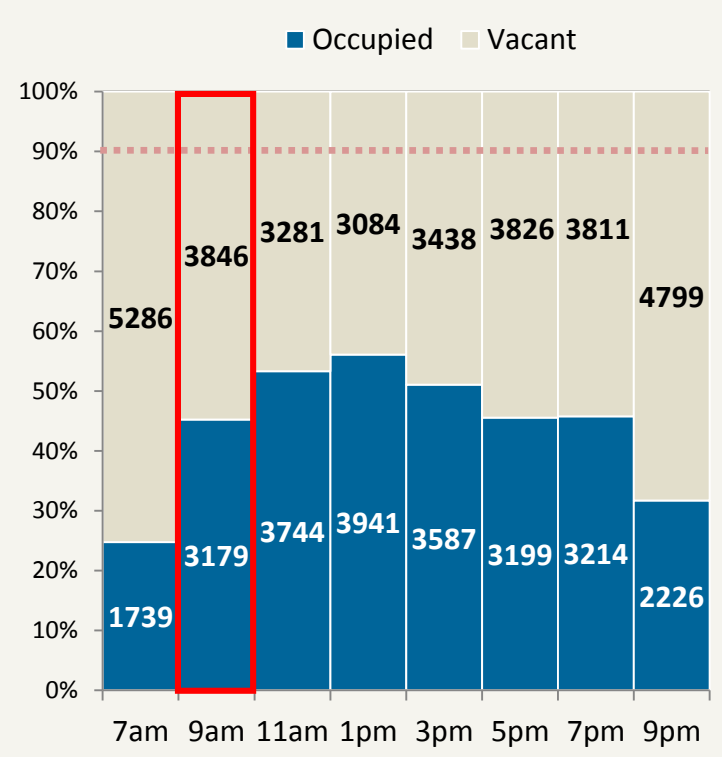
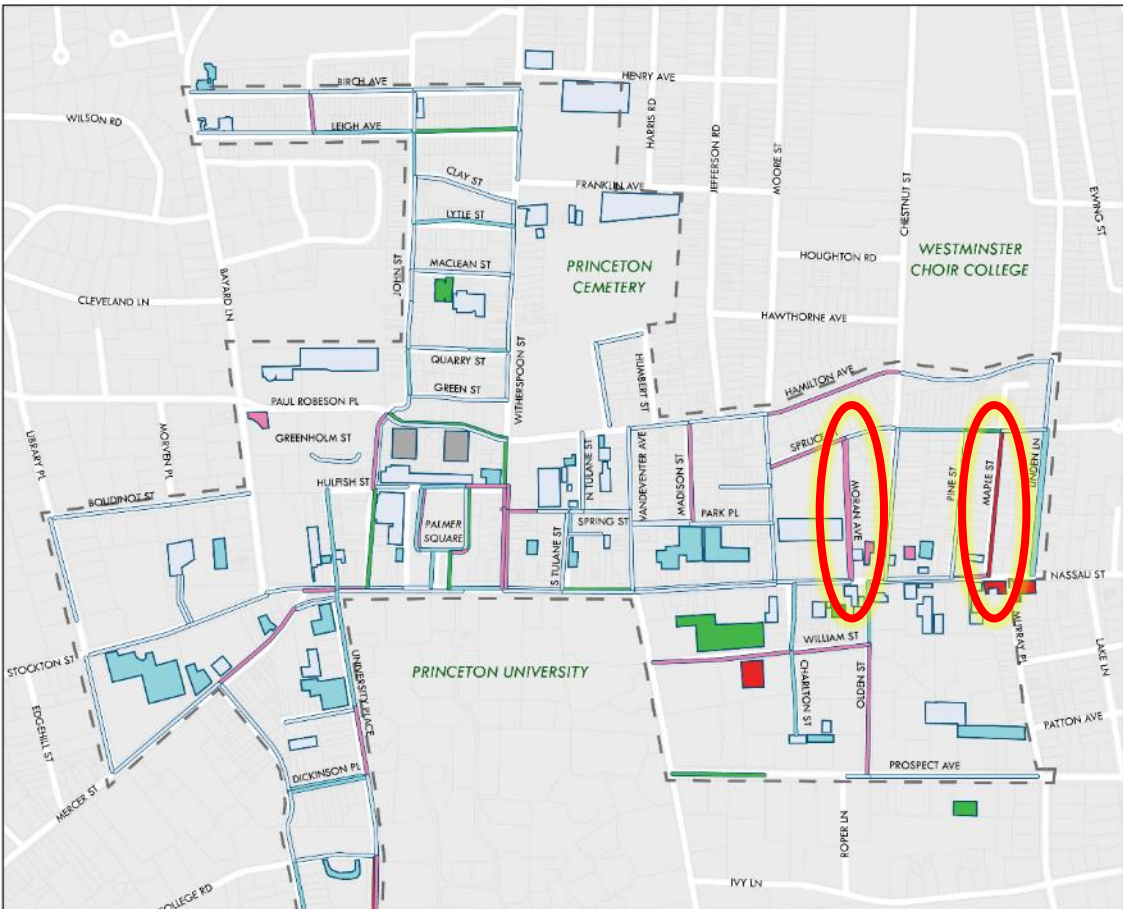


### Parking Utilization, Thursday, 7 AM

On-Street Parking		Off-Street Parking		
	0% - 60%		0% - 60%	
	61% - 80%		61% - 80%	
	81% - 90%		81% - 90%	<b>Study Area</b>
	91% - 100%		91% - 100%	<b>Not Accessible</b>
	Over 100%		Over 100%	

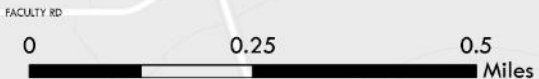


# Downtown Princeton Parking Utilization, Thursday, 9 AM



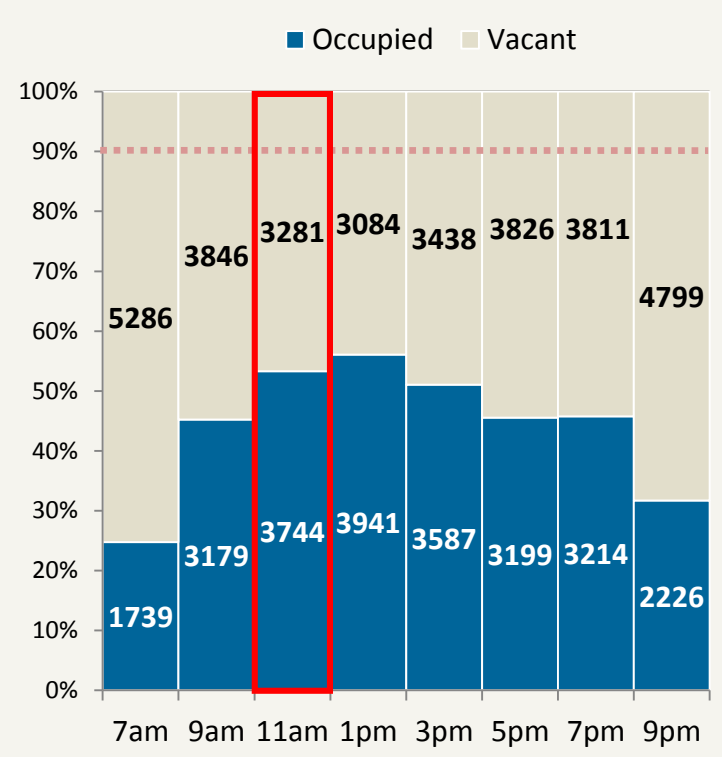
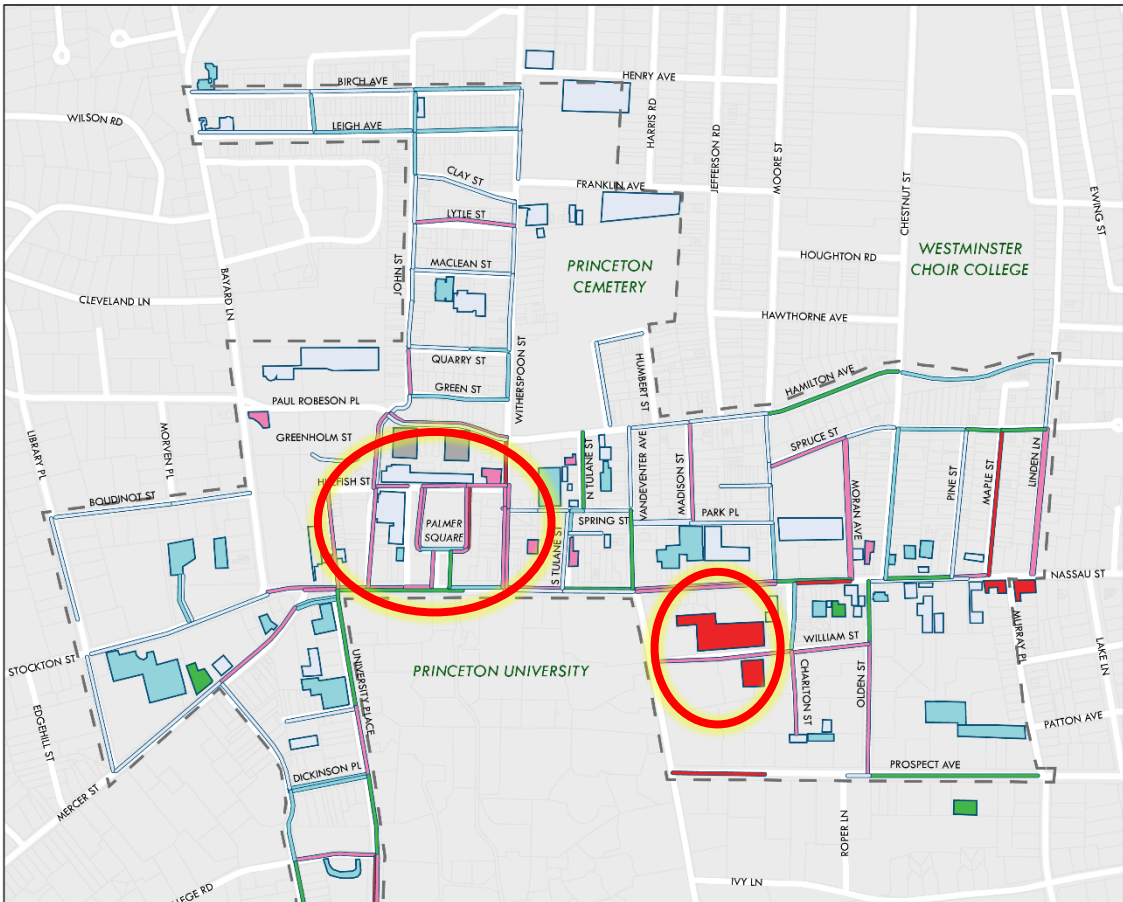
**Parking Utilization, Thursday, 9 AM**

On-Street Parking	Off-Street Parking	
0% - 60%	0% - 60%	Study Area
61% - 80%	61% - 80%	Not Accessible
81% - 90%	81% - 90%	
91% - 100%	91% - 100%	
Over 100%	Over 100%	

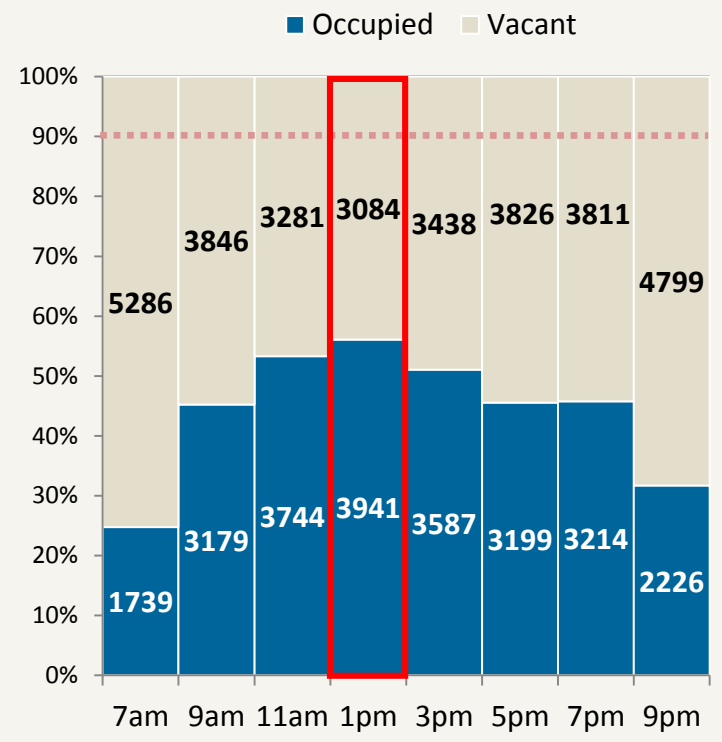
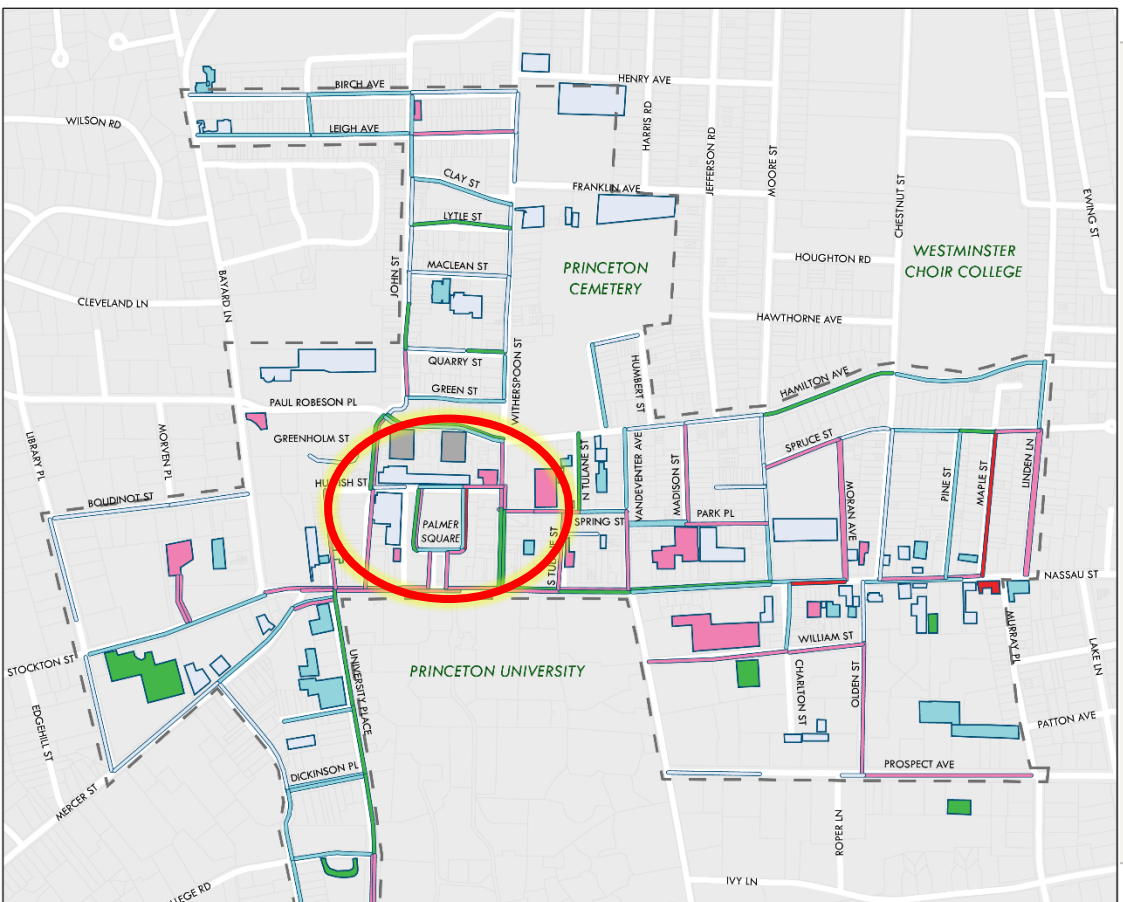




# Downtown Princeton Parking Utilization, Thursday, 11 AM



# Downtown Princeton Parking Utilization, Thursday, 1 PM

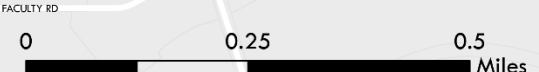


**Parking Utilization, Thursday, 1 PM**

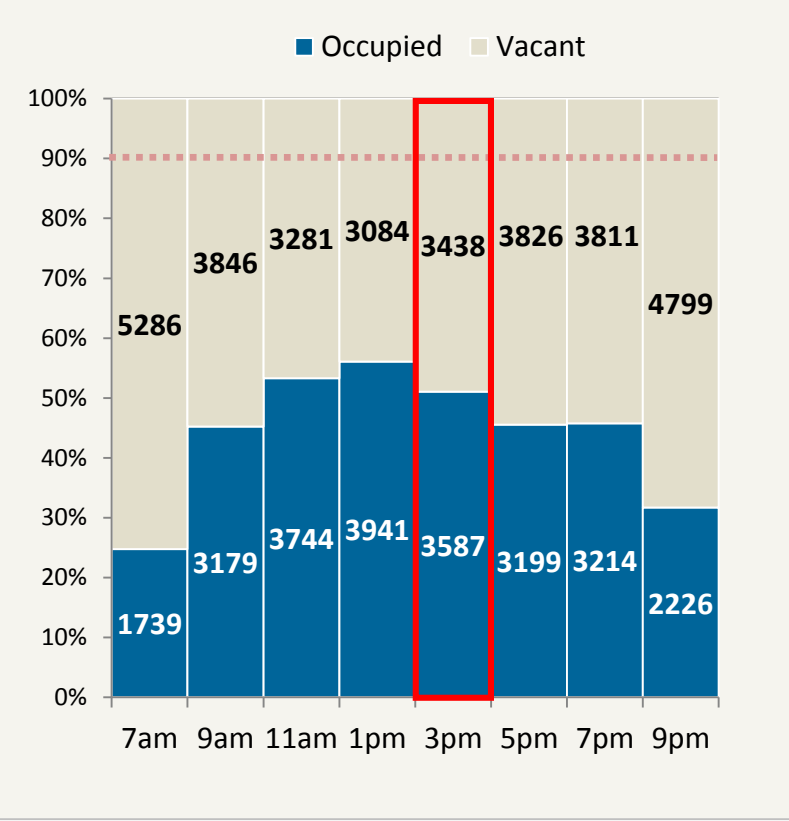
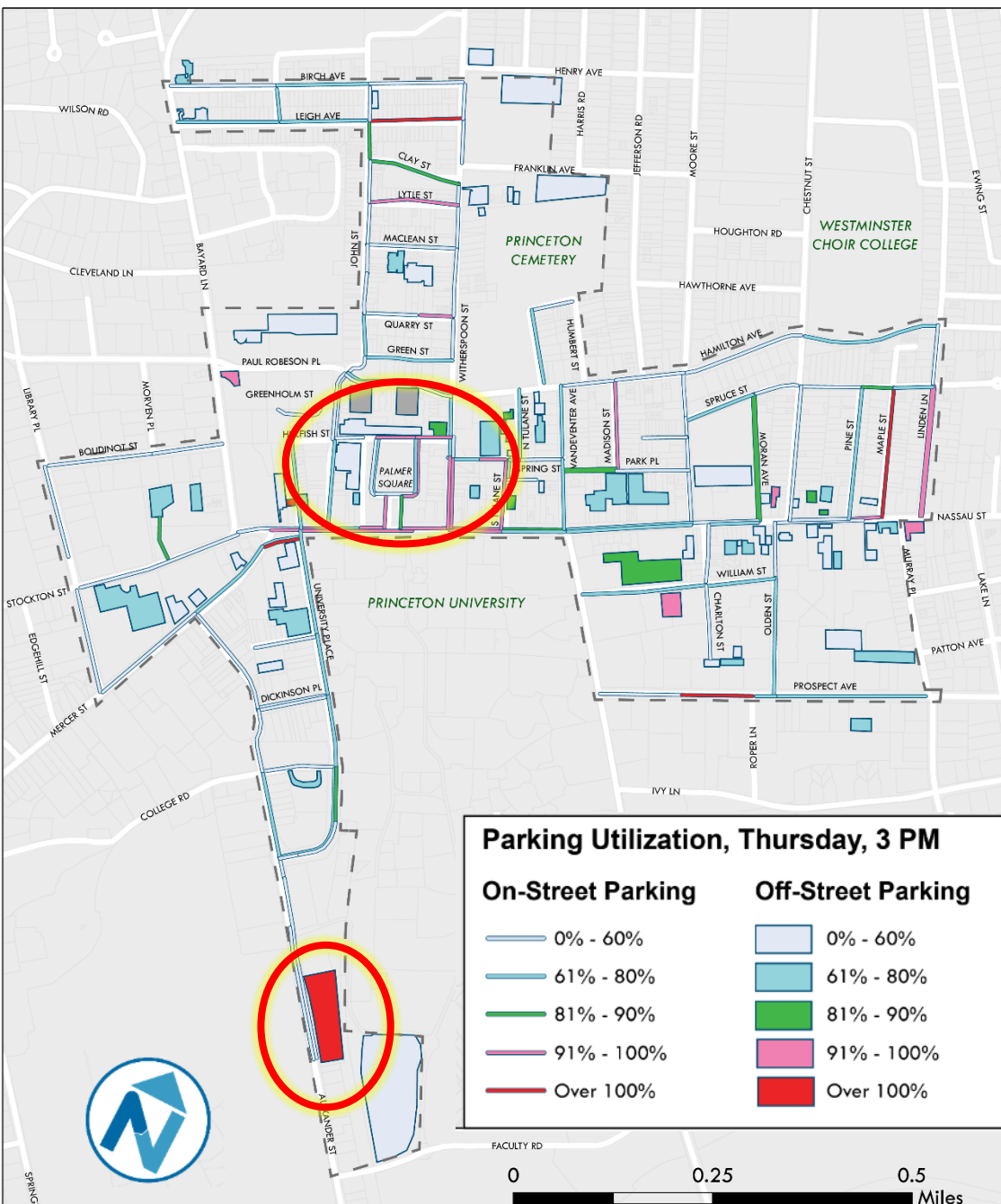
On-Street Parking	Off-Street Parking
0% - 60%	0% - 60%
61% - 80%	61% - 80%
81% - 90%	81% - 90%
91% - 100%	91% - 100%
Over 100%	Over 100%

Study Area  
 Not Accessible

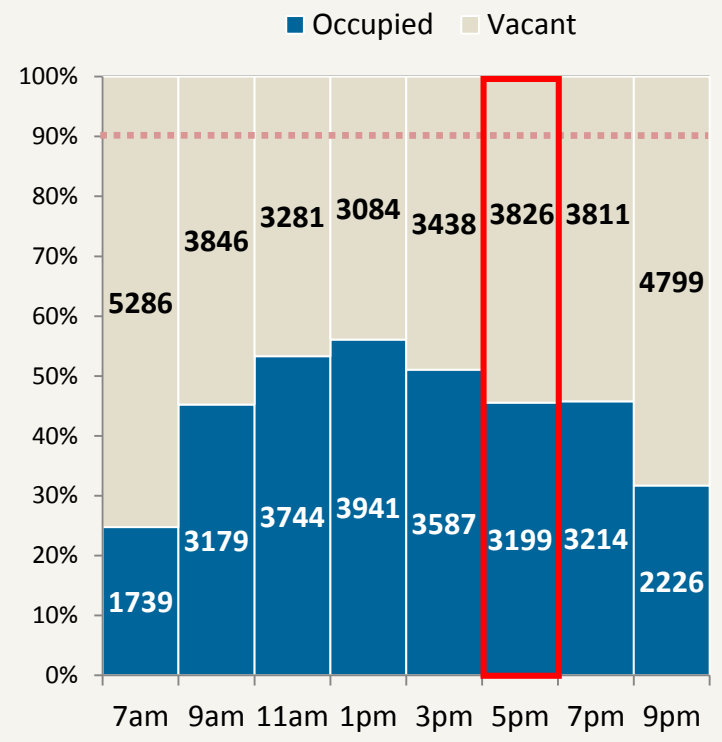
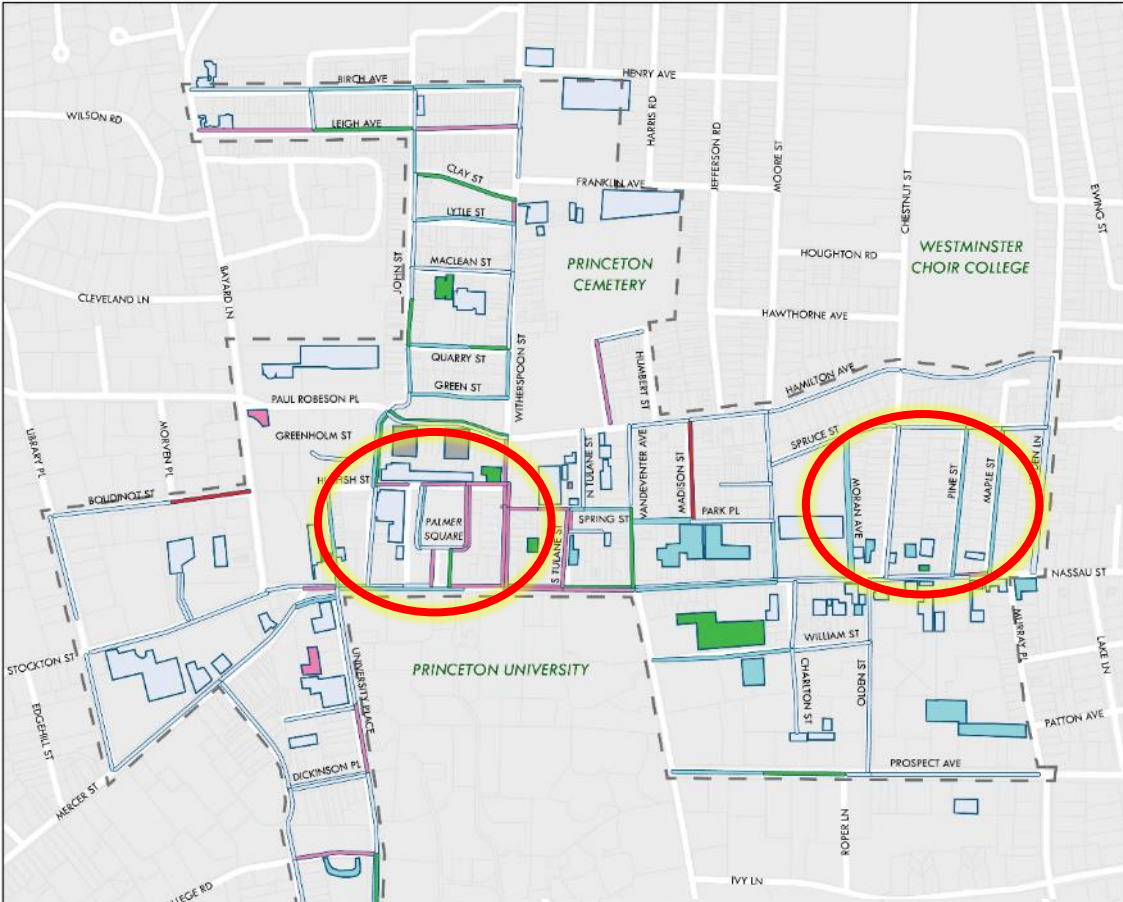
**Peak utilization:  
parking in Princeton  
is only half  
occupied.**



# Downtown Princeton Parking Utilization, Thursday, 3 PM



# Downtown Princeton Parking Utilization, Thursday, 5 PM



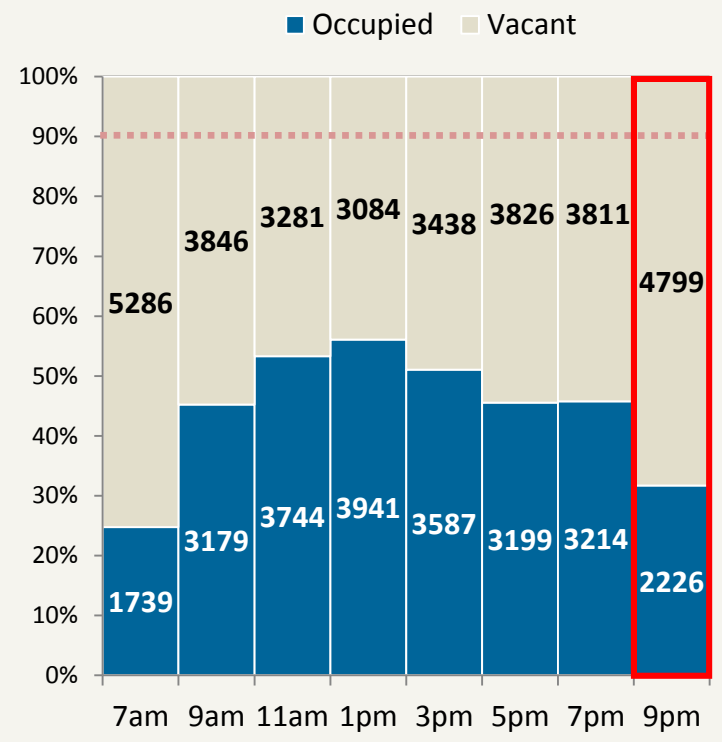
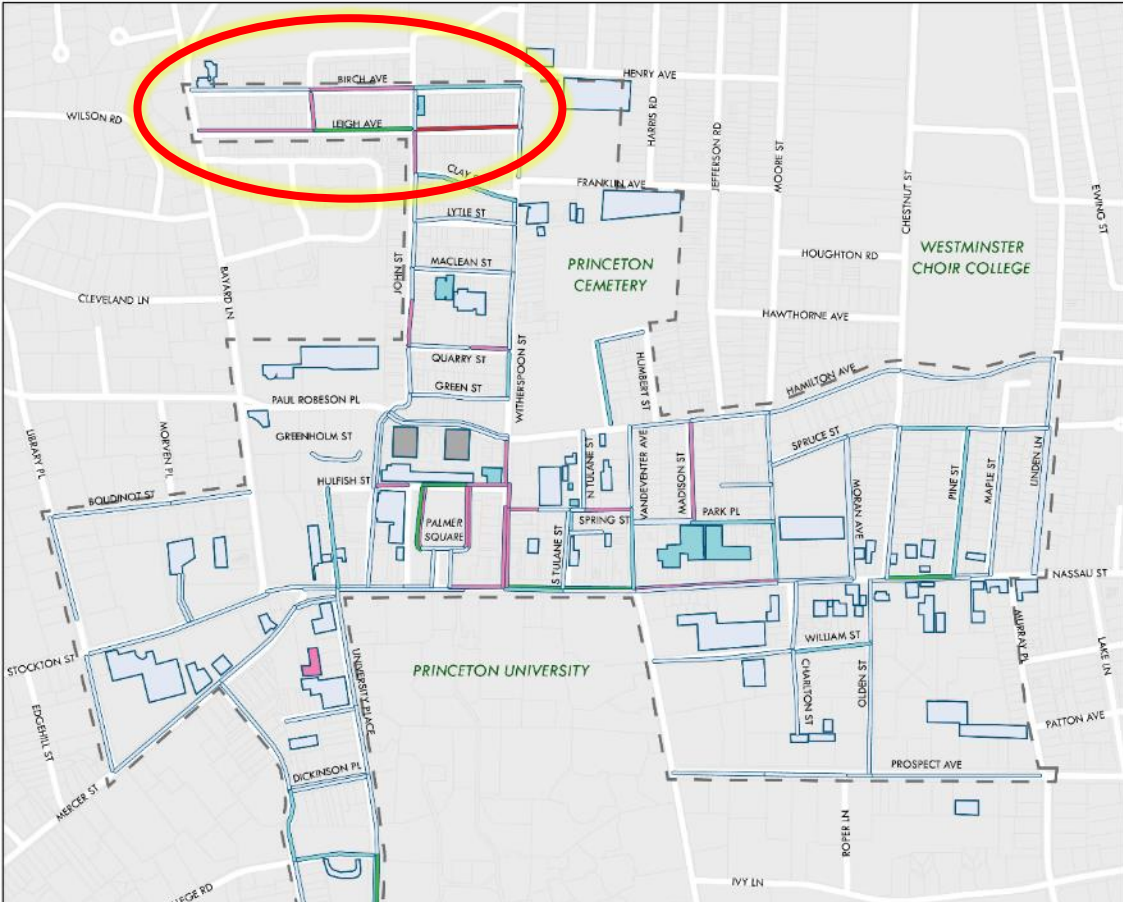
### Parking Utilization, Thursday, 5 PM

On-Street Parking	Off-Street Parking	Legend
0% - 60%	0% - 60%	Study Area
61% - 80%	61% - 80%	Not Accessible
81% - 90%	81% - 90%	
91% - 100%	91% - 100%	
Over 100%	Over 100%	





# Downtown Princeton Parking Utilization, Thursday, 9 PM



**Parking Utilization, Thursday, 9 PM**

On-Street Parking		Off-Street Parking		
0% - 60%	Lightest Blue	0% - 60%	Lightest Blue	Study Area
61% - 80%	Light Blue	61% - 80%	Light Blue	Not Accessible
81% - 90%	Medium Blue	81% - 90%	Medium Blue	
91% - 100%	Dark Blue	91% - 100%	Dark Blue	
Over 100%	Red	Over 100%	Red	

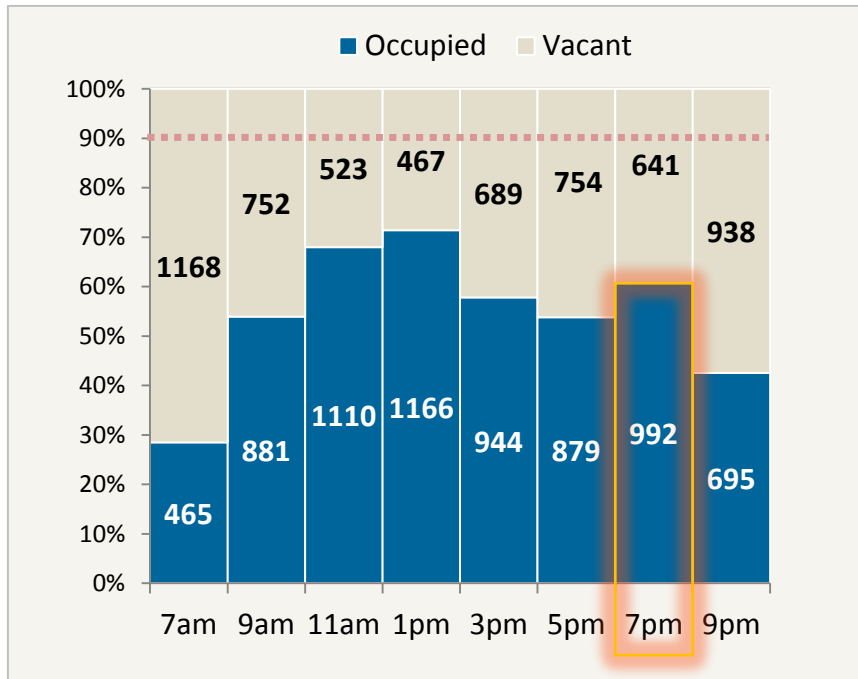




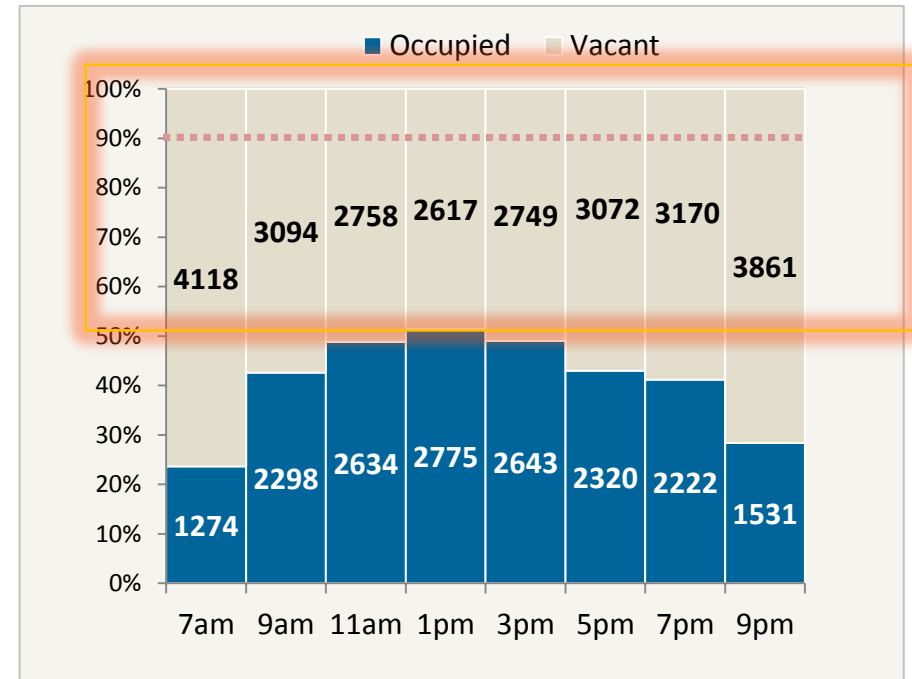
# ON V. OFF STREET UTILIZATION

- On street parking approaches 75% utilization at peak
- Off street parking does not surpass 50% utilization
- On-street parking spikes **again** at 7 PM when meter regulations end

## ON STREET (all)



## OFF STREET (all)



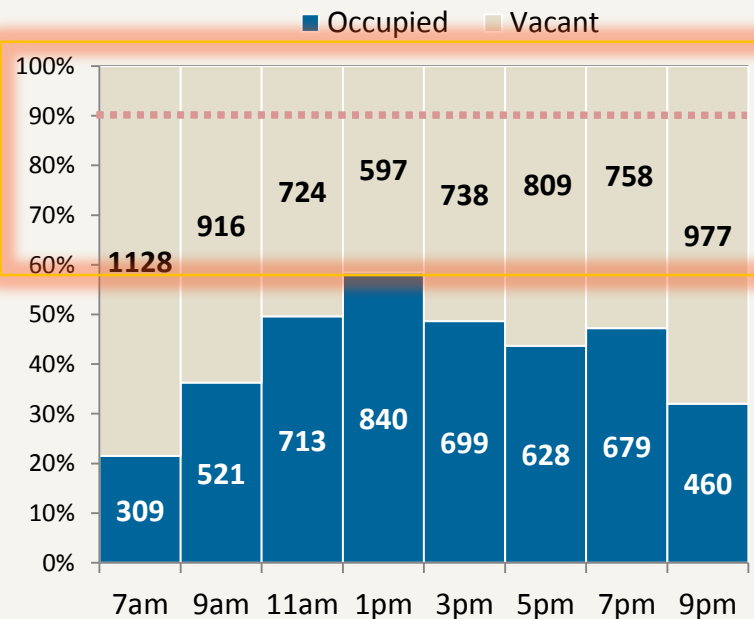
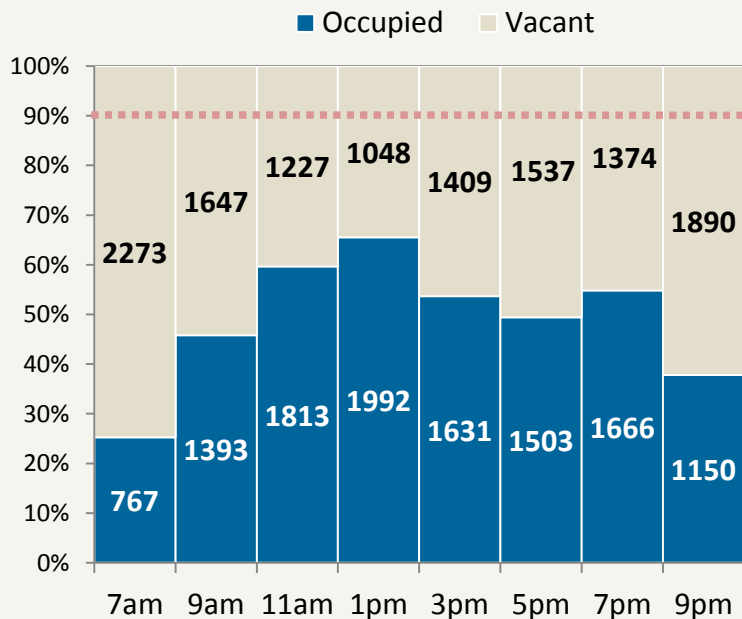


# PUBLICLY ACCESSIBLE PARKING UTILIZATION

- Total public parking utilization nears 65%
- Off street public parking utilization does not pass 60%
- A large number of off-street public spaces are unutilized during the week

## ALL PUBLIC PARKING (3,040 spaces)

## OFF STREET PUBLIC PARKING (1,437 spaces)



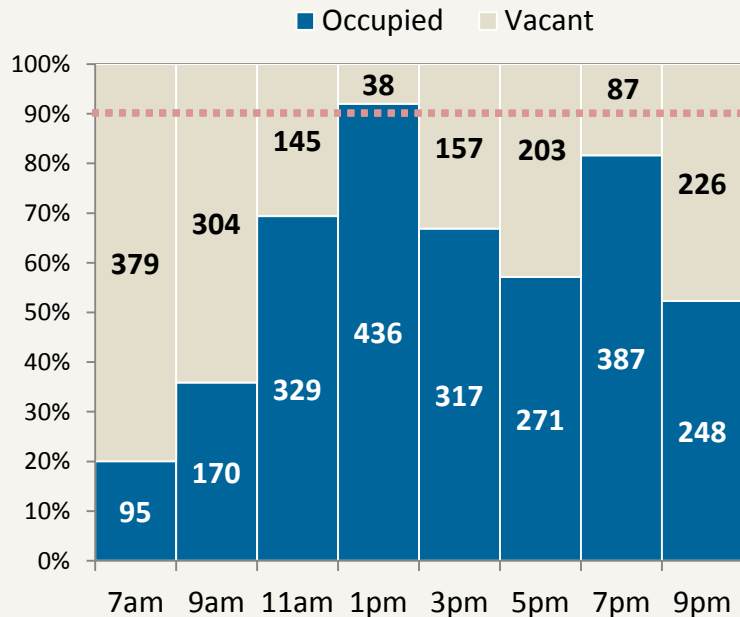




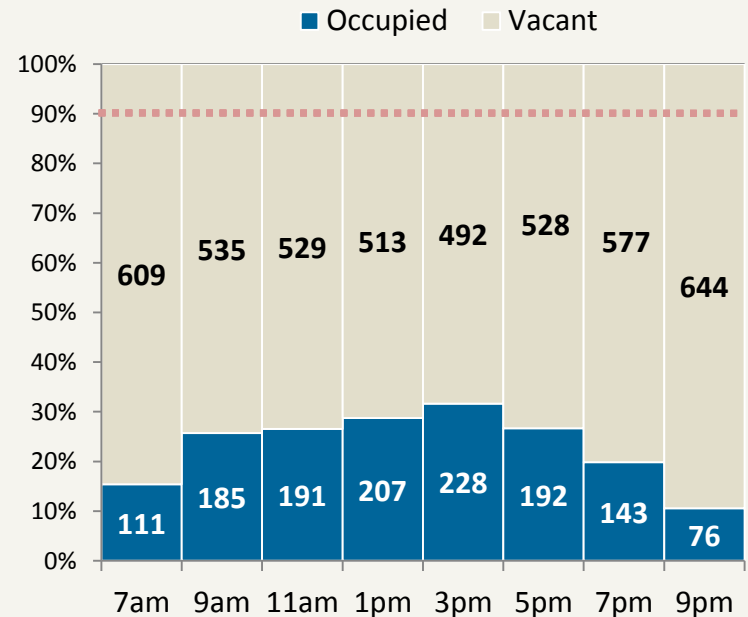
# PUBLICLY AVAILABLE GARAGE UTILIZATION

- Spring Street experiences greater utilization due to lower pricing
- Chambers and Hulfish garages (privately owned) do not surpass 35% utilization
- At peak, Spring Street garage is over 90% full

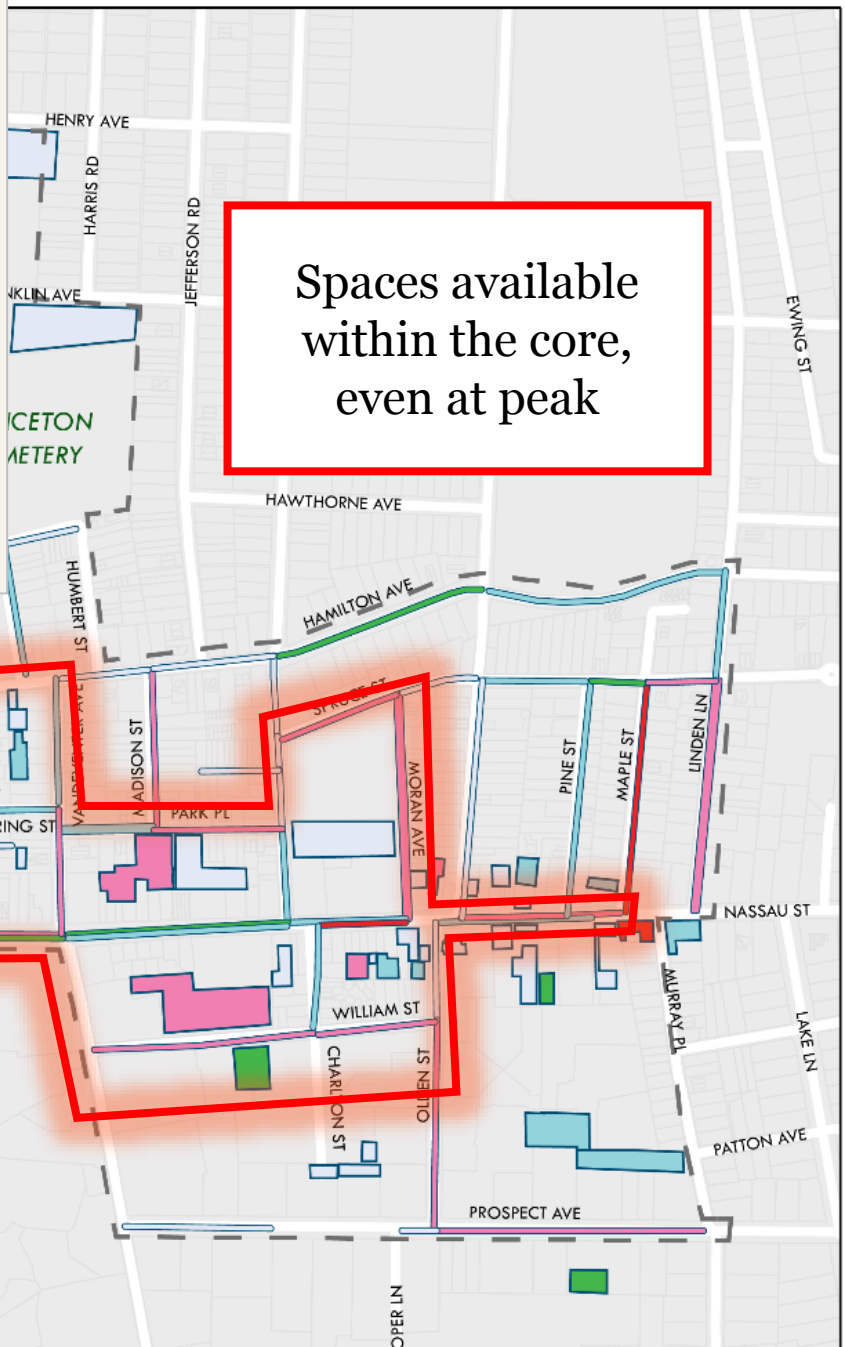
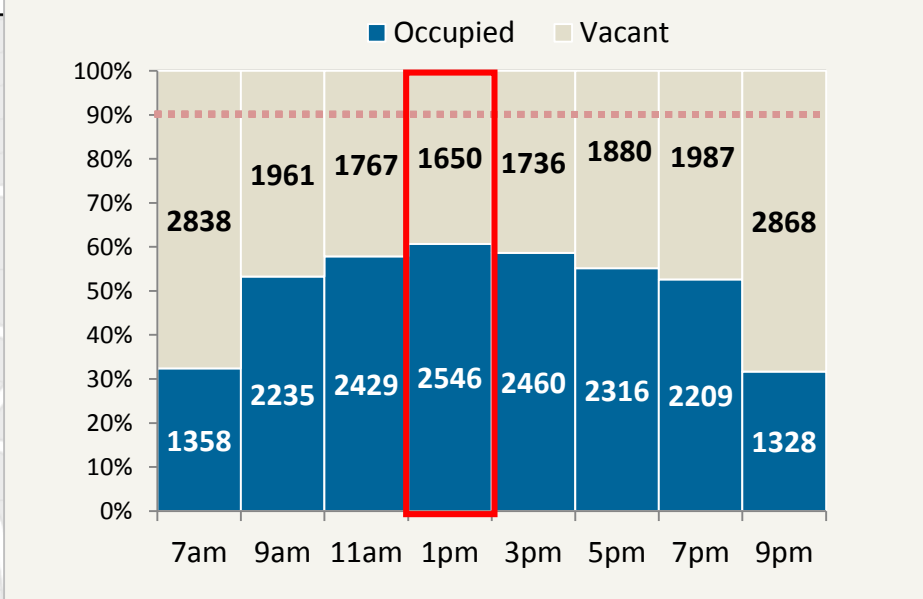
## SPRING STREET (less expensive)



## CHAMBERS AND HULFISH ST (more expensive)



# CORE OF PARKING DEMAND, WEEKDAYS





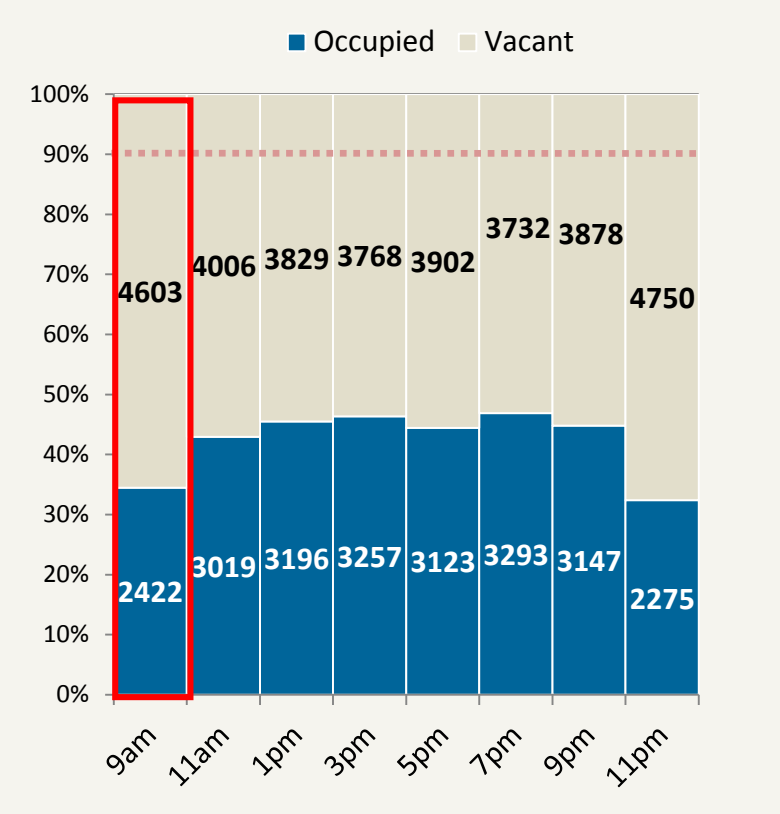
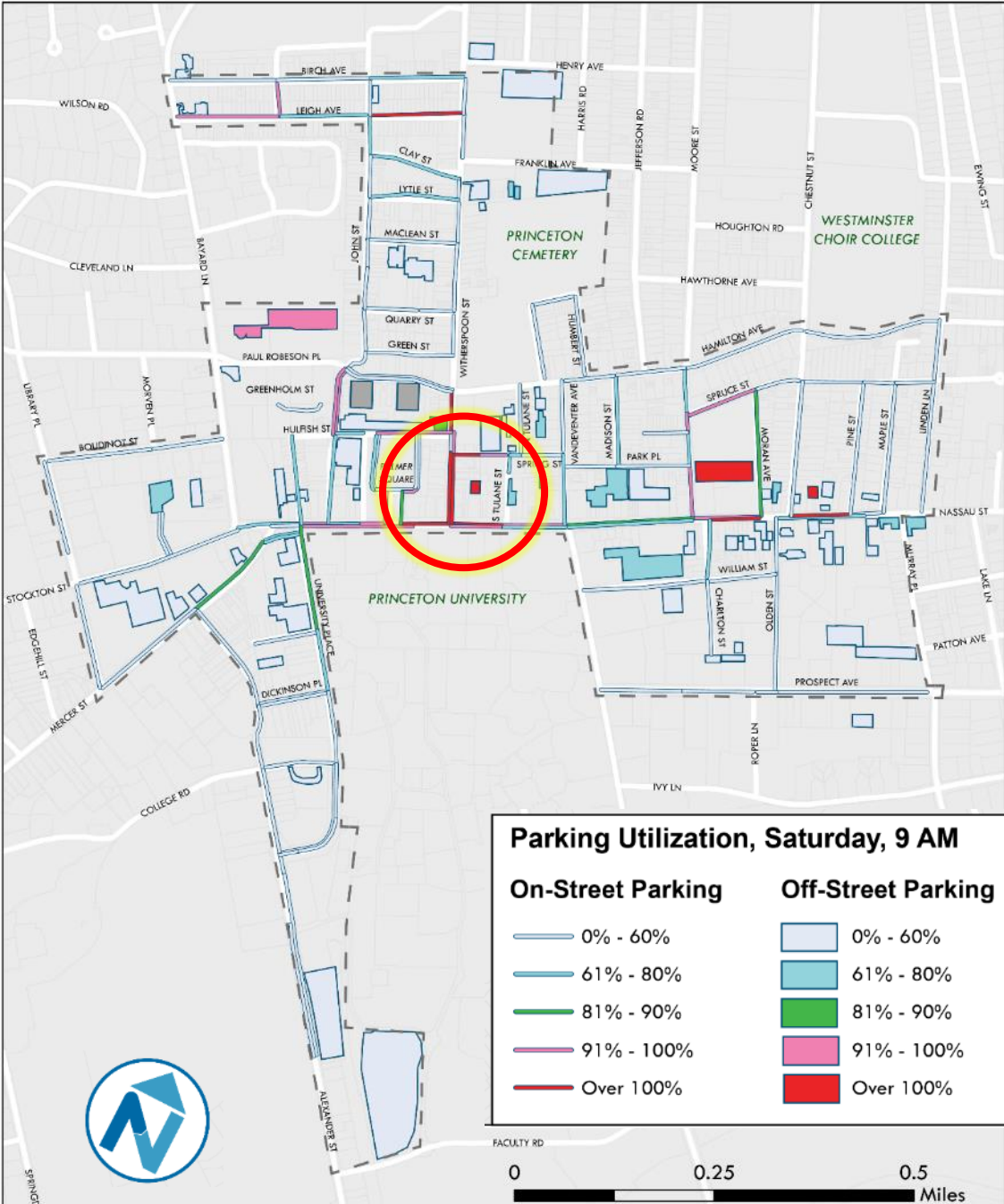
## KEY FINDINGS – WEEKDAY DEMAND

- **Peak demand occurs at 1 pm** with 53% total utilization
- **Parkers do not appear to be aware that Princeton University lots become available** to the public after 5 PM
- **Spring Street garage is used at a higher rate** than the Palmer Square garages due to lower pricing and validation options
- **Parking in in street metered spaces spikes at 7 PM** when meter enforcement ends
- **There is capacity in the core at peak times in off-street facilities** like the Chambers Street and Hulfish Street garages as well as restricted lots

# WEEKEND PARKING UTILIZATION



# Downtown Princeton Parking Utilization, Saturday, 9 AM



**Parking Utilization, Saturday, 9 AM**

**On-Street Parking**      **Off-Street Parking**

0% - 60%      0% - 60%

61% - 80%      61% - 80%

81% - 90%      81% - 90%

91% - 100%      91% - 100%

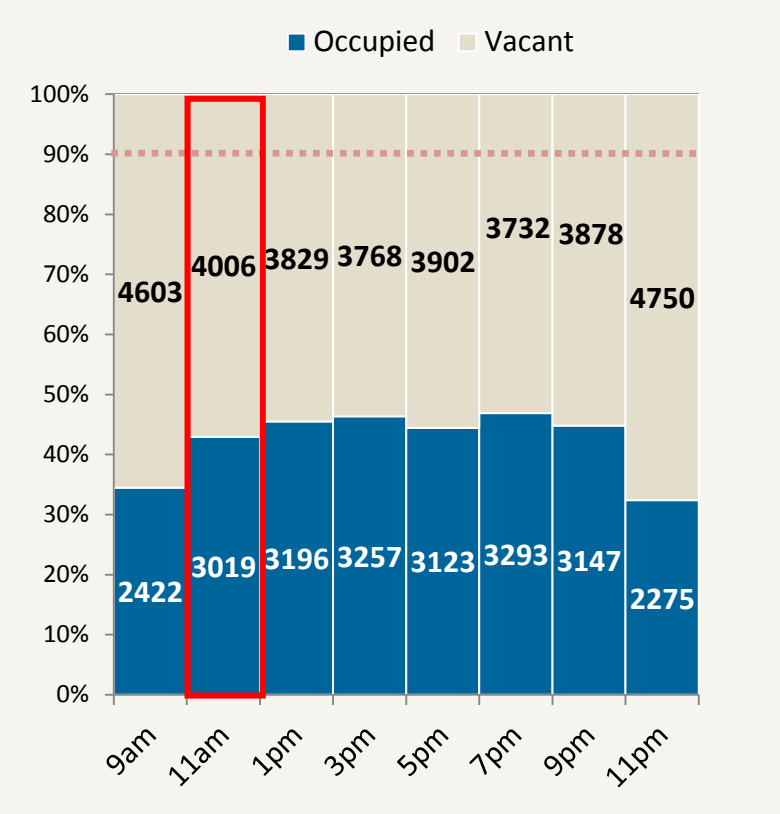
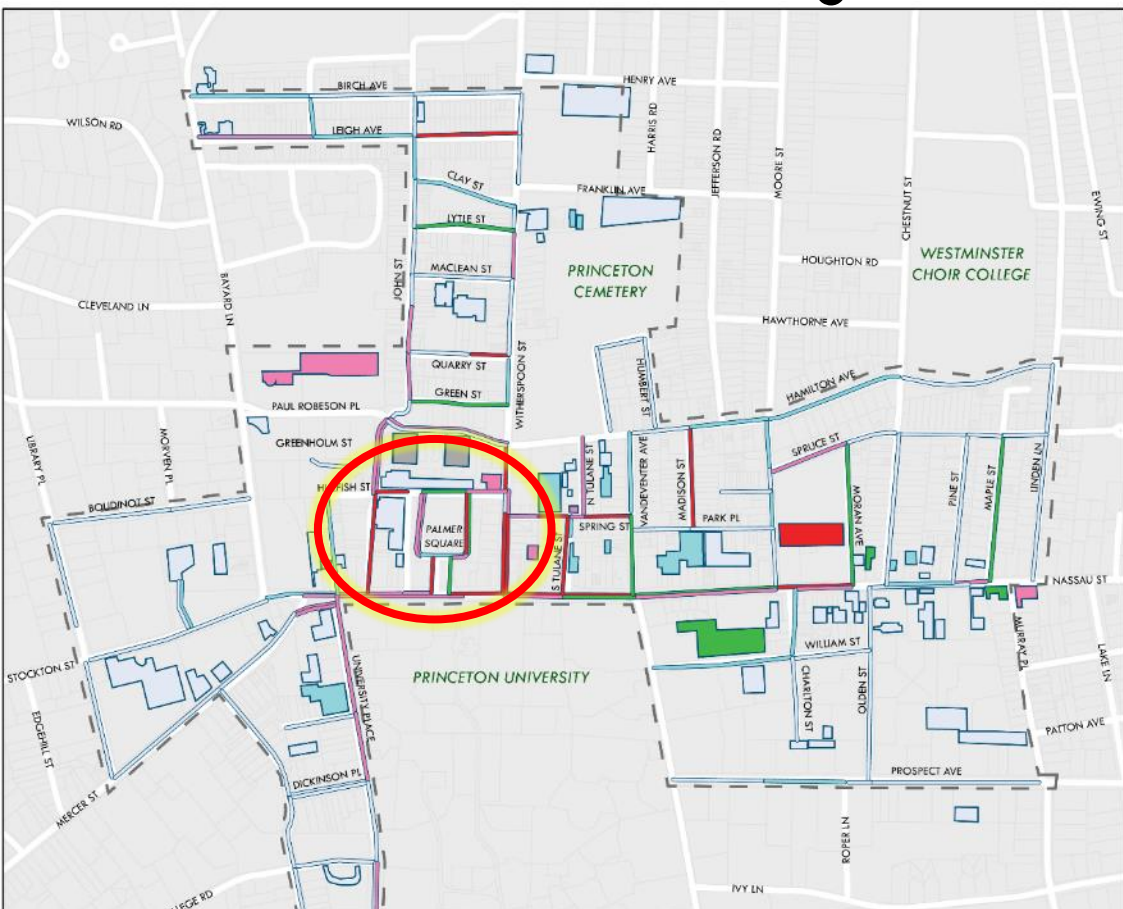
Over 100%      Over 100%

Study Area

Not Accessible



# Downtown Princeton Parking Utilization, Saturday, 11 AM

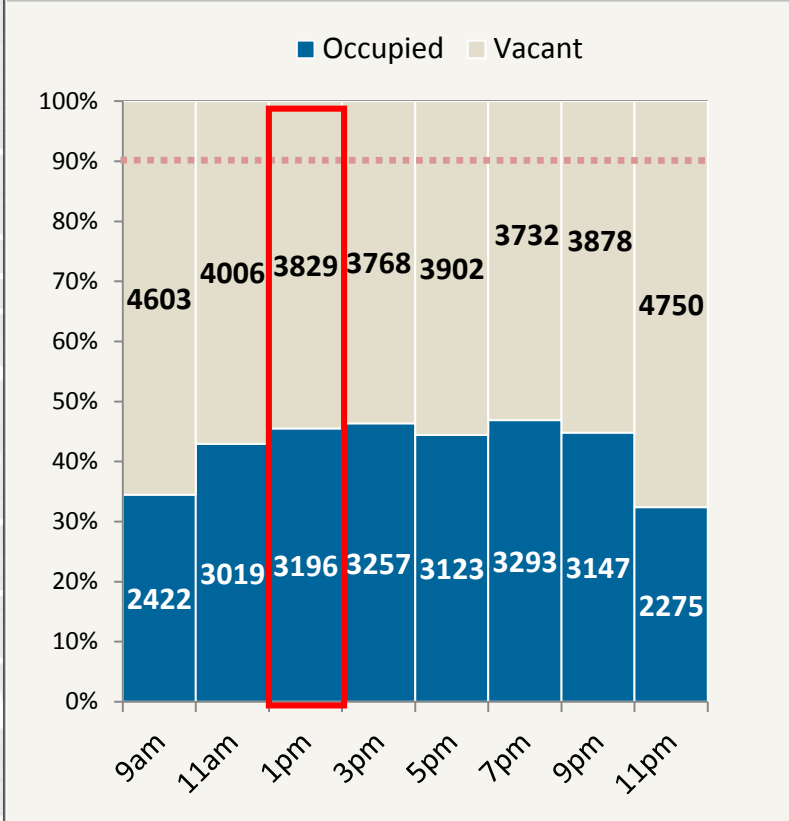
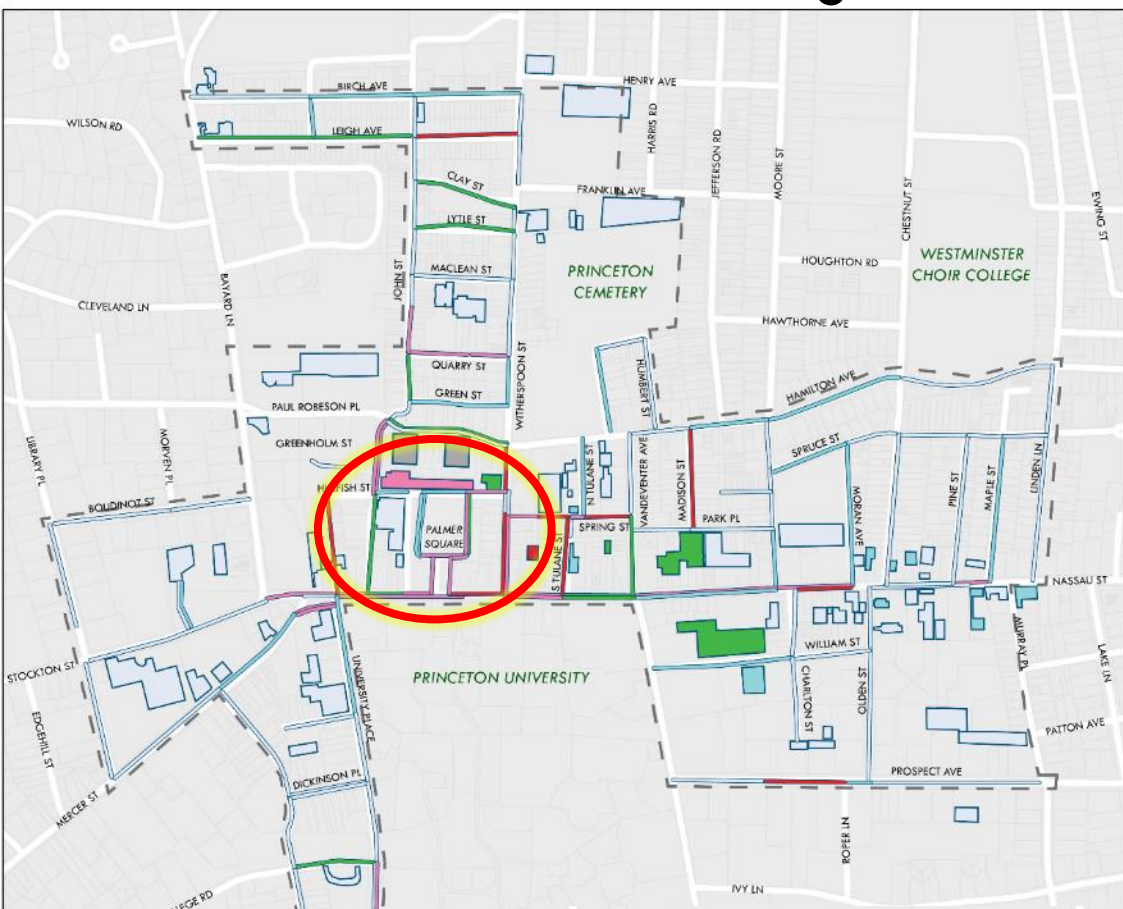


**Parking Utilization, Saturday, 11 AM**

On-Street Parking		Off-Street Parking		
	0% - 60%		0% - 60%	Study Area
	61% - 80%		61% - 80%	Not Accessible
	81% - 90%		81% - 90%	
	91% - 100%		91% - 100%	
	Over 100%		Over 100%	



# Downtown Princeton Parking Utilization, Saturday, 1 PM



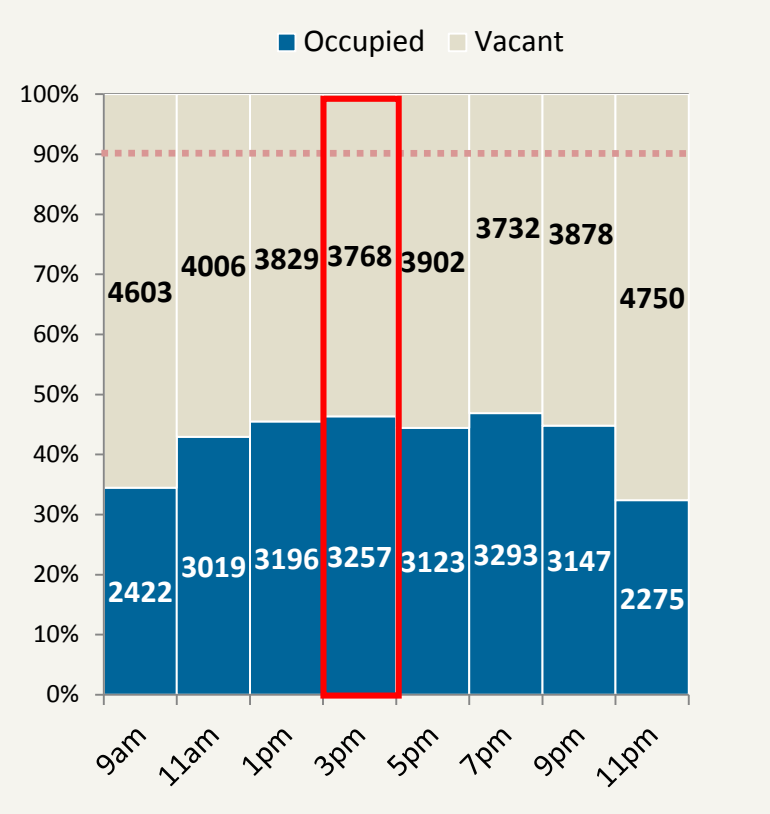
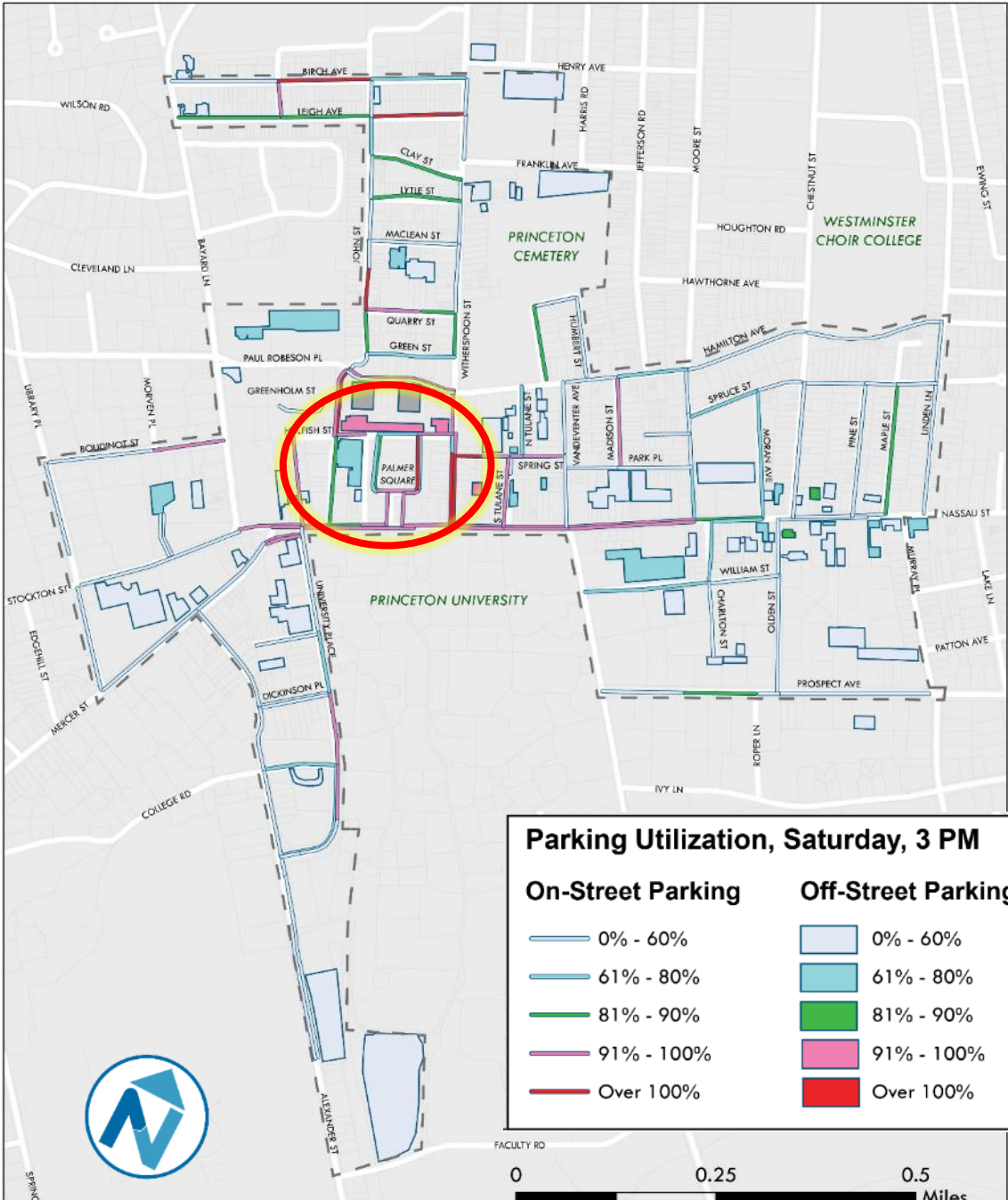
### Parking Utilization, Saturday, 1 PM

On-Street Parking	Off-Street Parking
0% - 60%	0% - 60%
61% - 80%	61% - 80%
81% - 90%	81% - 90%
91% - 100%	91% - 100%
Over 100%	Over 100%

Study Area  
 Not Accessible

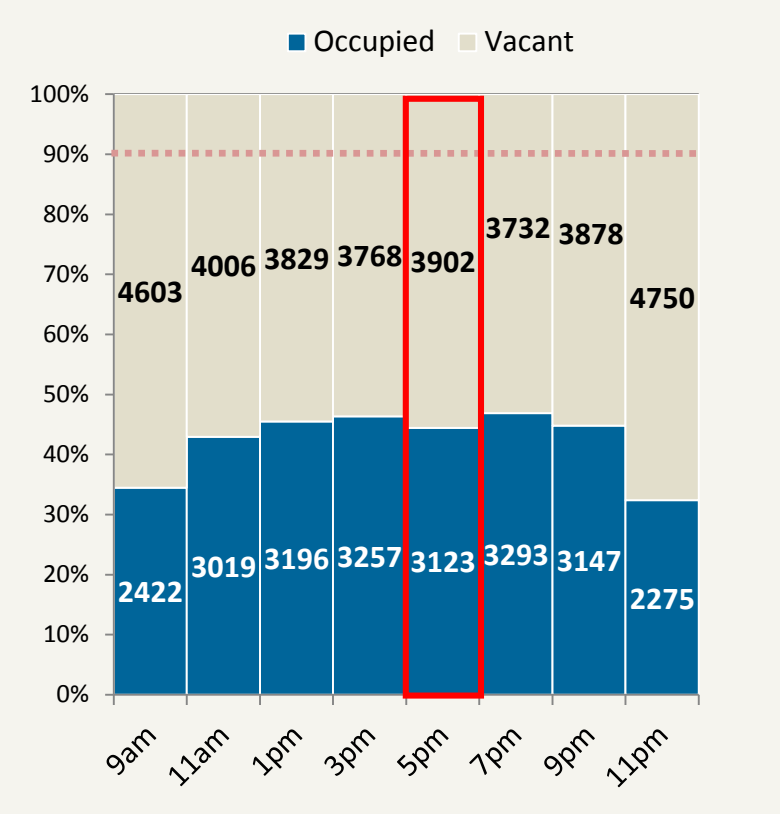
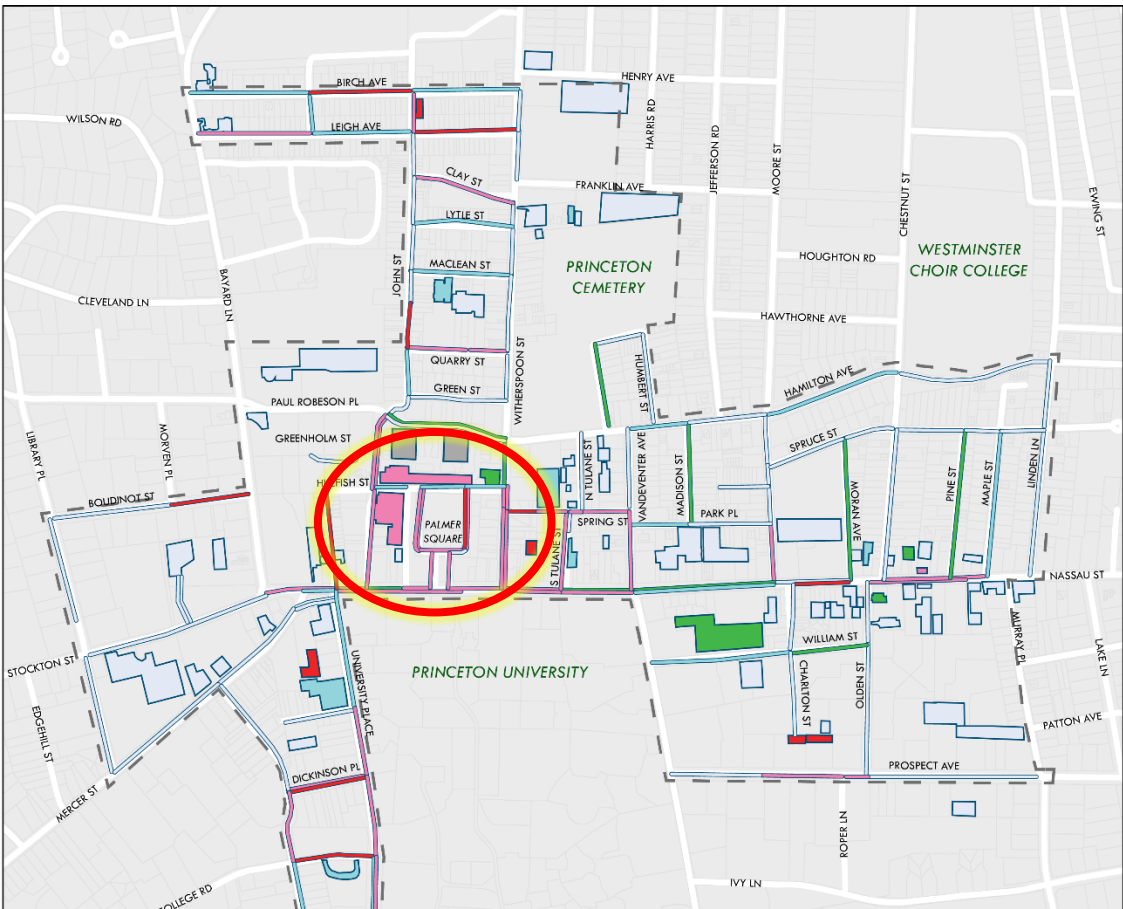


# Downtown Princeton Parking Utilization, Saturday, 3 PM



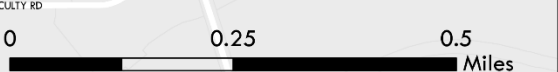


# Downtown Princeton Parking Utilization, Saturday, 5 PM



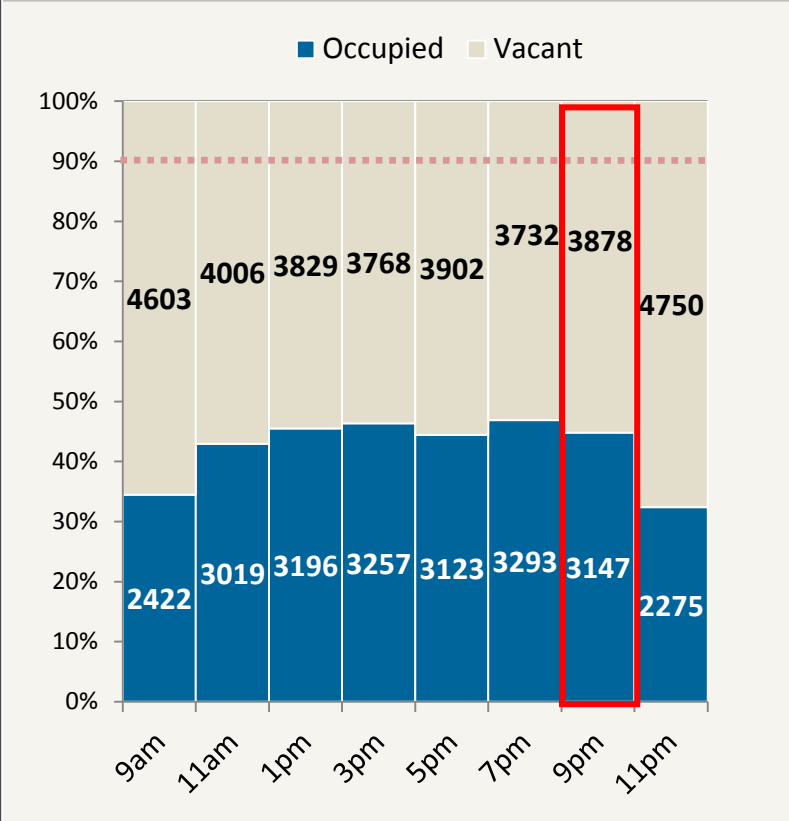
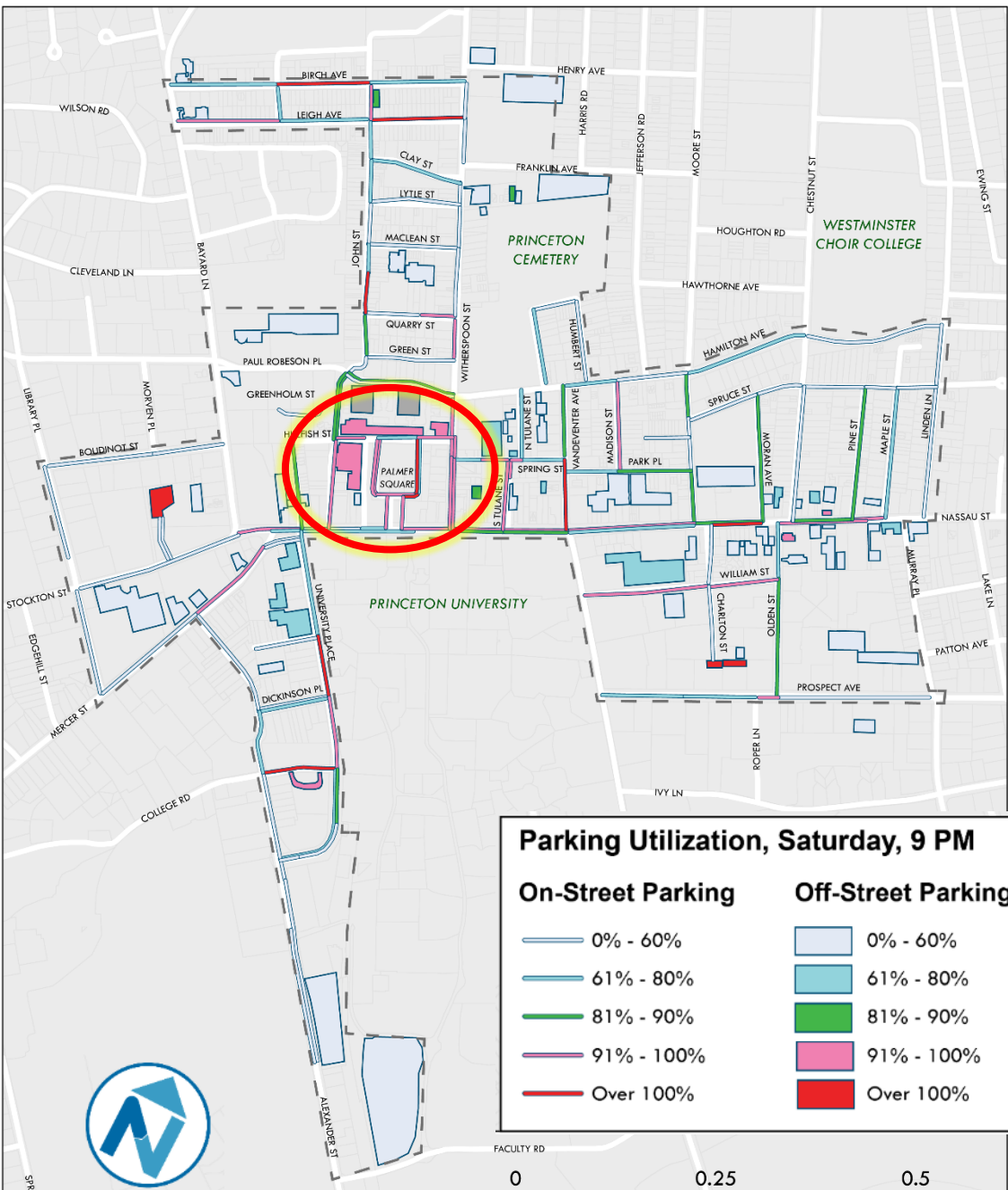
### Parking Utilization, Saturday, 5 PM

On-Street Parking		Off-Street Parking		
	0% - 60%		0% - 60%	Study Area
	61% - 80%		61% - 80%	Not Accessible
	81% - 90%		81% - 90%	
	91% - 100%		91% - 100%	
	Over 100%		Over 100%	

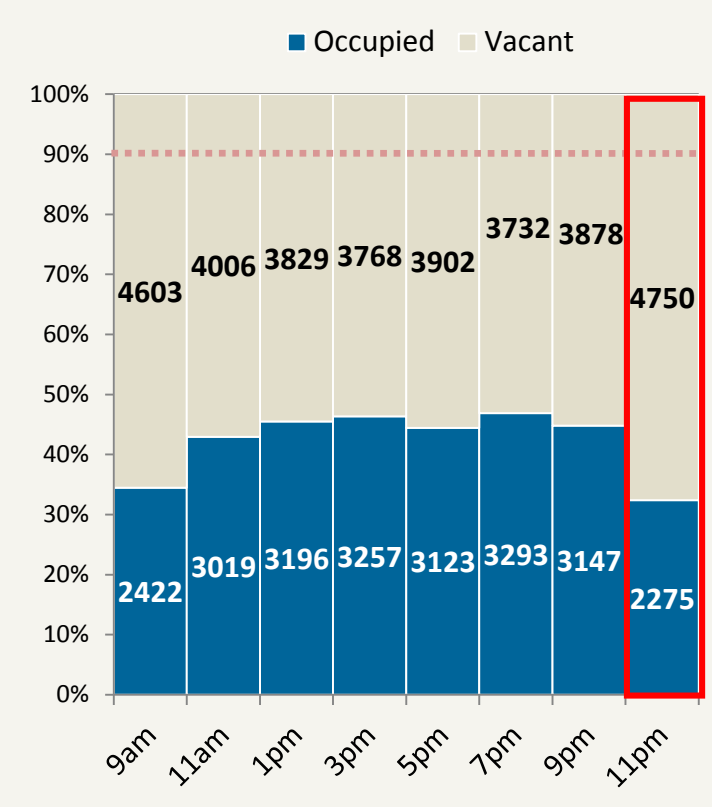
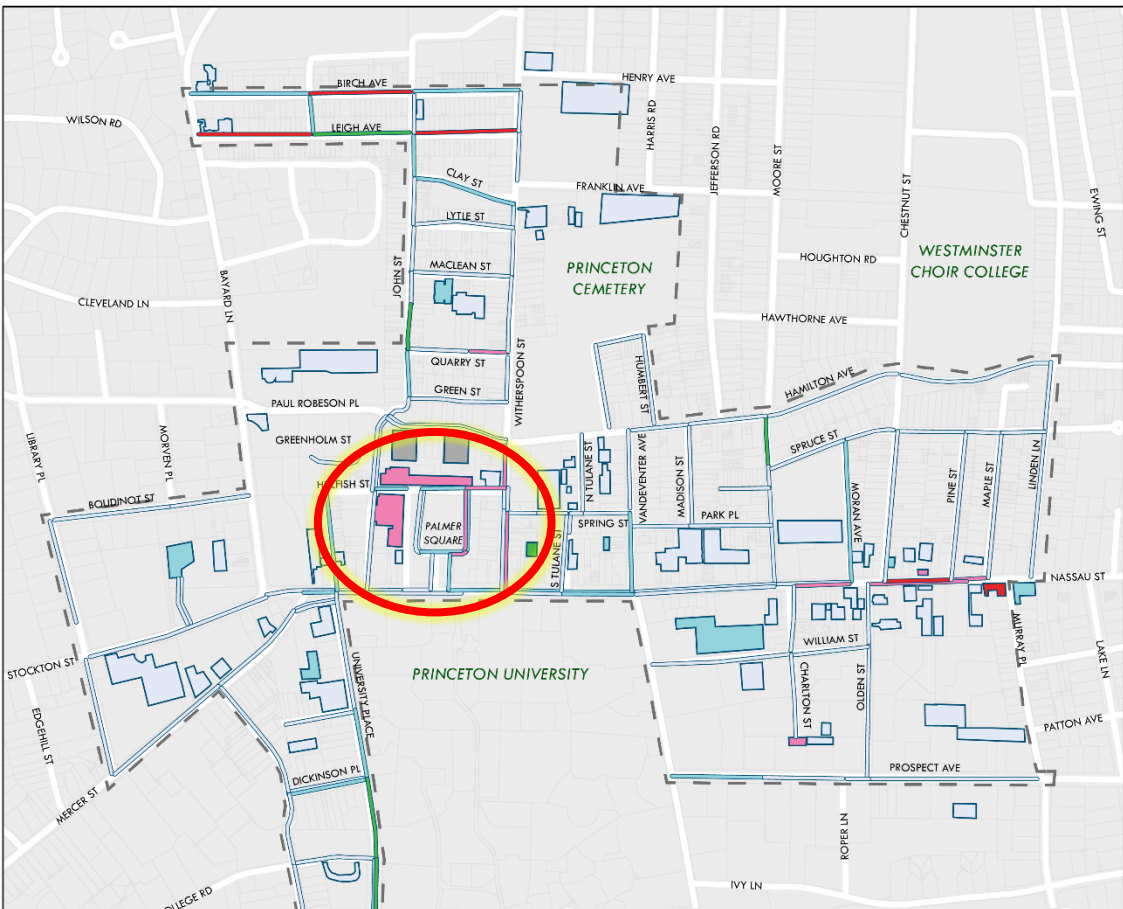




# Downtown Princeton Parking Utilization, Saturday, 9 PM

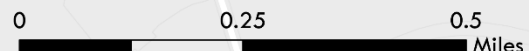


# Downtown Princeton Parking Utilization, Saturday, 11 PM



**Parking Utilization, Saturday, 11 PM**

<b>On-Street Parking</b>	<b>Off-Street Parking</b>	<b>Study Area</b>
0% - 60%	0% - 60%	Study Area
61% - 80%	61% - 80%	Not Accessible
81% - 90%	81% - 90%	
91% - 100%	91% - 100%	
Over 100%	Over 100%	

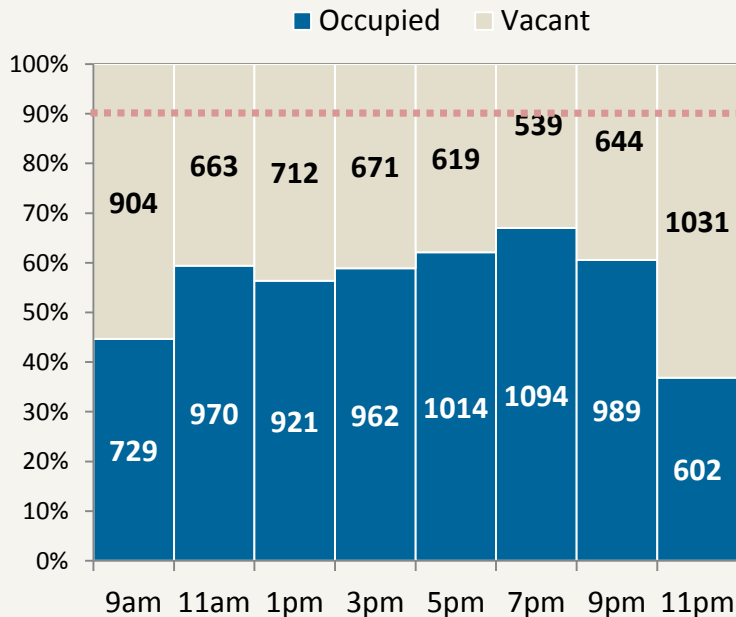




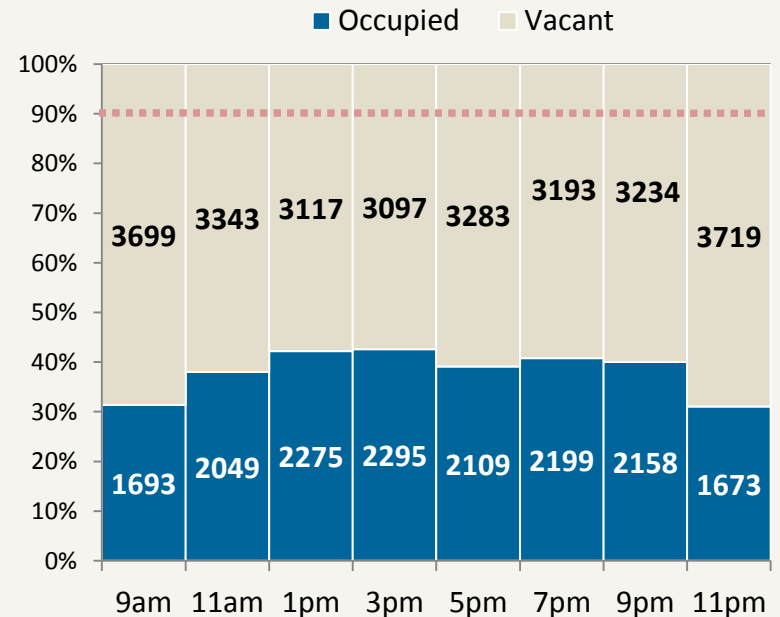
# ON V. OFF STREET UTILIZATION (Saturday)

- On street parking approaches 70% utilization at 7 PM peak
- Off street parking does not surpass 45% utilization
- There are over 500 on-street spaces remaining open at 7 PM peak
- Many off-street spaces that remain open during the peak are restricted

## ON STREET



## OFF STREET

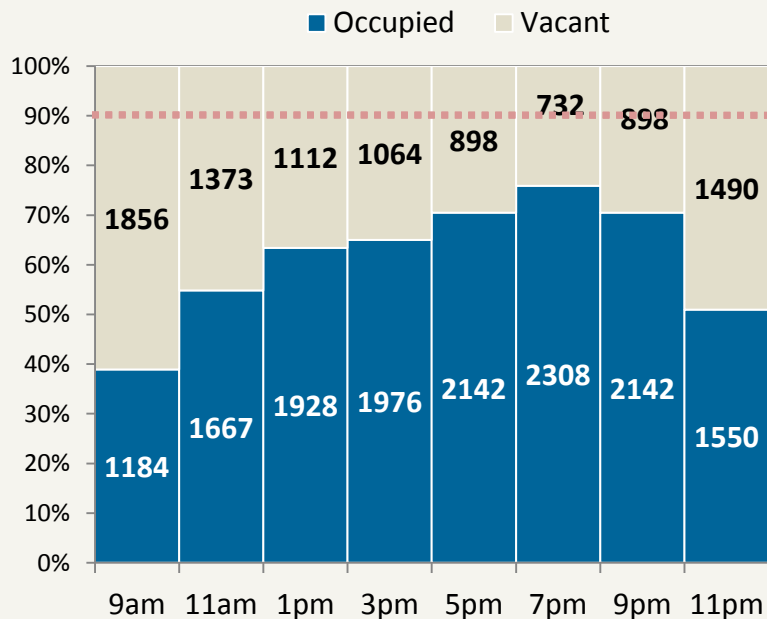




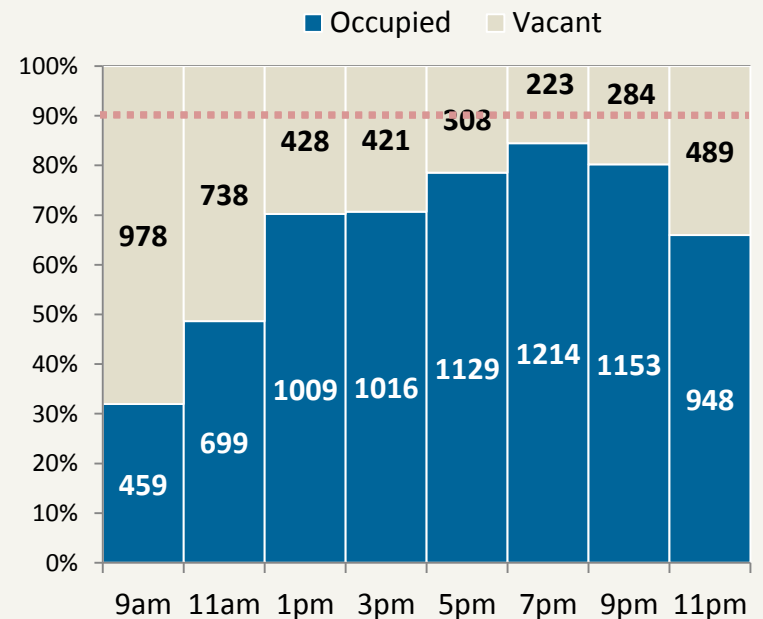
# PUBLIC PARKING UTILIZATION

- Public parking inventory is split between on-street and off-street spaces
- Total public parking utilization nears 80% at peak
- Off street public parking utilization surpasses 90% at peak

## ALL PUBLIC PARKING



## OFF STREET PUBLIC PARKING

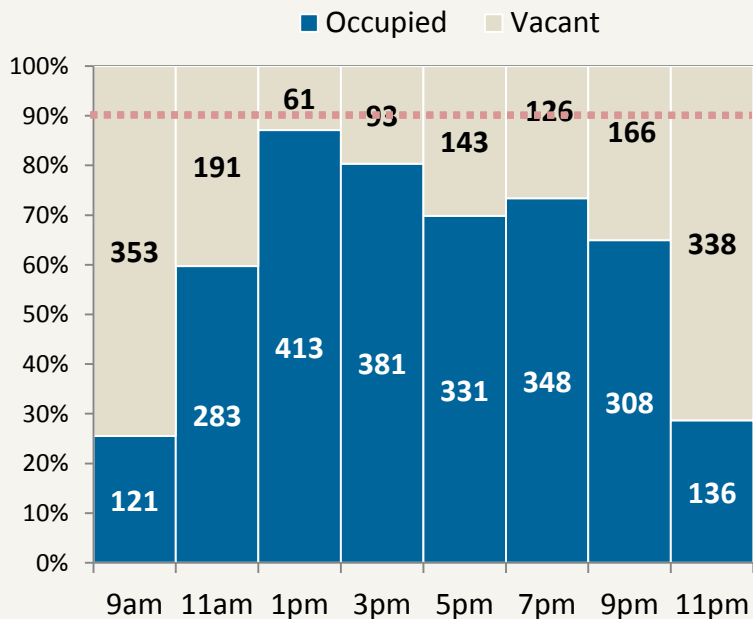




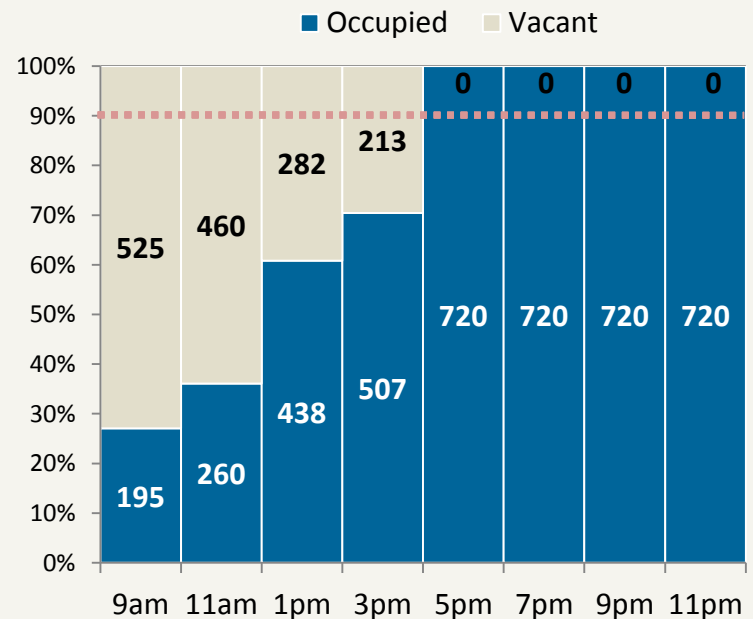
# PUBLIC GARAGE UTILIZATION

- Public garages are highly utilized during Saturday peak between 5 PM and 11 PM
- Spring Street garage fills more quickly than Chambers and Hulfish
- Saturday garage use is much higher than weekday use

## SPRING STREET



## CHAMBERS AND HULFISH ST

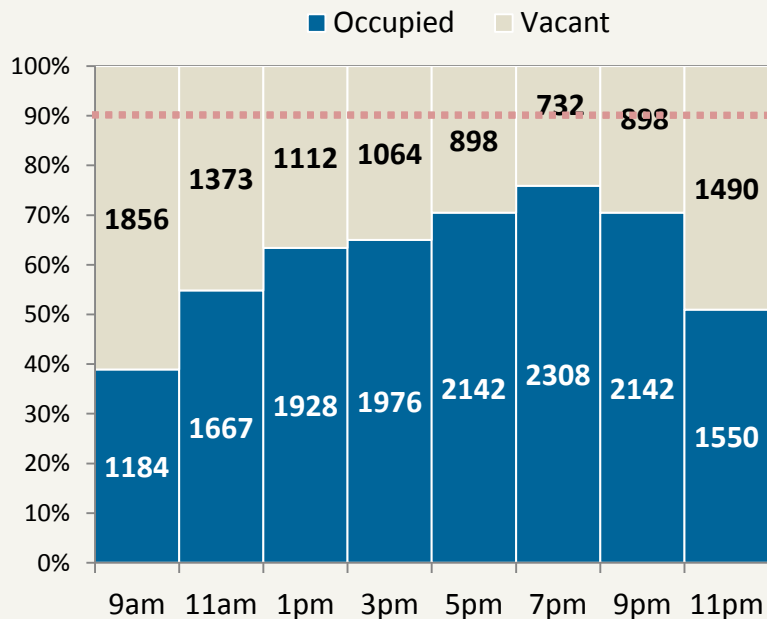




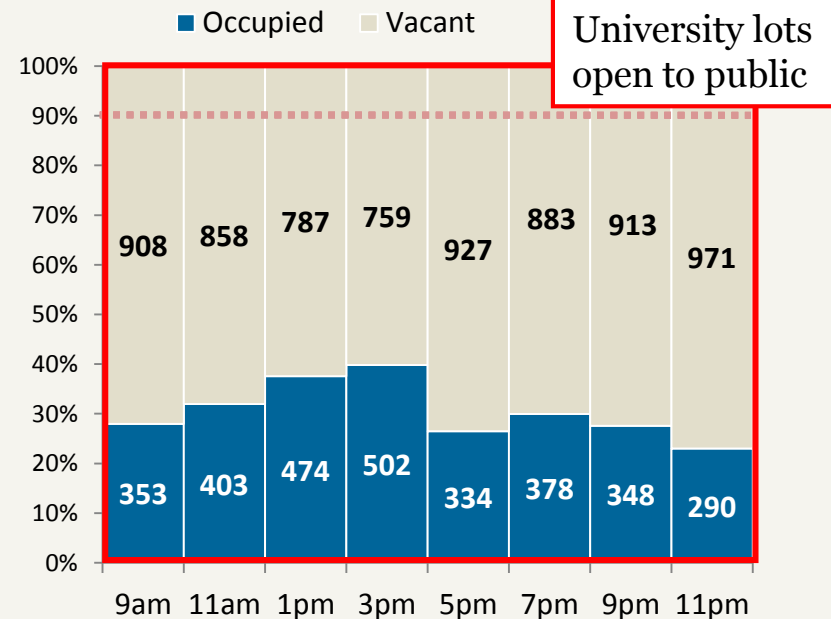
# SHARED PARKING UTILIZATION

- Most shared parking is in Princeton University lots and garages, open to the public after 5 PM and all day on Saturdays
- Shared parking is underutilized on Saturdays given high public parking demand – **1,000 spaces are available at 5:00 pm**
  - Utilization does not surpass 40% and is only 30% at peak time

## ALL PUBLIC PARKING

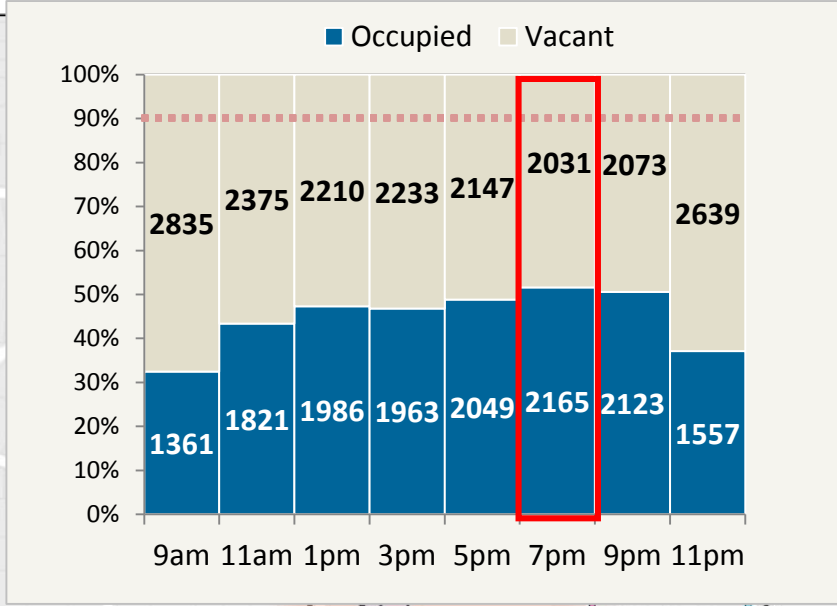


## SHARED PARKING





# CORE OF PARKING DEMAND, SATURDAY



Core of demand along Nassau St and downtown restaurants and shopping



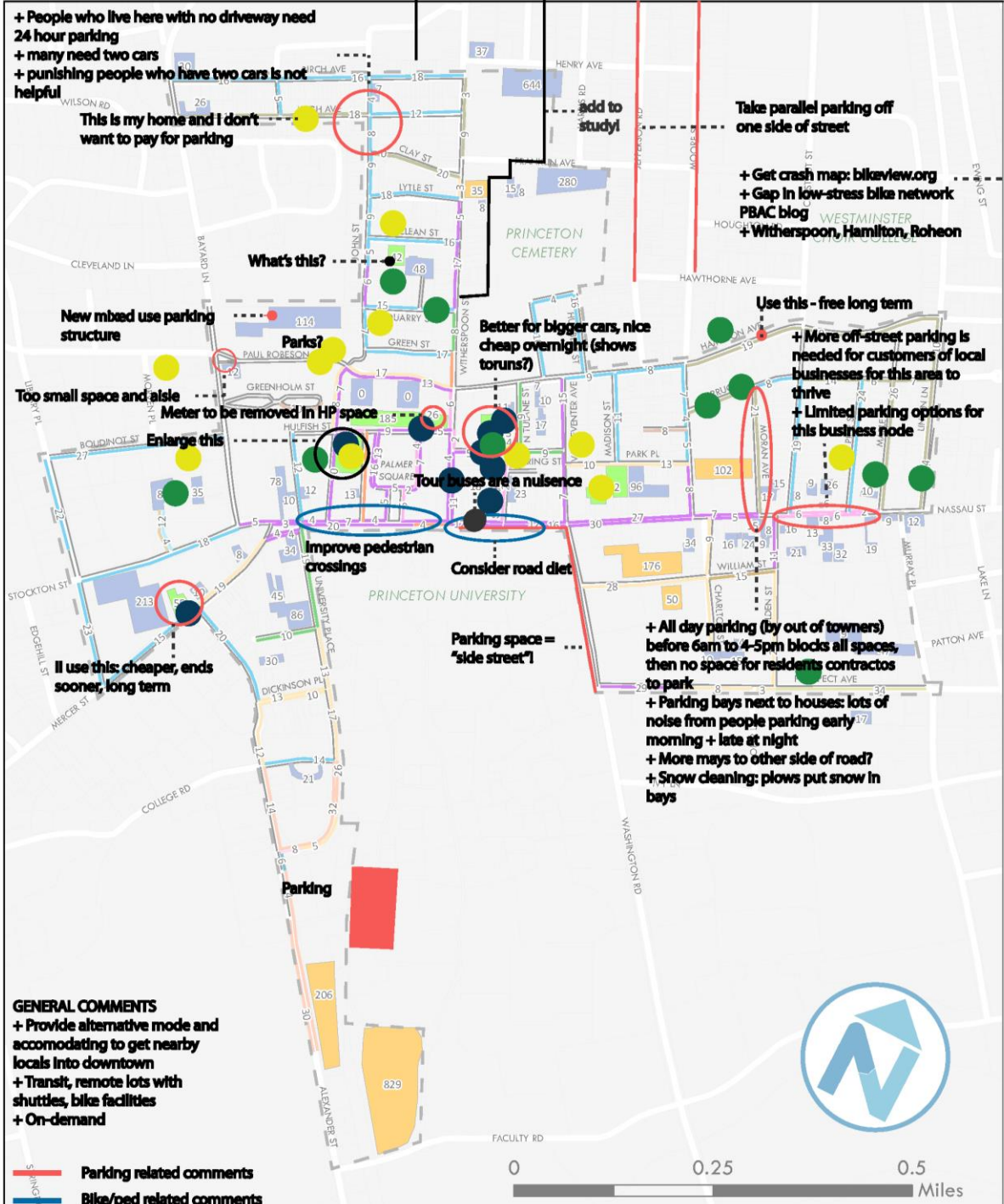


## KEY FINDINGS – SATURDAY DEMAND

- In general, **parking demand is more concentrated in the core area at Palmer Square** than during a weekday
- Off-street parking is used at a much higher rate on Saturday
- Publicly available garages are full during peak times
- **80% of all publicly available parking is full at the 7 PM peak**, while shared Princeton University lots are only 30% full
- **Nassau Street and Palmer Square parking is full** throughout the day
- **2,000 restricted off-street spaces are not in use** at 7 PM peak
- Birch Avenue and Leigh Avenue are highly utilized

# PARKING PERCEPTIONS





# WHAT WE HEARD AT THE OPEN HOUSE

- Insider knowledge of key parking locations and issues:
  - Spring Street garage is a popular parking location
  - Moran Avenue and Maple Street are known as unregulated parking hotspots
  - Witherspoon-Jackson and Tree Streets neighborhoods experience resident parking difficulties

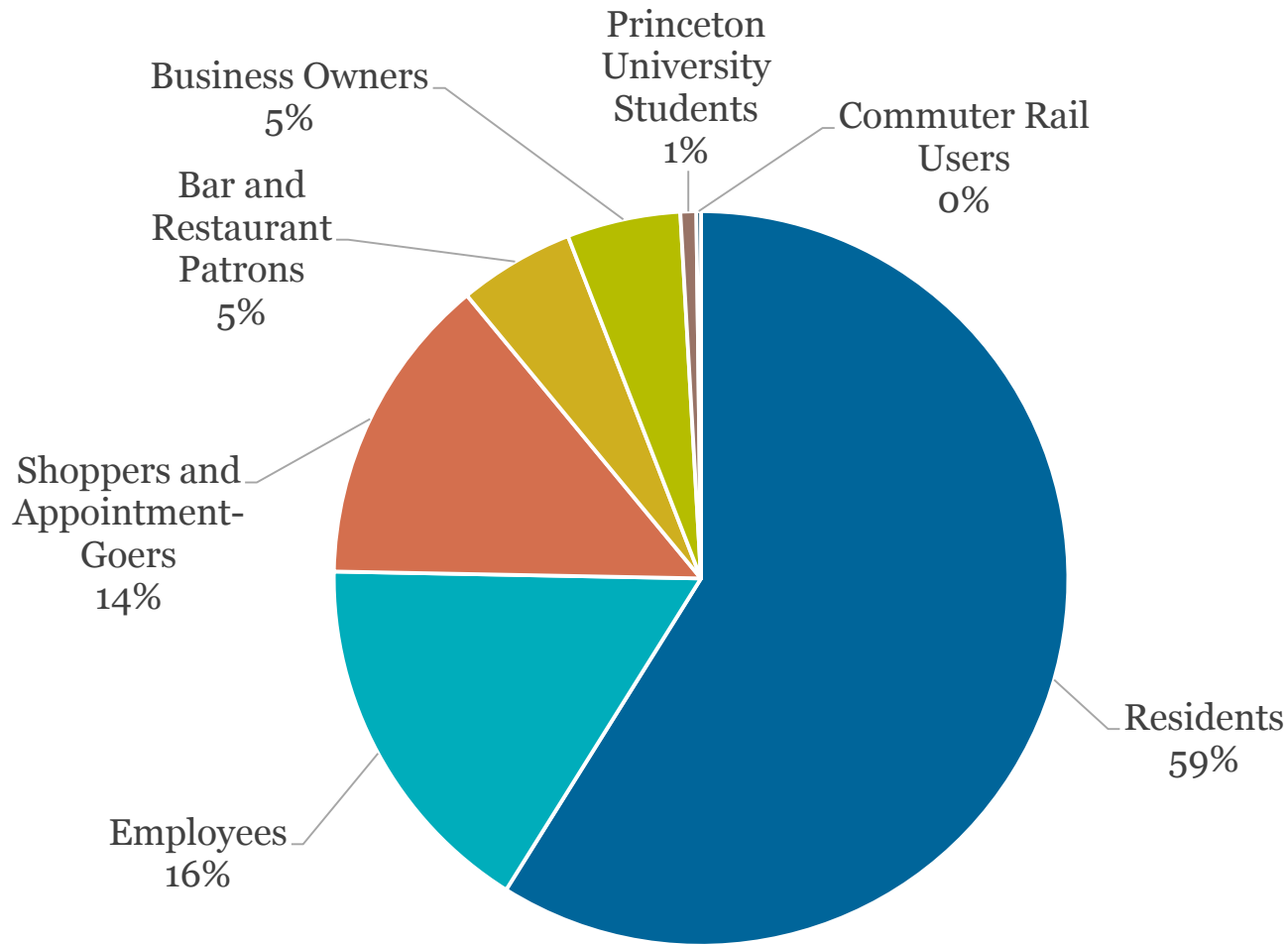


# STAKEHOLDER INTERVIEW INSIGHTS

- **Enforcement and confusing regulations can be intimidating** for customers and visitors
- Small business **employee parking is difficult** to find or expensive
- **Time limits create a barrier** to visitors enjoying multiple establishments
- Parking apps which allow on the fly time additions (like **ParkMobile**) could improve visitor experience
- **Loading zones are difficult to enforce**, especially with tour buses
- Perception of **spillover parking from Princeton University staff and students creates frustration**
- Tree Streets and Witherspoon-Jackson residents **experience difficulty parking due to other users** parking on their streets
- Difficulty of parking and **harsh enforcement** discourages visitors
- Many wonder why there is an **overnight parking ban**



# SURVEY COMPLETED BY 1,552 RESPONDENTS

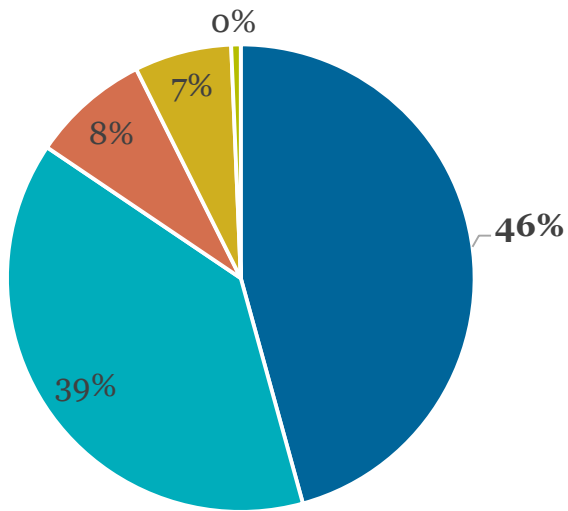




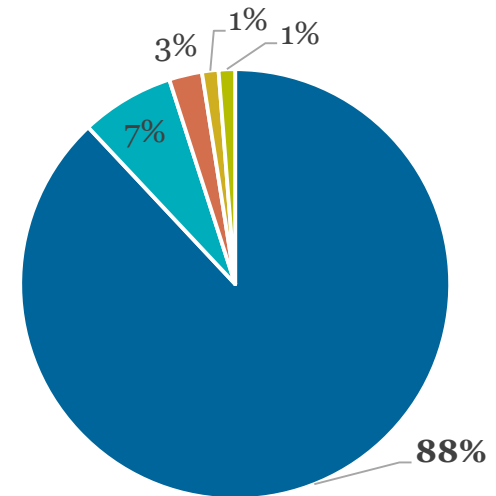
# MANY RESIDENTS WALK OTHERS DRIVE

■ Drive alone ■ Walk ■ Drive/carpool with others ■ Bike

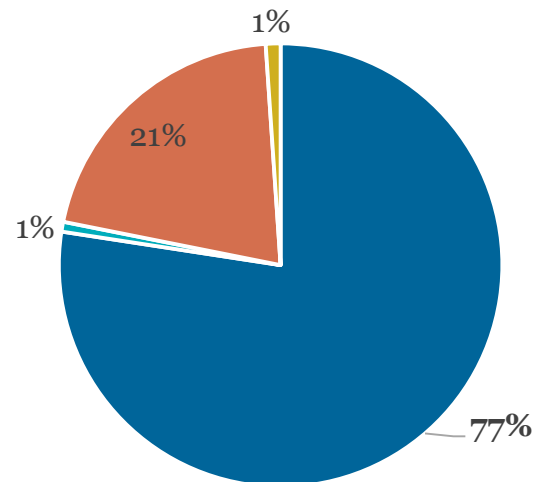
Residents



Employees



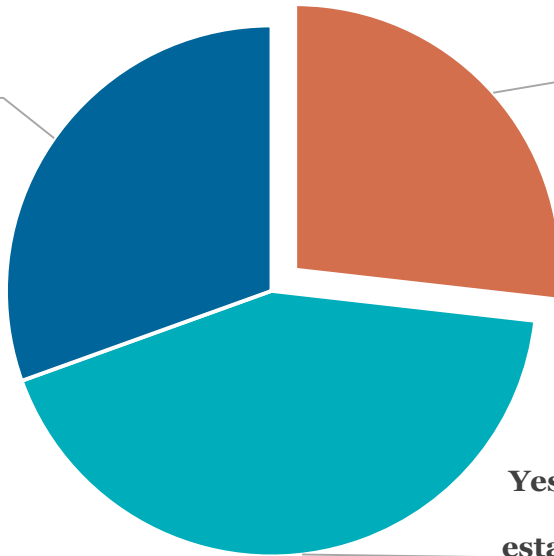
Customers





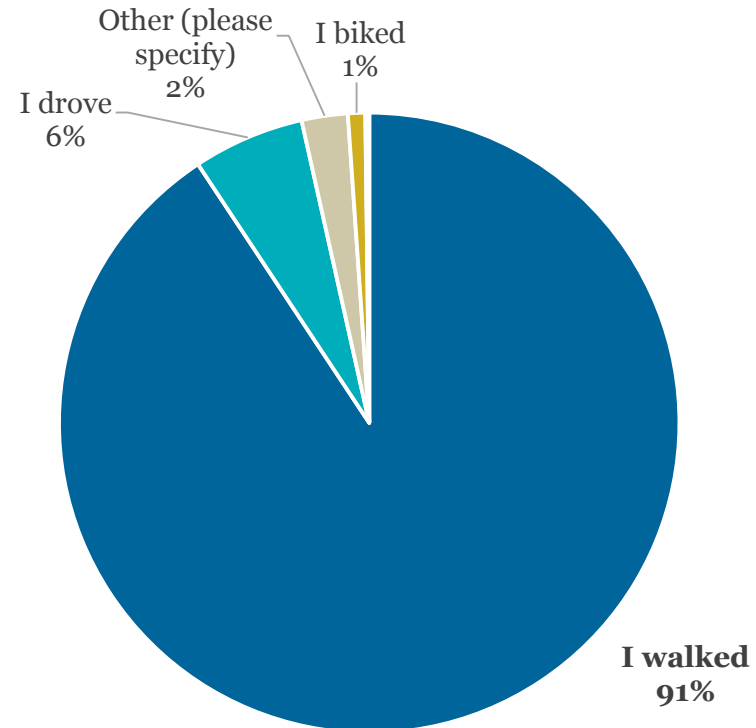
# MOST RESPONDENTS VISITED MULTIPLE ESTABLISHMENTS DOWNTOWN & THEY WALK BETWEEN DESTINATIONS

Yes, I traveled to three or more establishments  
30%



No, I traveled to just one establishment  
27%

Yes, I traveled to two establishments  
43%



Other (please specify)  
2%

I biked  
1%

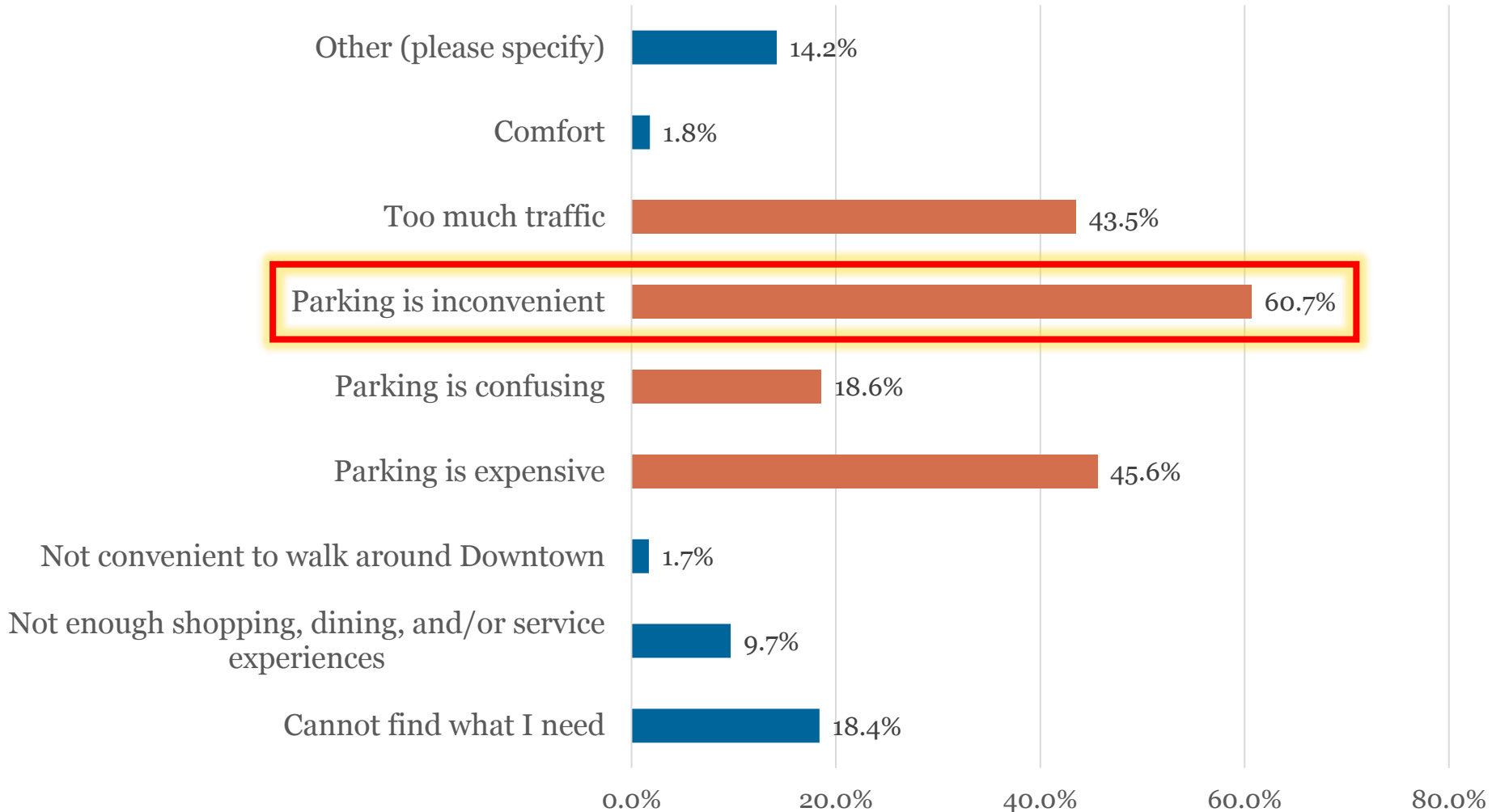
I drove  
6%

I walked  
91%



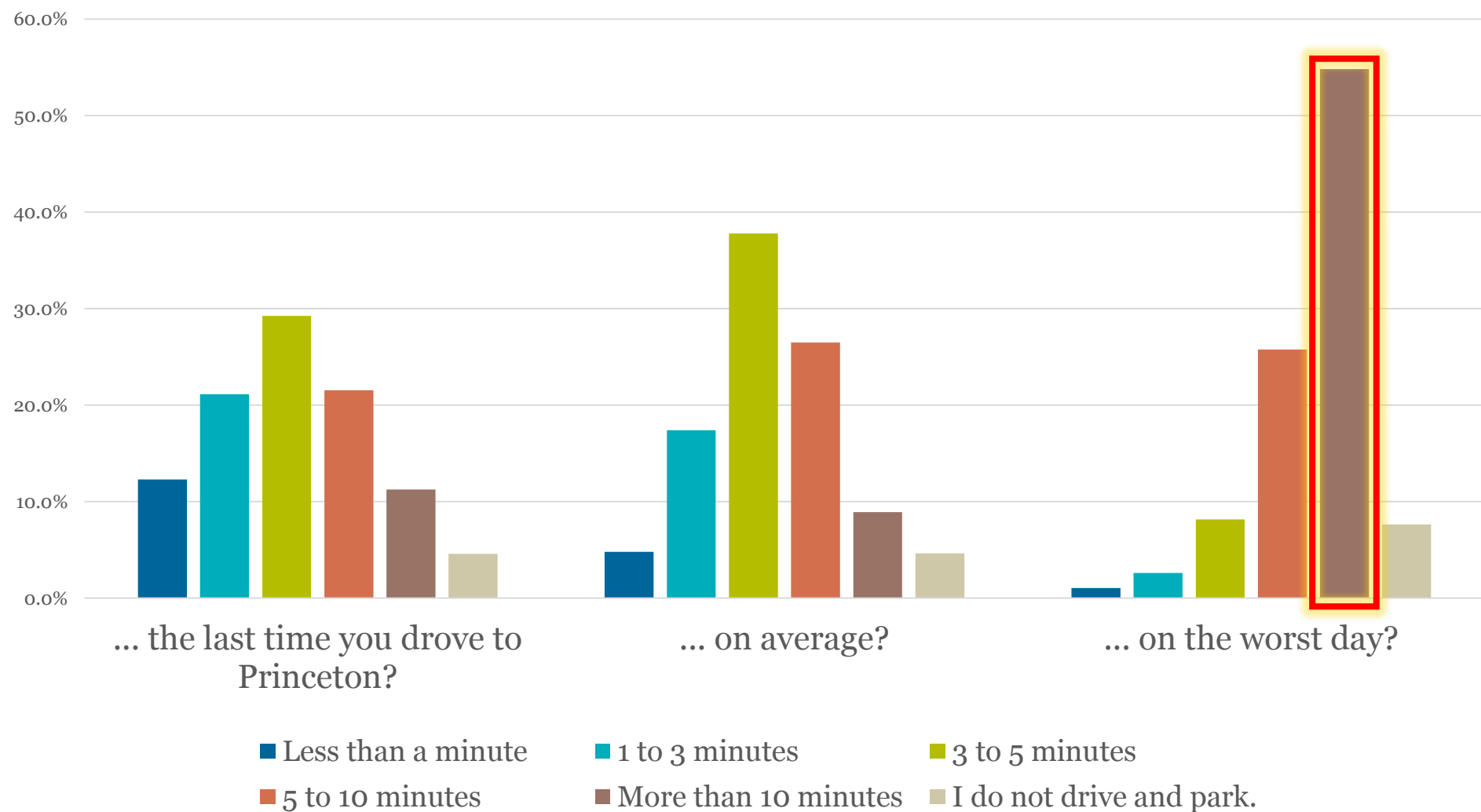


# WHY DON'T YOU GO TO DOWNTOWN PRINCETON? (CHECK ALL THAT APPLY)



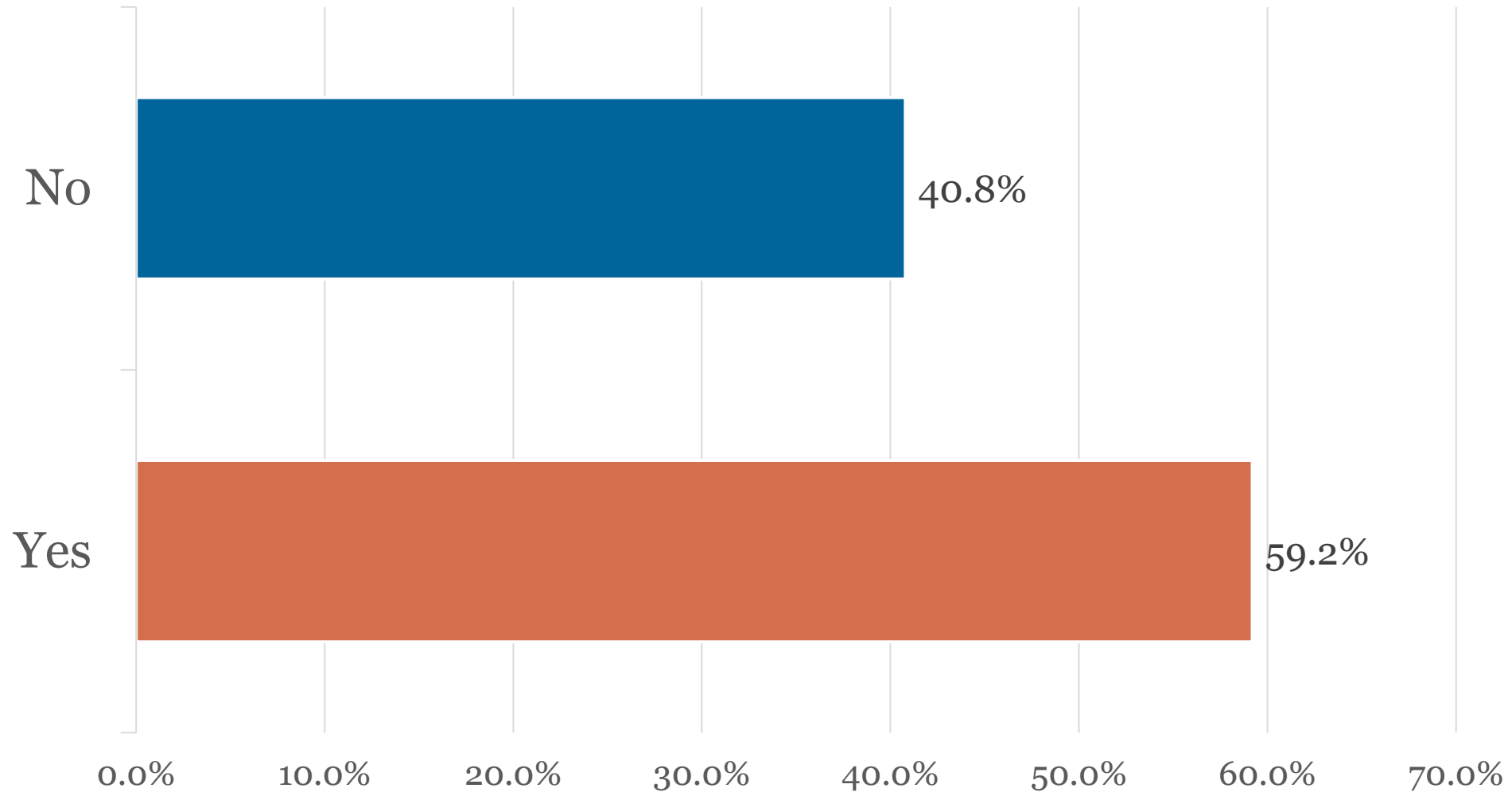


# HOW LONG DOES IT TAKE YOU TO FIND A PARKING SPOT DOWNTOWN?



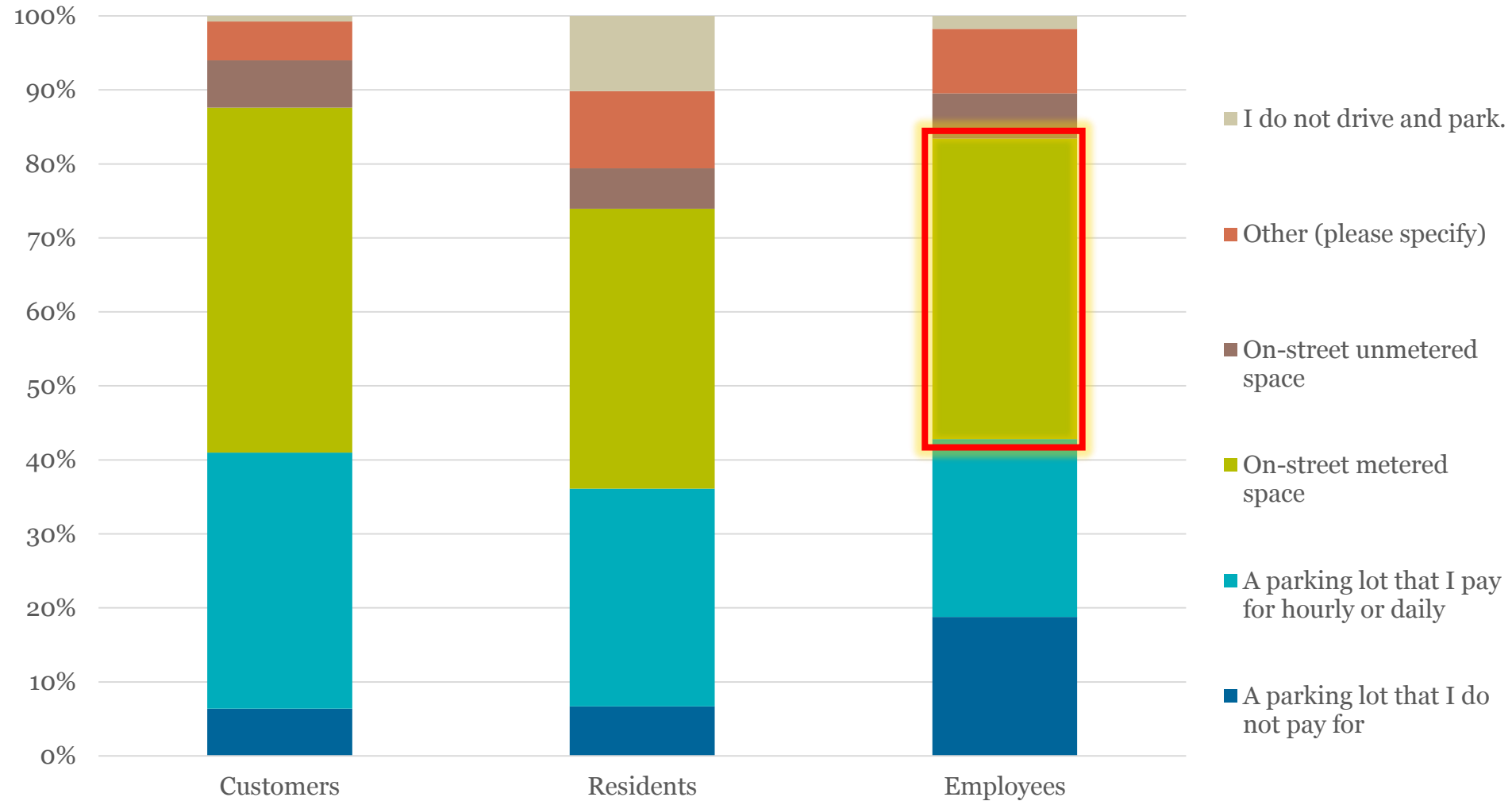


# HAVE YOU EVER NOT FOUND PARKING AND LEFT DOWNTOWN PRINCETON?



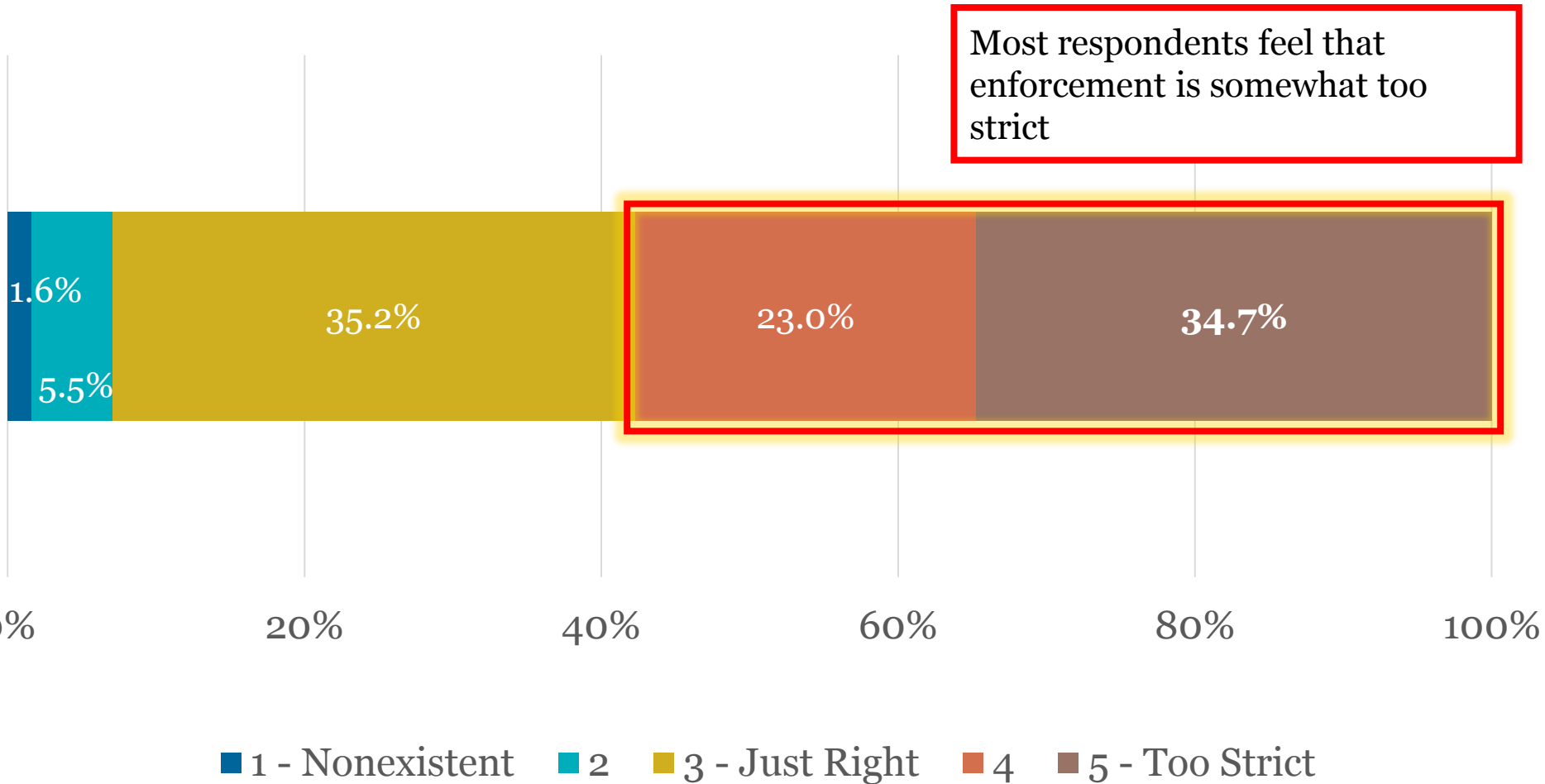


# EMPLOYEES PARK ON-STREET



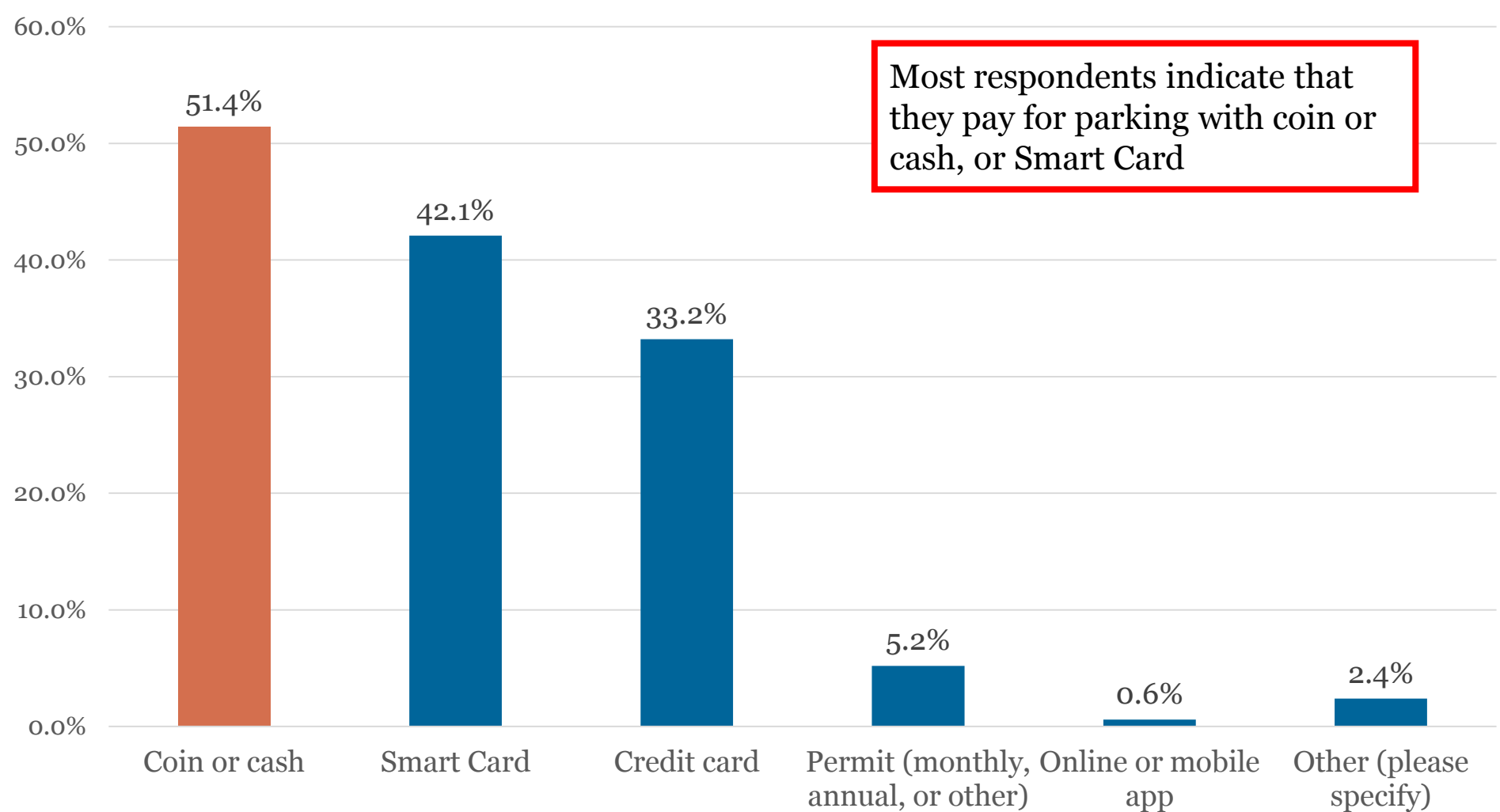


# PARKING ENFORCEMENT IN PRINCETON IS...



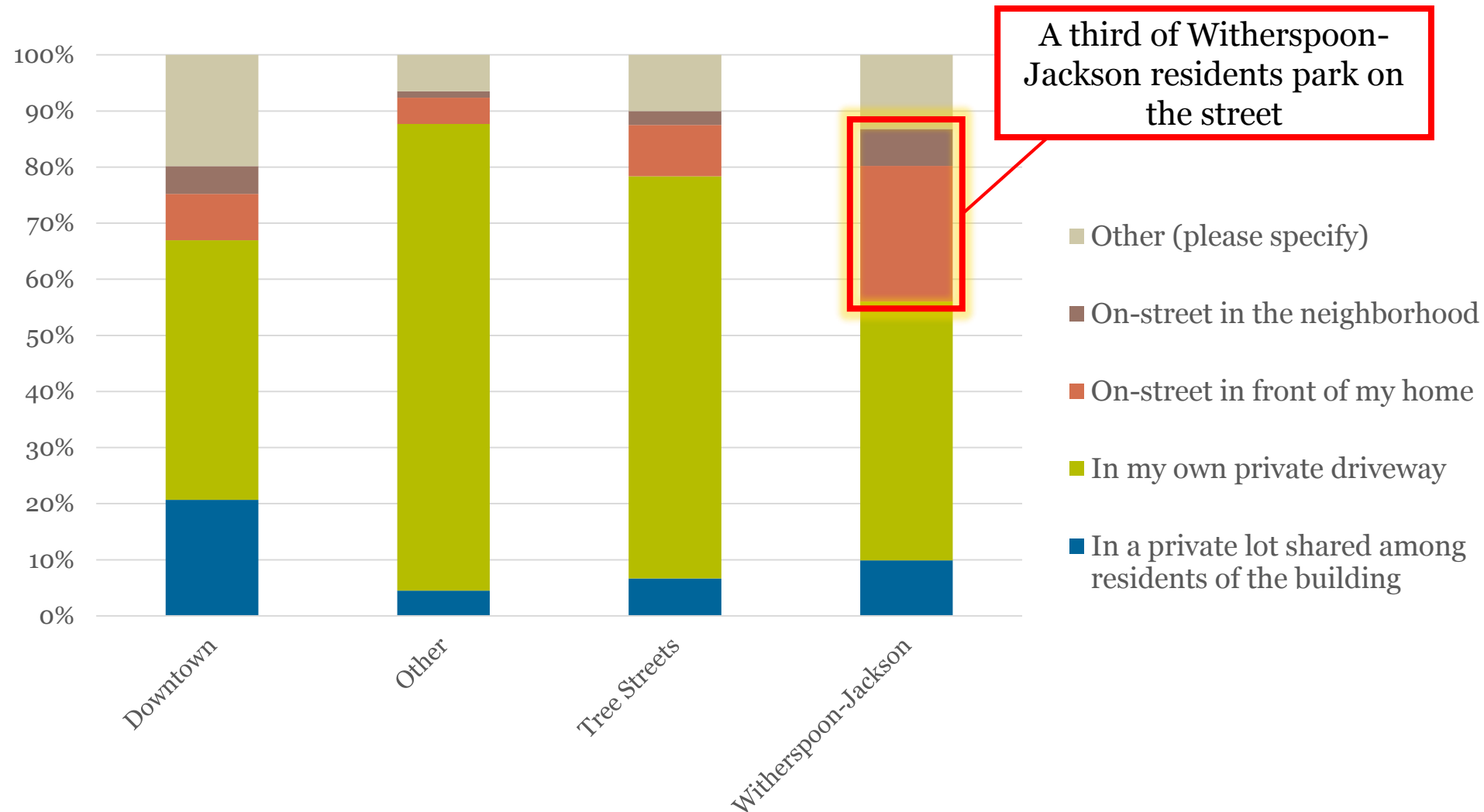


# IF YOU PAY FOR PARKING, HOW DO YOU USUALLY PAY? (CHECK ALL THAT APPLY)





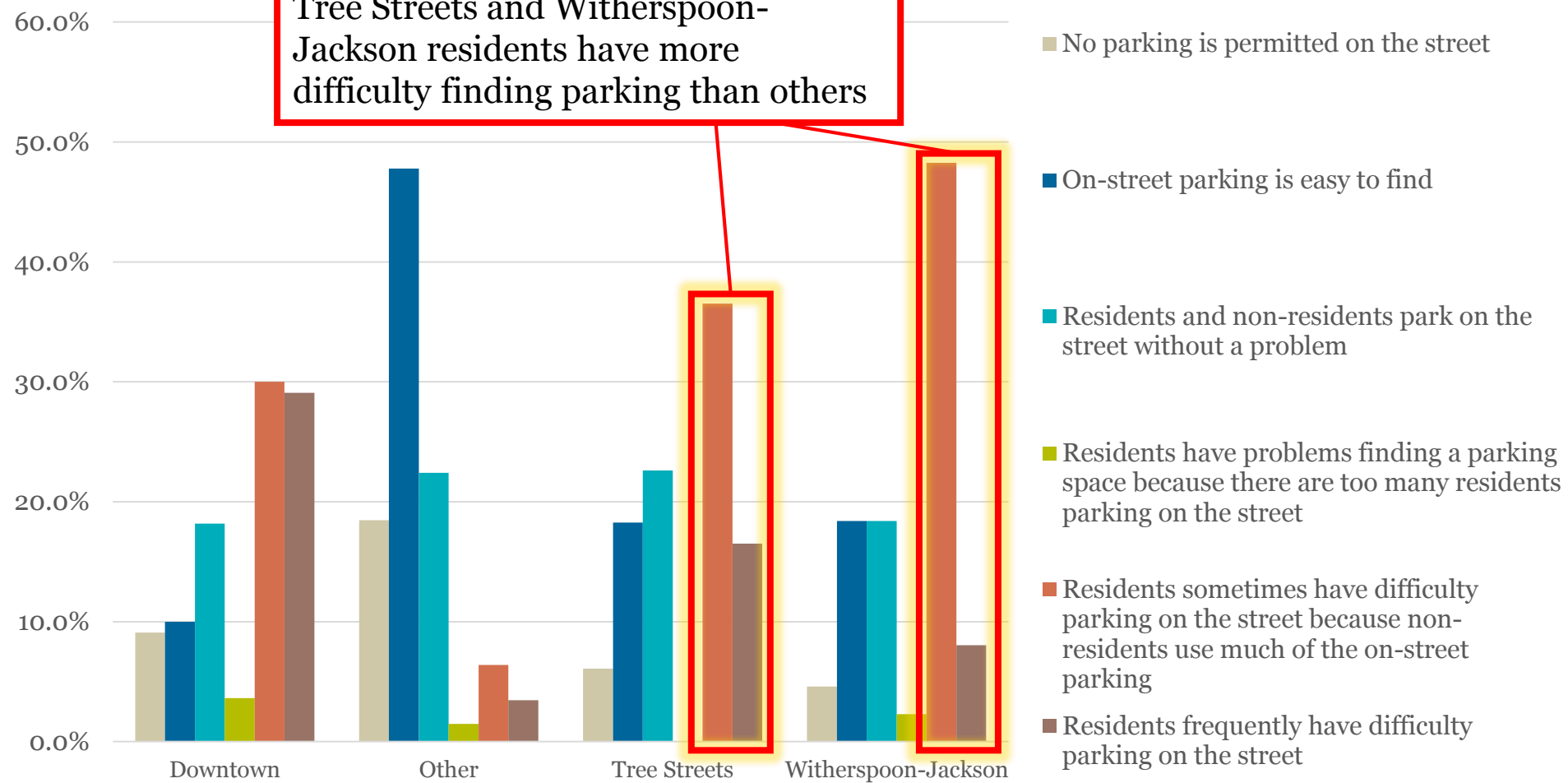
# RESIDENTIAL PARKING DIFFERS BY NEIGHBORHOOD





# RESIDENTS – PLEASE DESCRIBE THE ON-STREET PARKING CONDITIONS IN YOUR NEIGHBORHOOD

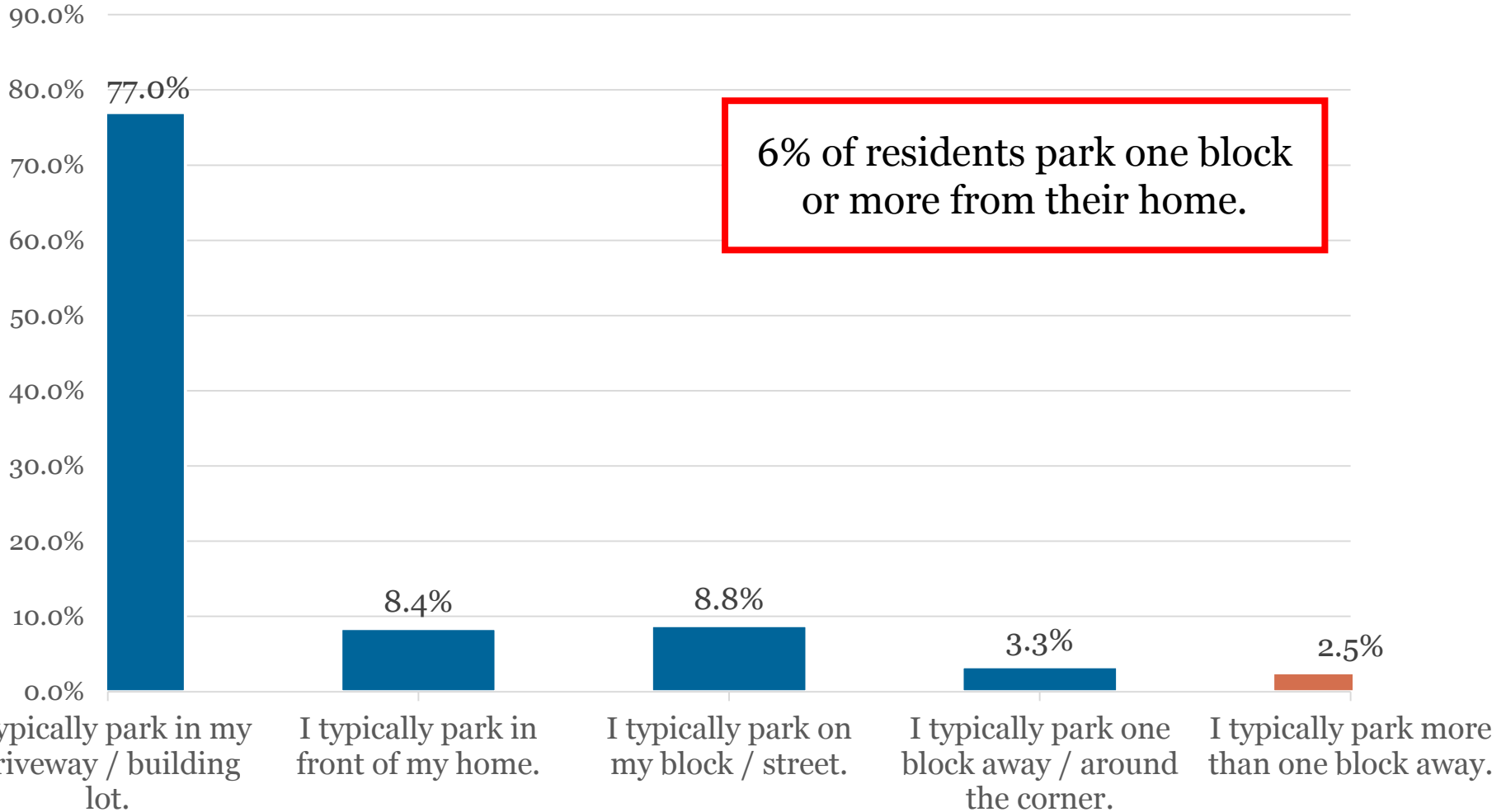
Tree Streets and Witherspoon-Jackson residents have more difficulty finding parking than others







# RESIDENTS – HOW FAR DO YOU TYPICALLY PARK FROM YOUR RESIDENCE?





# PLEASE RATE THE IMPORTANCE OF THE FOLLOWING FACTORS IN DETERMINING WHERE YOU CHOOSE TO PARK (1 – NOT IMPORTANT, 5 – MOST IMPORTANT)

Employees are more time sensitive than other user groups

■ Employees ■ Customers ■ Residents

Time limits (when will I have to move my car?)

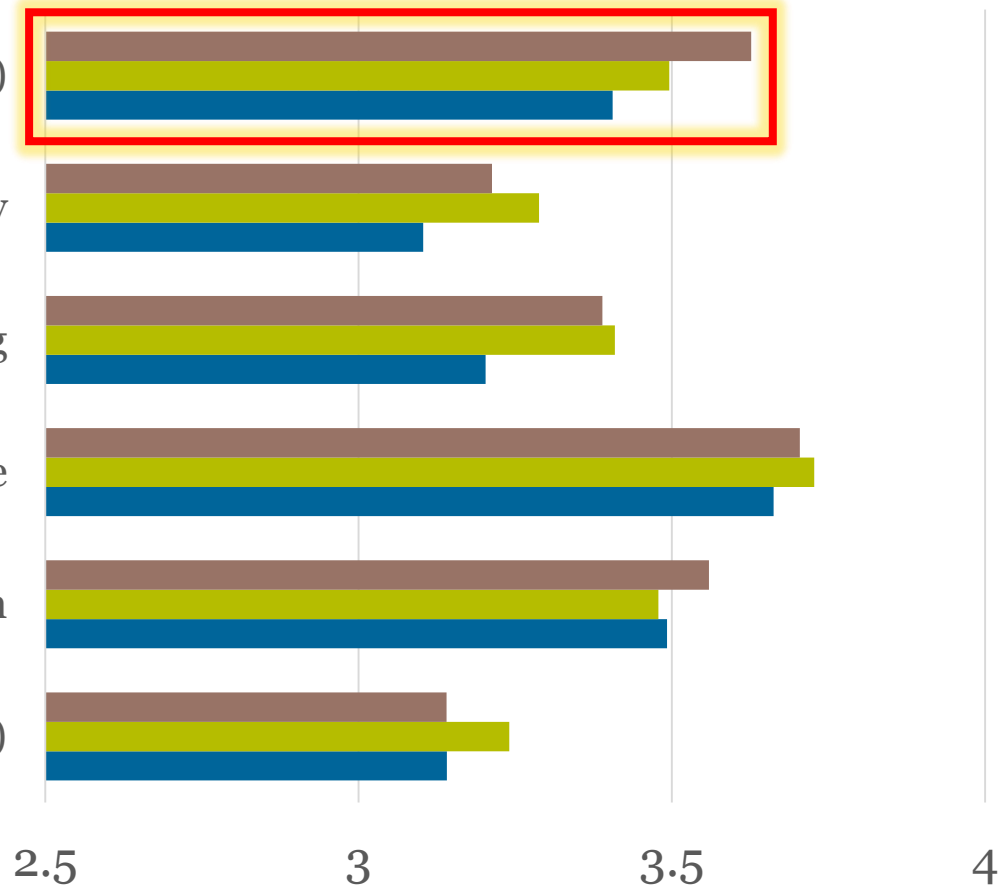
Comfort and security

Cost or price of parking

Ease of finding a space

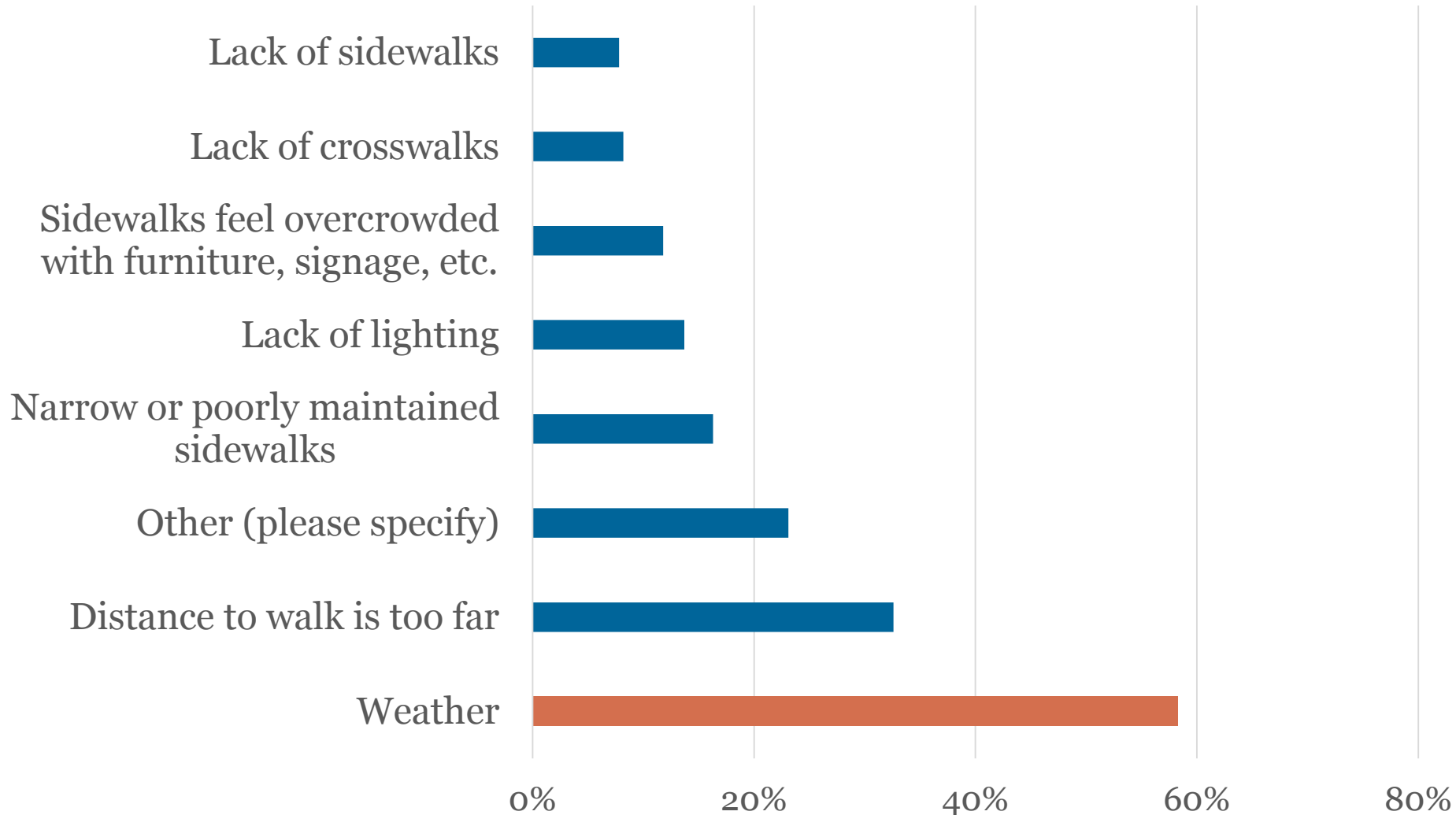
Location/proximity to destination

Type of parking facility (on street vs. lot)





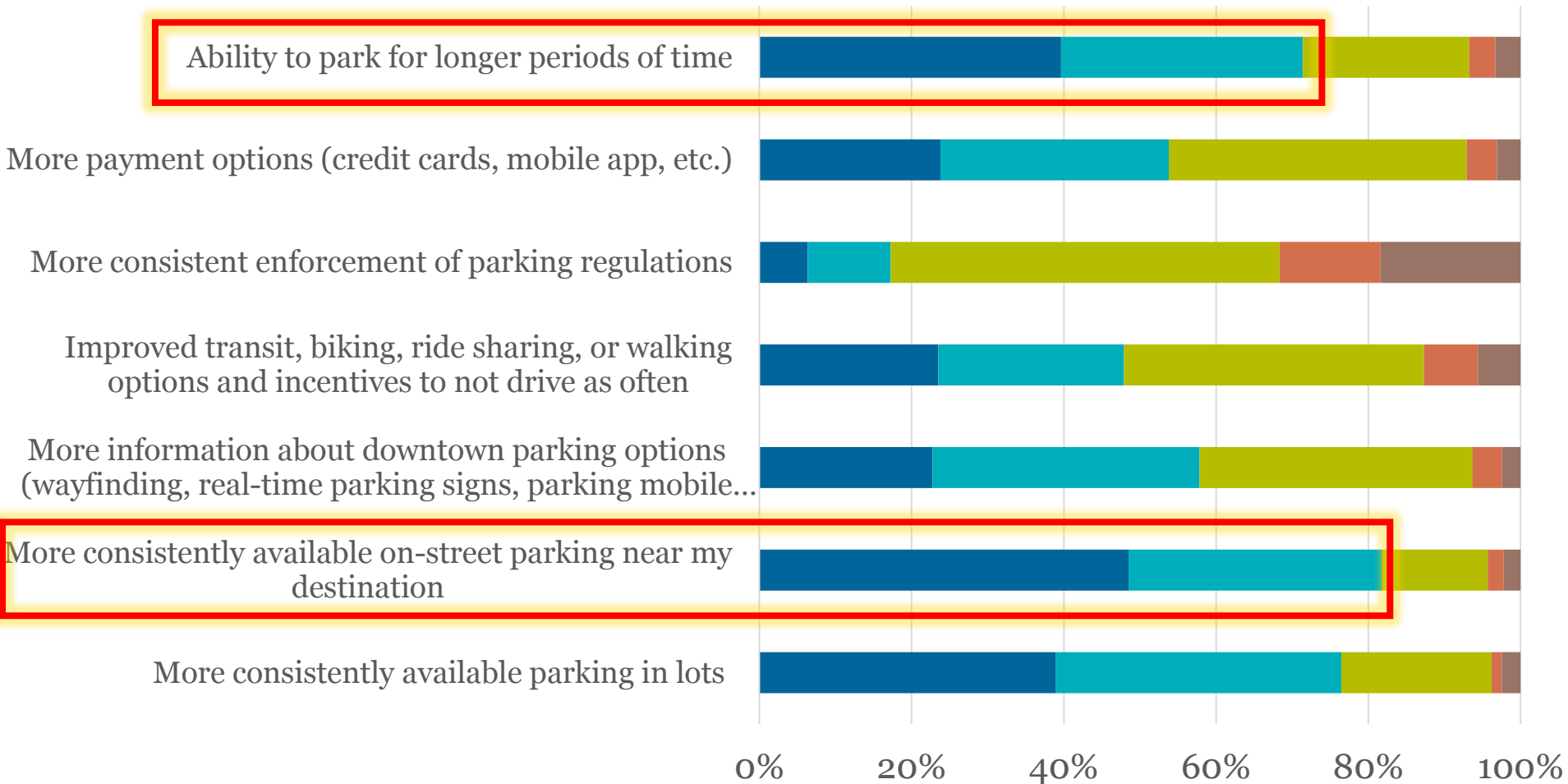
# WHAT FACTORS LIMIT YOUR WILLINGNESS TO WALK TO AND WITHIN DOWNTOWN PRINCETON? (CHECK ALL THAT APPLY)





# HOW WOULD THE FOLLOWING IMPROVEMENTS IMPACT YOUR PARKING EXPERIENCE AND THE OVERALL QUALITY OF PRINCETON? (1 – DETRIMENTAL, 5 – SIGNIFICANT BENEFIT)

■ 5 - Significant benefit ■ 4 ■ 3 - No benefit ■ 2 ■ 1 - Detrimental





## KEY FINDINGS – PARKING PERCEPTIONS

- **Employees are using metered spaces downtown**
- 45% of customers and 40% of employees say it takes them 5-10 minutes or more to find parking
- Nearly **90% of customers and employees drive alone** to Downtown
- Over half of users still pay for parking with coins or cash (less convenient than other options)
- Residents from the Tree Streets, Downtown, and Witherspoon-Jackson neighborhoods face more parking difficulties
- Most residents park in their driveways, but 33% of Witherspoon-Jackson residents park on the street
- Most residents who park on street do so because they cannot fit all of their vehicles in their driveway
  - One third of resident respondents do not have a driveway
- Respondents indicated that “Ability to park for longer periods of time” would provide a significant benefit to parking
- Respondents did not indicate significant issues with Princeton's walking environment

# DRAFT STRATEGIES





# STREAMLINE ON-STREET REGULATIONS AND SIGNAGE

Row Labels	Sum of Inventory
10 Hour Parking Meters	109
10 Hour Parking Meters 8AM-7PM	7
10 Hour Parking Meters 8AM-7PM except Sunday	100
14 Hour Parking	6
14 Hour Parking Meters	72
15 Minute Parking Meters	8
2 Hour Parking	259
2 Hour Parking 8AM-6PM except Sunday	139
2 Hour Parking 8AM-7PM except Sunday	22
2 Hour Parking Meters	191
2 Hour Parking Meters 8AM-7PM except Sunday	46
2 Hour Parking Meters 8AM-8PM except Sunday	35
2 Hour Parking Meters 8AM-6PM except Sunday	6
2 Hour Parking Meters Mon-Sat 8AM-7PM, Sun 1PM-8PM	13
2 Hour Parking Meters Mon-Sat 8AM-8PM, Sun 1PM-8PM	106
2 Hour Parking 8AM-7PM except Sunday	43
24 Hour Parking Meters	34
30 Minute Parking	4
30 Minute Parking Meters	24
30 Minute Parking Meters Mon-Sat 8AM-8PM, Sun 1PM-8PM	22
5 Hour Parking Meters	18
5 Hour Parking Meters 10AM-7PM except Sunday	10
5 Hour Parking Meters 8AM-7PM except Sunday	27
Meter Parking 6AM-2AM	15
Meter Parking Mon-Sat, 6AM-8PM	44
20 Hour Parking, No Parking 2AM-6AM	243
Permit Only	12
Resident Parking Only	18
<b>Grand Total</b>	<b>1633</b>

- **Time Limits**

- 15 min to 10 hour

- **Time Span**

- 8 AM? to 6/7/8 PM?/2 AM?

- **Pricing**

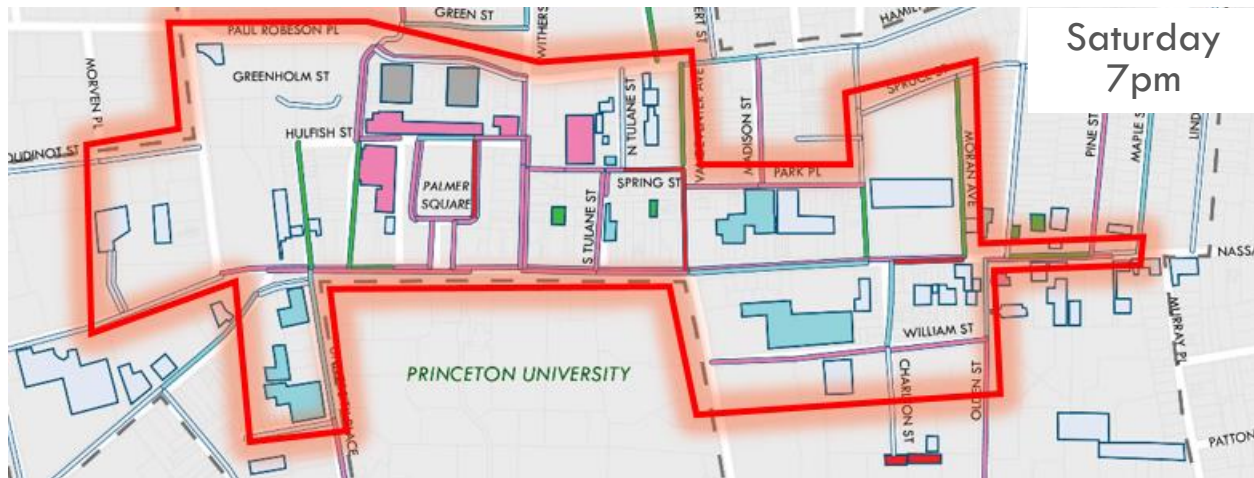
- At least 6 different prices onstreet





# ADOPT AN AVAILABILITY GOAL

- Manage parking demand to meet goal
- On-going, dynamic (and market-based) strategy
- Use a data-backed policy to set rates and regulations



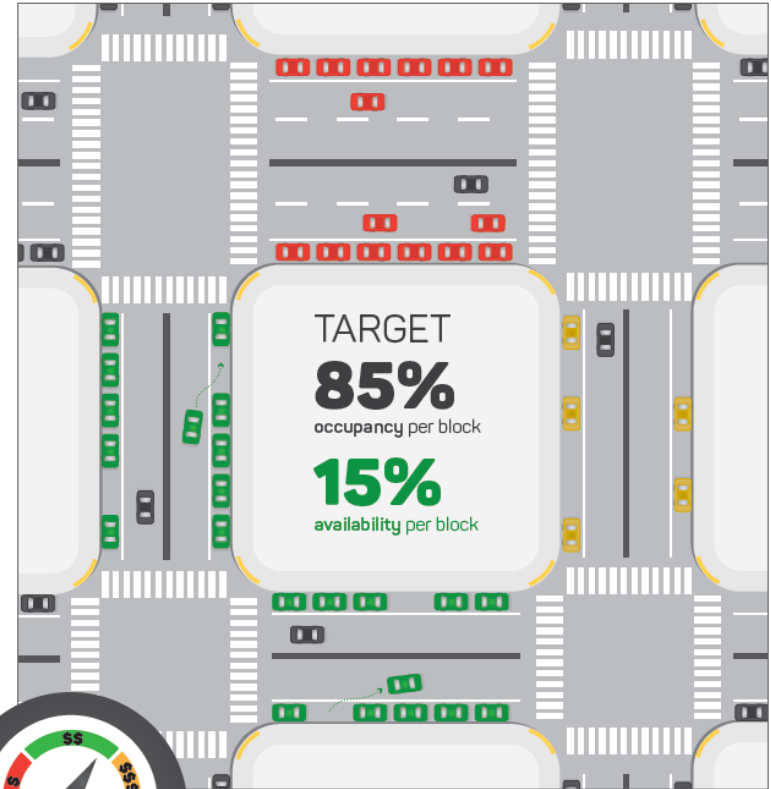
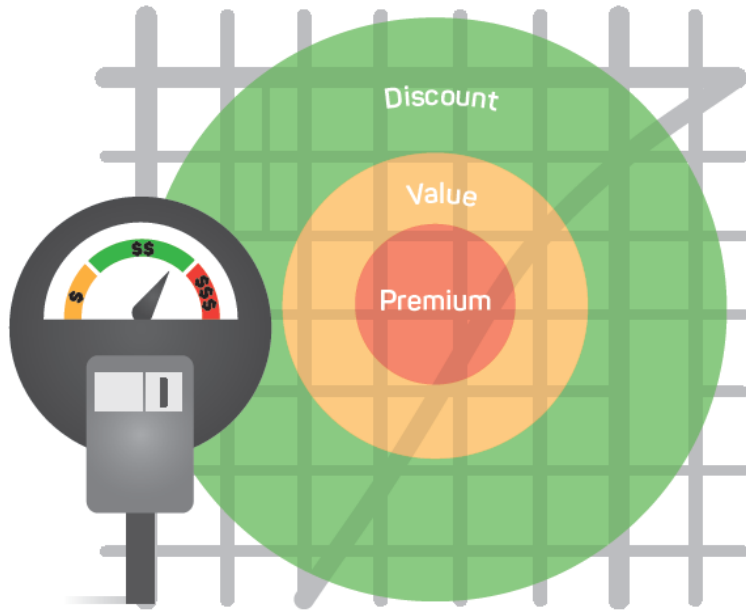
More consistently available on-street parking near my destination







# USE PRICE TO CREATE AVAILABILITY



## PROGRESSIVE PARKING

If block/lot is too full, **increase the price**

If block/lot is too empty, **lower the price**

If block/lot is just right, **keep the same price**



# MATCH PRICE TO DEMAND

- Specified target occupancy rate of eighty-five percent (85%) in Downtown Meter Zones
- Biennial occupancy survey to evaluate rates

# PARKING

## DOWNTOWN REDWOOD CITY

Street parking free Mon – Sat before 10am and after 6pm; free all day Sunday.

### Commuter

Street parking 25¢ per hour Mon-Sat, 10am-6pm; First 1 1/2 hours free in garages at all times

### GARAGES

1. MARSHALL  
387 spaces  
(\$1 per hour before 6pm)
2. JEFFERSON  
585 spaces  
(25¢ per hour before 6pm)

### Downtown Event & Dinner Visitor (FREE with validation)

\$2.50 per hour after 6pm (First 1 1/2 hours free at all times/first 4 hours free with validation from Century Theater)

### GARAGES

1. MARSHALL  
387 spaces
2. JEFFERSON  
585 spaces
3. CROSSING 900  
900 spaces  
(Open to the public nights & weekends)

### Downtown Event & Dinner Visitor (FREE)

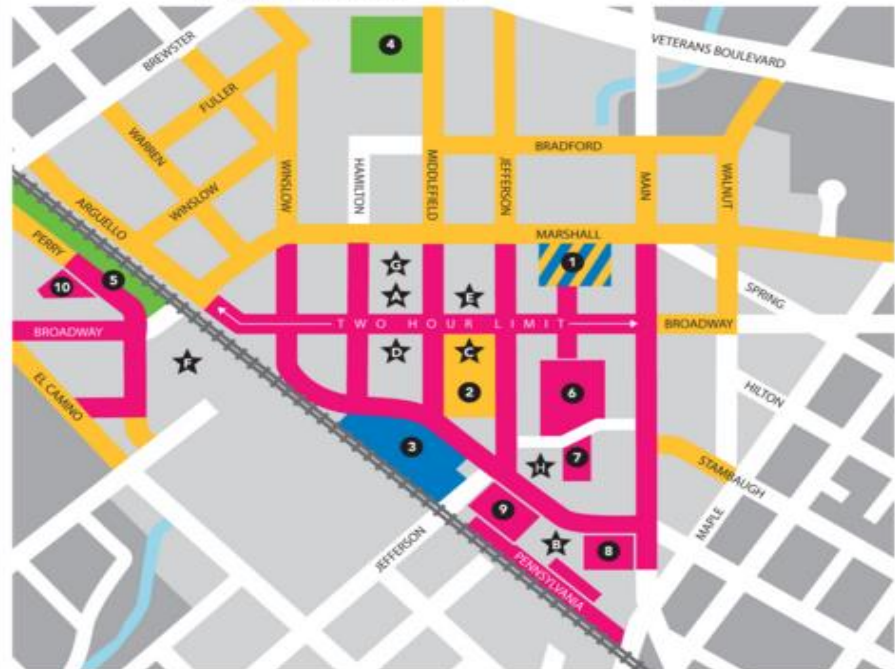
Free Mon - Fri after 6pm, all day on weekends

4. COUNTY GARAGE  
797 spaces
5. CALTRAIN LOT  
160 spaces

### Lunchtime/Daytime Visitor

\$1 per hour Mon-Sat, 10am-6pm; lots free Mon-Sat after 6pm and all day Sunday

6. MAIN STREET LOT  
150 spaces
7. CITY HALL LOT  
15 spaces
8. LIBRARY LOT A  
88 spaces
9. LIBRARY LOT B  
98 spaces
10. PERRY STREET LOT  
52 spaces



### LANDMARKS & DESTINATIONS

- |                      |                    |                     |                                    |
|----------------------|--------------------|---------------------|------------------------------------|
| A. Courthouse Square | C. Century Theatre | E. Dragon Theatre   | G. San Mateo County History Museum |
| B. Library           | D. Fox Theatre     | F. Caltrain Station | H. City Hall                       |



# COMPREHENSIVE SIGNAGE AND WAYFINDING

## CONFLICTING SIGNAGE AT VANDEVENTER AVE AND NASSAU STREET





# COMPREHENSIVE SIGNAGE AND WAYFINDING





# USE CONVENIENT PARKING TECHNOLOGY

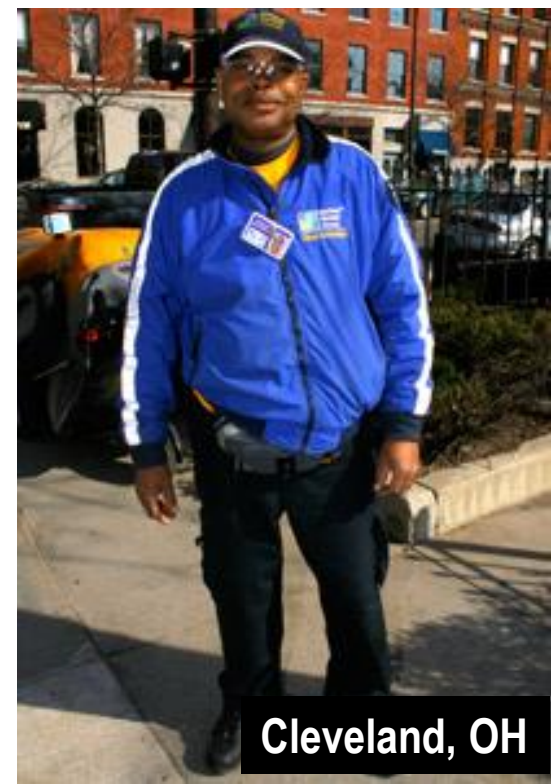
- Make it easy and convenient
- Use technology to pay by coin, debit/ credit, and cell
- Can combine meters & kiosks
- Enhance “first 8 minutes free” option
- Integrate with enforcement equipment





# CUSTOMER-ORIENTED ENFORCEMENT

- Align Enforcement mission with City goals
- Consider first ticket free (per calendar year) with parking information
- Consider progressive fines
- Use new technology





# INCREASE PARKING SUPPLY



**Surface Parking:  
\$5,000 per space**



**Above Ground  
Structure:  
\$20,000 - \$25,000 per  
space**



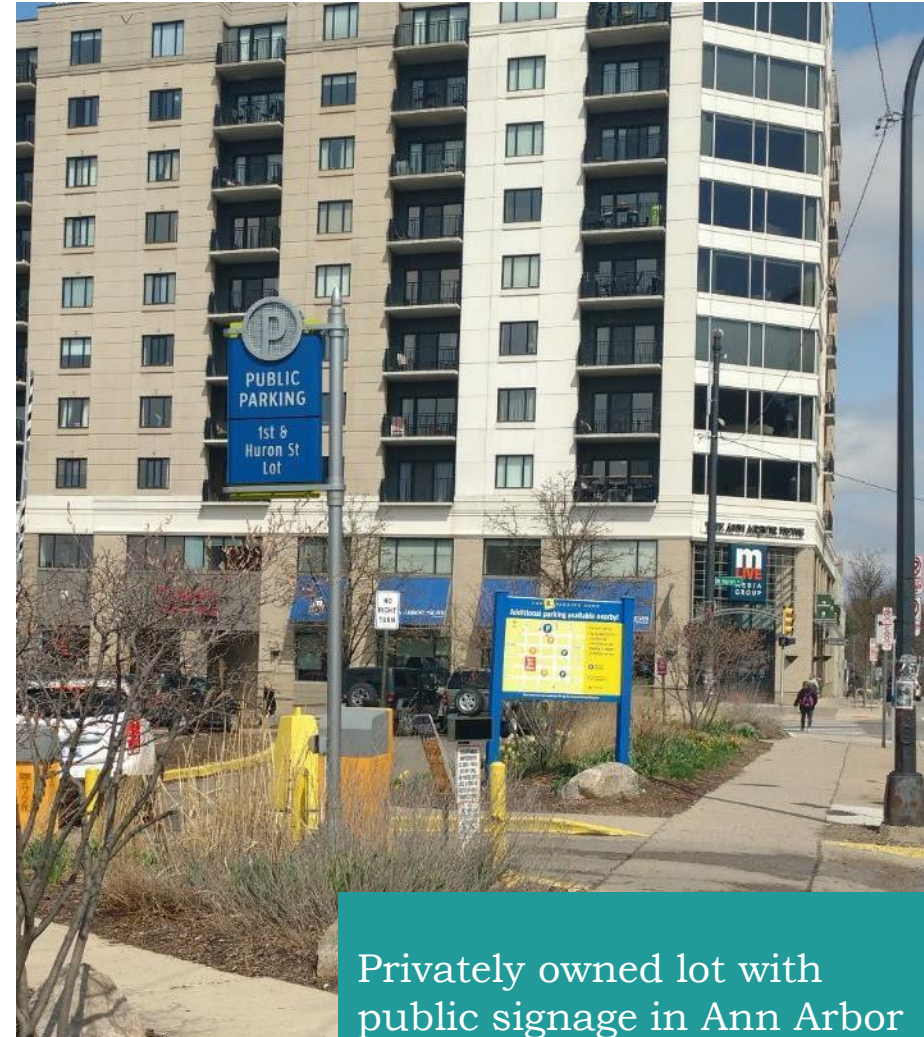
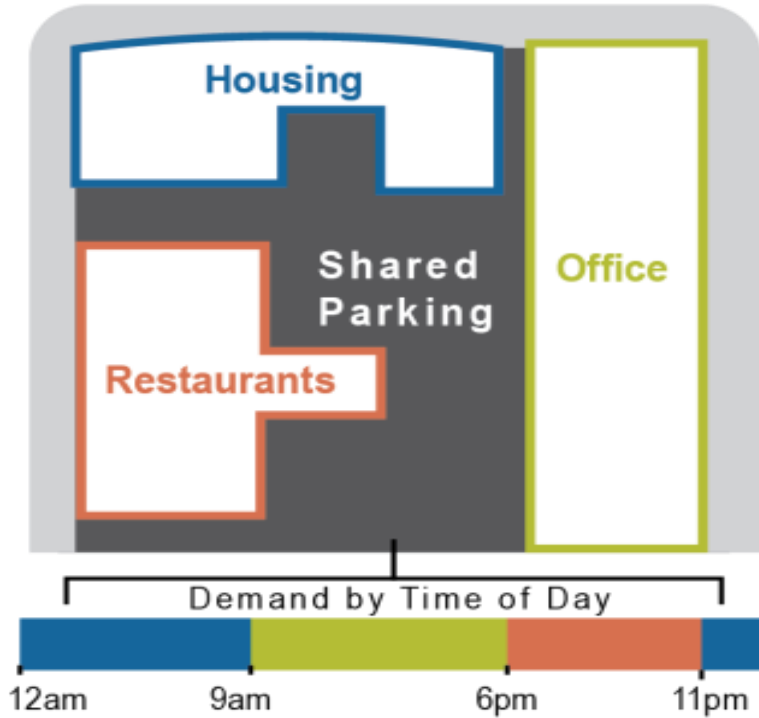
**Underground Structure:  
\$35,000 per space** Average costs vary by location

Parking is expensive, and space is at a premium



# INCREASE PARKING SUPPLY

- Shared parking between uses



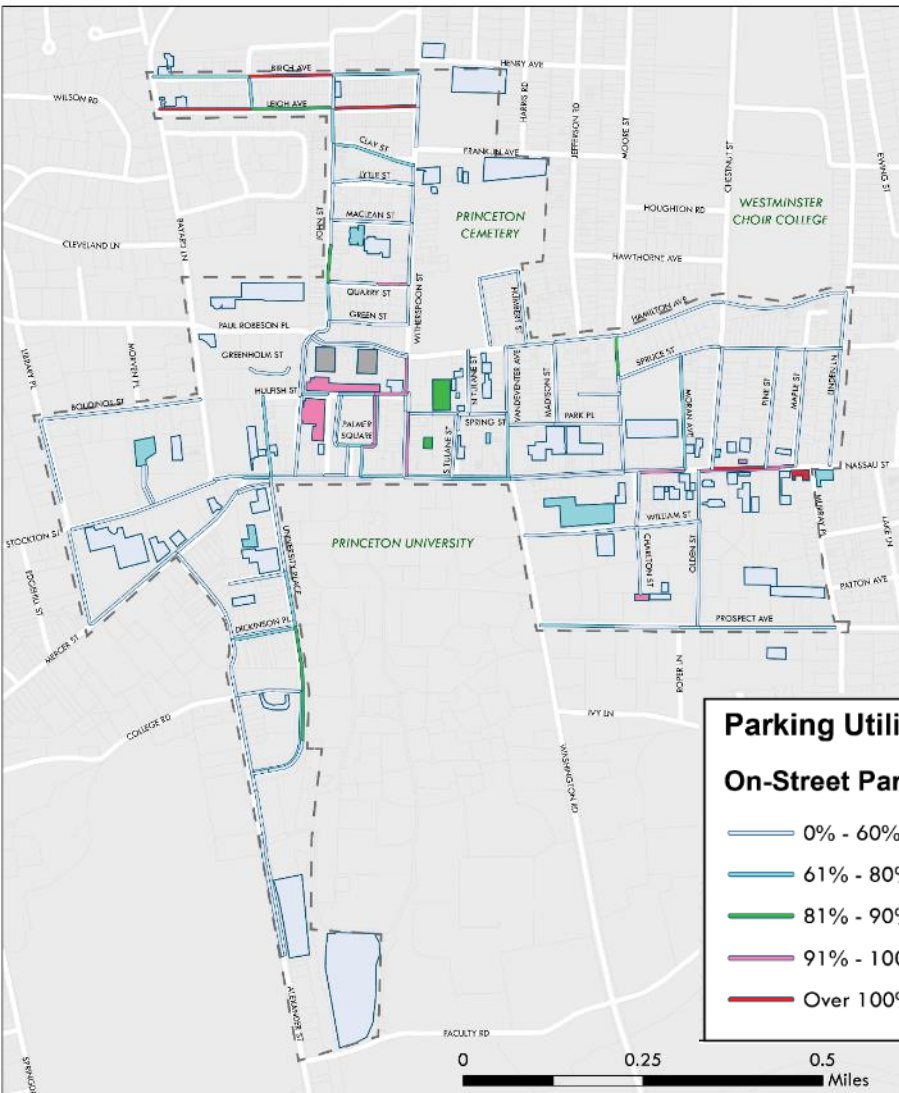
Privately owned lot with public signage in Ann Arbor





# CREATE ADDITIONAL EMPLOYEE PARKING

- Work with owners of underutilized lots at peak hours
- Help broker agreements between private lot owners and businesses with parking needs
- Expand on business permit agreements such as Peacock Inn valet parking in Trinity lot

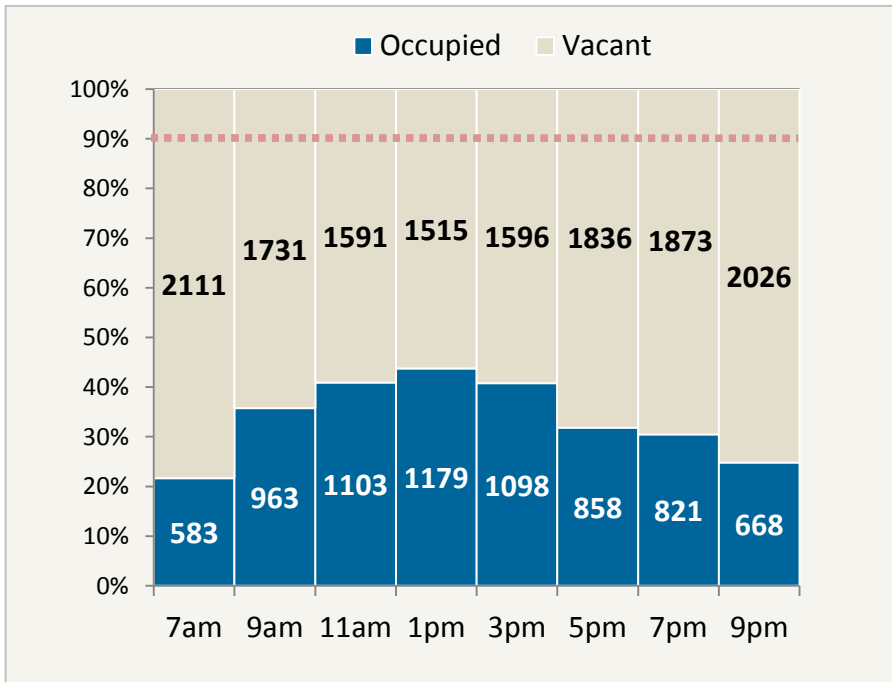




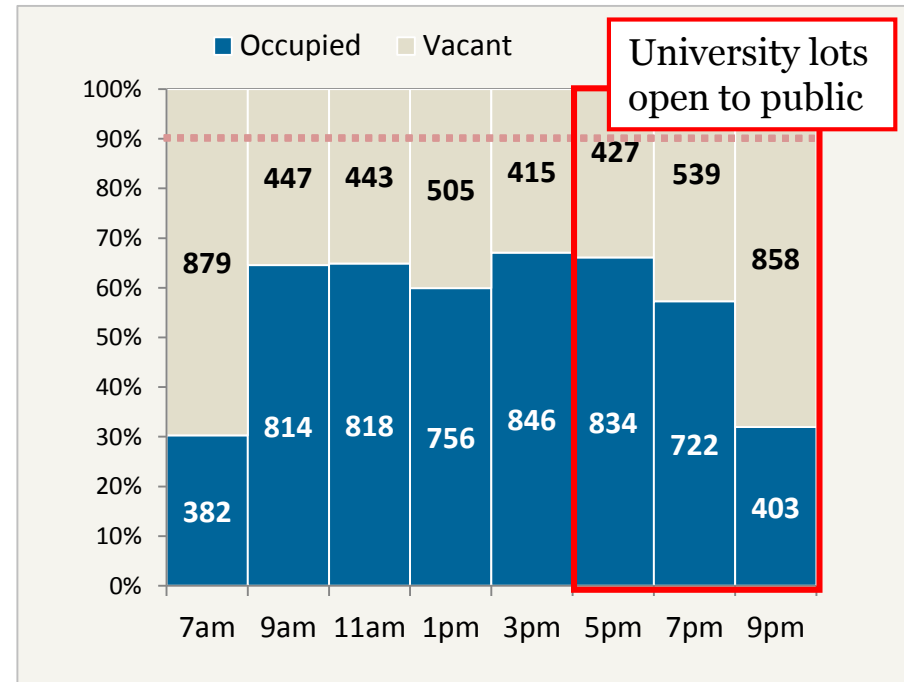
# RESTRICTED ACCESS V. SHARED PARKING

- Restricted access parking does not surpass 45% utilization
- Shared parking is used more extensively than restricted access parking at all times of day (Princeton University affiliates)

## ALL RESTRICTED OFF STREET PARKING



## SHARED PARKING





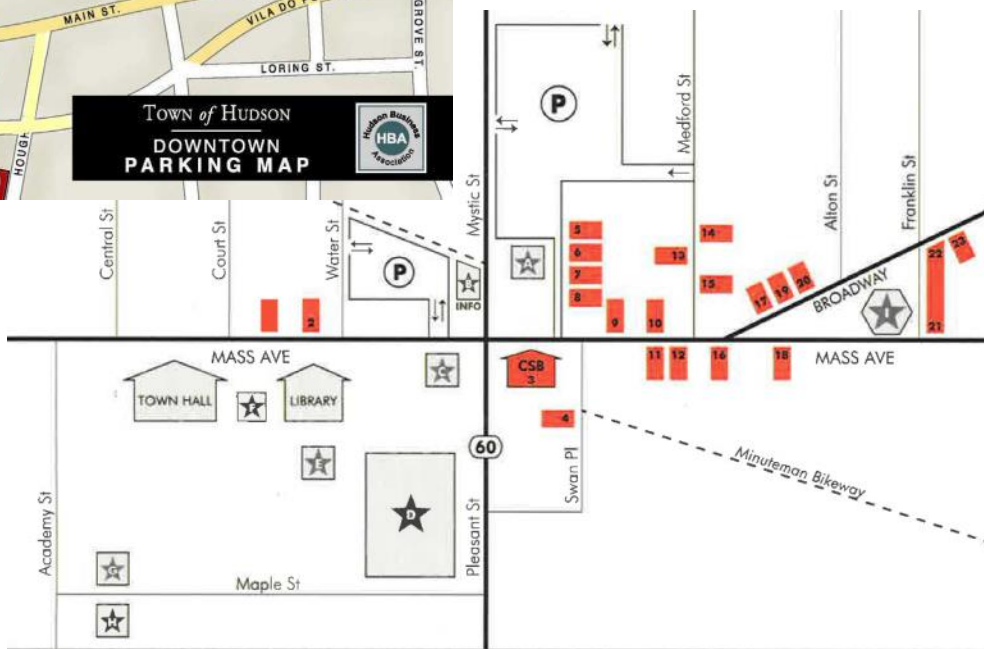
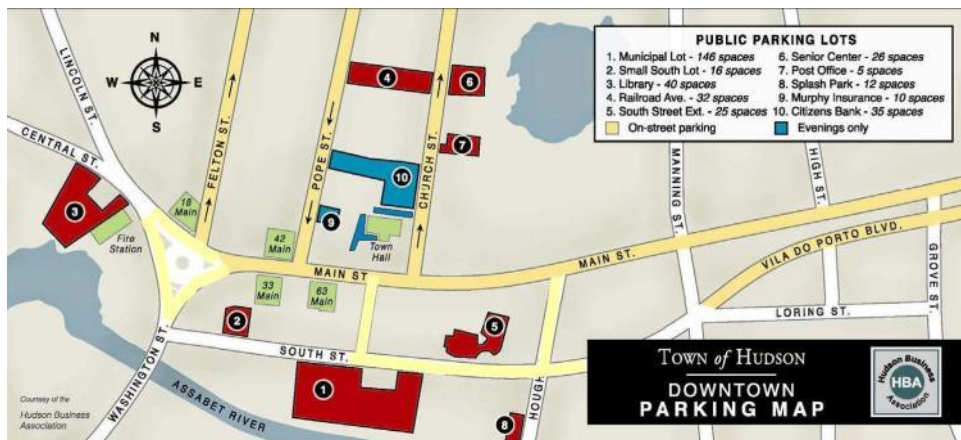
# PARKING BENEFIT DISTRICT

- **Parking revenue** used to finance **neighborhood improvements**
- Enables long-term investment in structured parking or other mobility improvements when necessary





# CREATE BUSINESS COMMUNITY CONNECTION WITH PARKING



1. Henry Bear's Park
2. The Orange Hanger
3. Cambridge Savings Bank
4. Kickstand Cafe
5. Silver and Salt Photography
6. Frames With a History
7. Easy Does It Movements
8. Restoration Services
9. Arlington Centered
10. Chilly Cow
11. Himalayan Crafts
12. Derby Farm Flowers & Gardens
13. TradeBuzz.com
14. The Book Rack
15. The Regent Theatre
16. Ronald A. Riesz Dispensing Optician
17. Common Ground
18. The Computer Cafe
19. Madrona Tree
20. Artful Heart Gallery
21. Helena's
22. Isis Parenting
23. Jacqui's Design Group

Join us for ongoing and special events

### First Fridays

Start your weekend here!

### Holiday Stroll

First weekend in December

### Music and Art Festivals

### Town Day

Mid September

### Farmer's market

June thru October

Wednesdays 2 - 6:30pm  
in the parking lot behind the Chamber of Commerce

### ★ CULTURAL SITES

- A. Jefferson Cutter House
- Arlington Chamber of Commerce
- Cyrus E. Dallin Art Museum
- Whittemore Park
- B. Uncle Sam Plaza
- C. First Parish UJ Church
- D. Old Burying Ground
- E. Whittemore Robbins House
- F. Menotomy Indian Hunter Statue & Robbins Memorial Garden
- G. Arlington Friends of Drama
- H. Senior Center
- I. Fire Station

**P** meters in effect 8am to 6pm  
except Sundays  
and Legal Holidays



# COMPREHENSIVE APPROACH

## Transportation

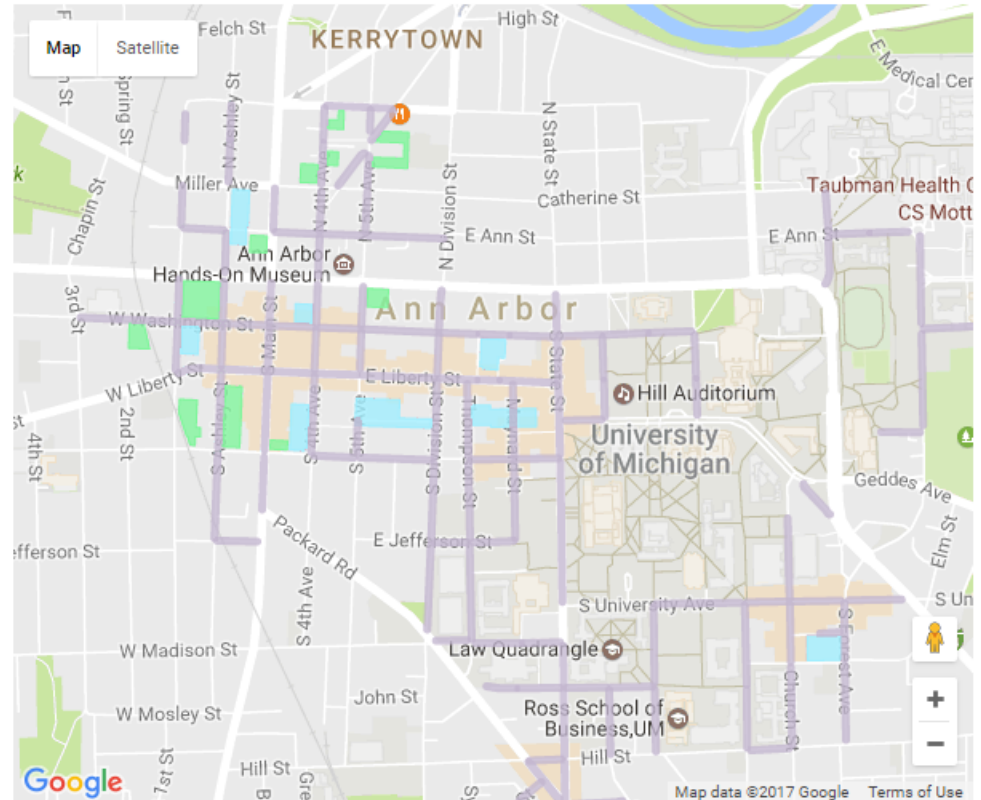
The Ann Arbor DDA works to promote downtown vitality. An important strategy is the encouragement of a **menu of transportation choices** for downtown visitors, residents, customers, employees, and others, who can select their preferred means to come downtown based on factors such as cost, convenience, and environmental interests. Use the interactive map to find locations and information about downtown parking and transportation options.

### Parking Facilities

- Lots
- Structures
- Meters

### Parking Options

- Hourly
- Monthly Permit
- Evening/ Overnight Permit
- Metered Lots
- Flat Rate Entry Facilities
- Bike
- Zip Cars
- Moped/ Motorcycle
- Electric Vehicle Charging Stations
- MAVEN



# Ann Arbor, MI

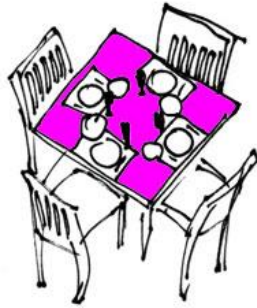


# EXISTING ZONING

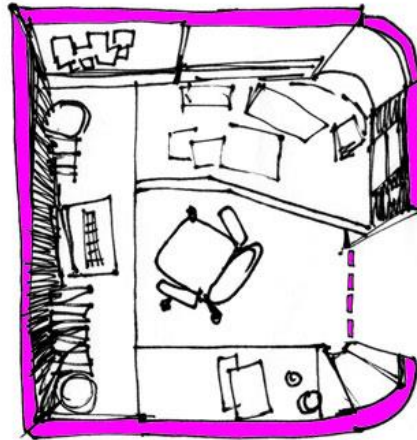
Building Type	Parking Requirement
Dwellings	1.5 spaces per one bedroom unit, 2 spaces per two or more bedroom unit
Offices	1 space per 200 square feet
Restaurants	1 space per 3 seats
Retail Stores	1 space per 175 square feet



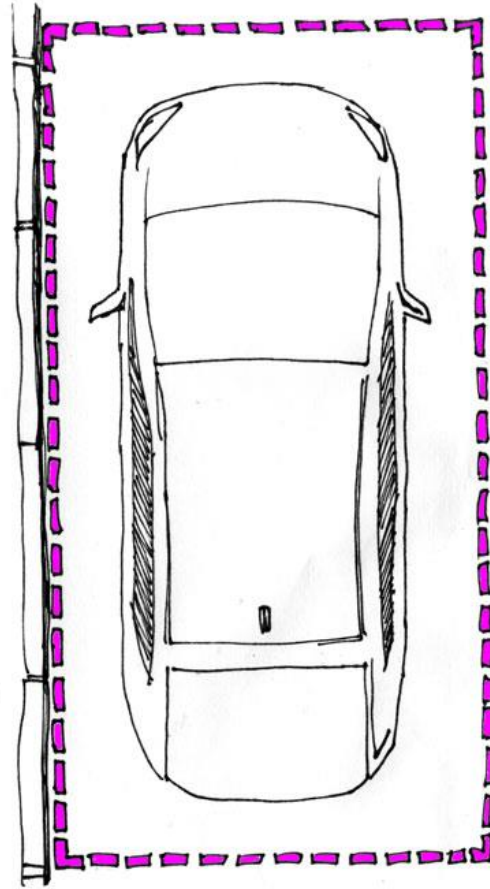
# EXISTING ZONING



**25**  
square feet



**72**  
square feet



**200**  
square feet



# WHAT ZONING CODE CAN ENCOURAGE

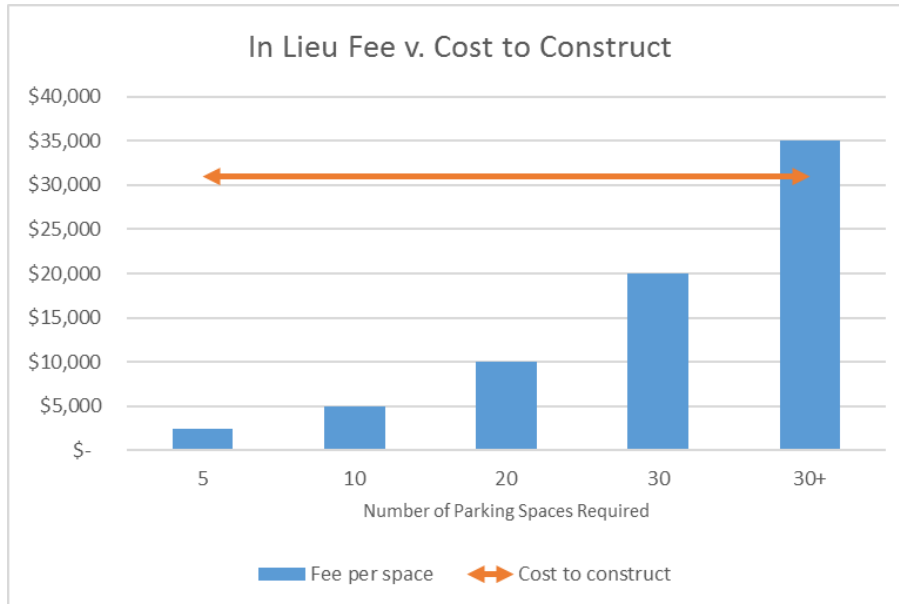


Masking garages with contiguous retail flow along sidewalks





# IN LIEU FEES



City	Determination of Fees	Example Fee
<b>San Luis Obispo, CA</b>	Plan area, land use, number of units	\$5,839 for “each potential additional single family dwelling unit”
		\$4,630 for “each potential multi-family dwelling unit”
<b>Santa Monica, CA</b>	None	\$20,000 per space (one-time)
<b>Miami, FL (Coconut Grove)</b>	None	\$50 per space per month
<b>Miami Beach, FL</b>	None	\$40,000 per space (one time)
<b>Northampton, MA</b>	None	\$2,000 per space (one-time)
<b>Oak Bluffs, MA</b>	The number of required spaces for the development	\$50 to \$100 per space per year
<b>Jackson, WY</b>	The number of required spaces opted out	\$8,500 per space (up to 5 spaces)
		\$17,000 per space (if greater than 5 spaces)
<b>Bend, OR</b>	The number of required spaces opted out	Set by City Council, most recent documentation indicates:
		\$2,500 per space up to 5 spaces
		\$4,500 for 6-20 spaces
		\$7,000 for more than 20 spaces



# PERMIT PROGRAM OPPORTUNITIES

- **Overnight Parking Ban – Purpose?**
  - Protect from student or visitor infiltration?
  - Prevent spread from one street to the next?
  - Limit parking availability to discourage car ownership?
- **Resident – Purpose?**
  - Protect residential streets from overflow parking
  - Provide space for those without driveways
  - Allow for some accommodation while also allowing for metered or timed parking
- **Employee Permits**
  - Limited pool of spaces available
  - MacLean Street Yard (90 spaces) cost \$30 per month for employees
  - Successful, but lengthy waiting list



# STREAMLINE PERMIT SYSTEM

- Readjust permit system to meet Parking Study goals
- Evaluate:
  - # of permits allowed
  - Pricing
  - Eligibility zones
  - Time zones of exemptions





# SIMPLIFY LOADING/DROP OFF ZONES

- 15 minute zones
- Loading Zones
- Drop-off zones
- Bus Stops
- Tour Bus Drop Off





# SUPPORTING STRATEGIES

**People First:** Safe transportation for everyone.



**Connectivity:** Improve access by adding key connections.



**Bicycle Friendly:** Support regional bicycle travel.



**Transit Accessible:** Accommodate growth through efficient transit.



**Networked District:** Link the district using technology and placemaking.

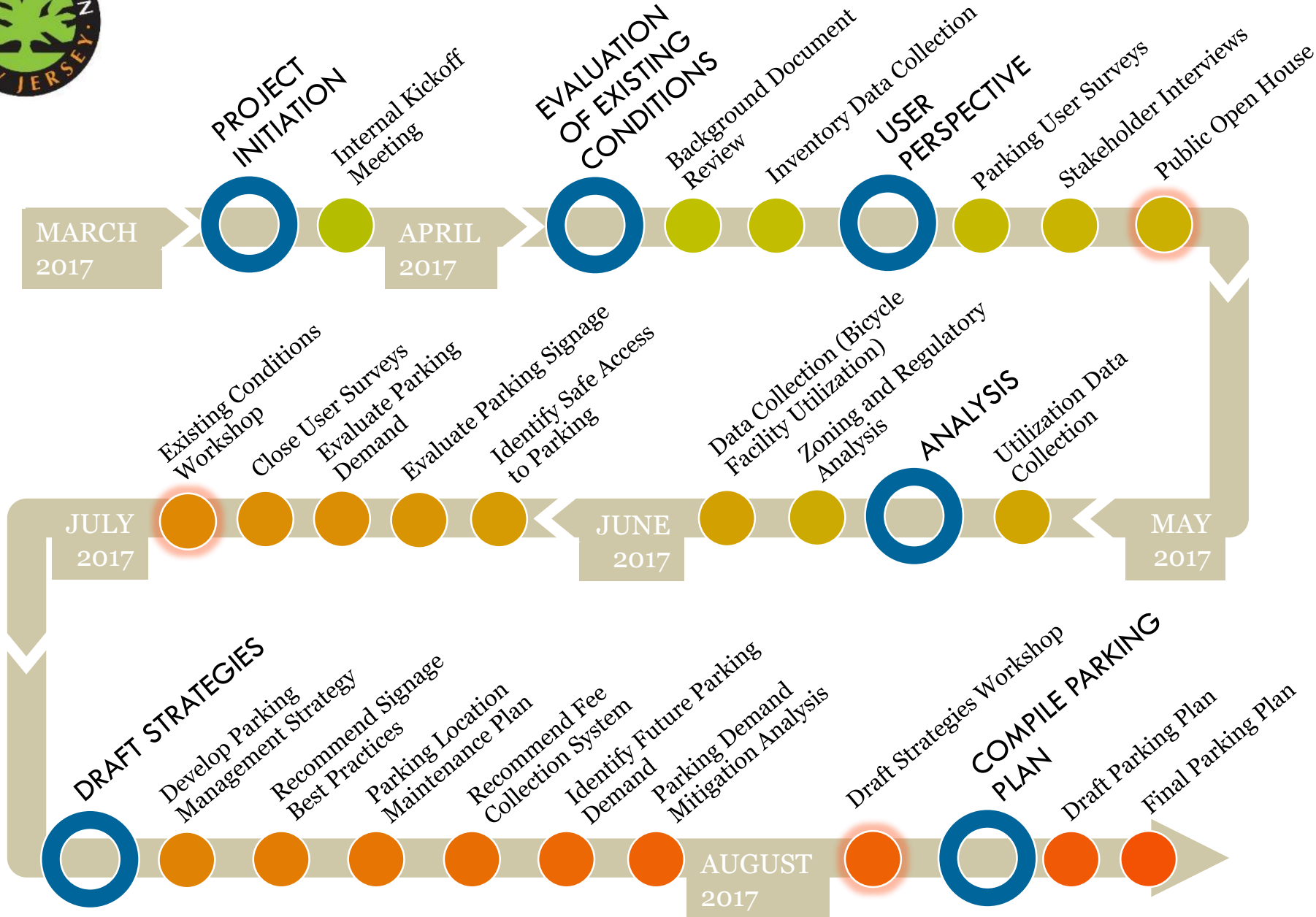


**Zoning:** Encourage mix of uses, minimize parking requirements, require shared parking





# NEXT STEPS





# REPORT AND PLAN

## Demand Management

- Pricing
- Time Limits
- TDM
- Pedestrian access
- Signage

## Administration

- Permit programs
- Governance
- Management structure
- Enforcement

## Supply Expansion

- Striping efficiencies
- Shared parking
- Additional off-street supply

## A Suite of Strategies:

- Cost to implement
- Long-term costs
- Required approvals
- Time frames
- Responsible parties



# Thank You!

