



Project Summary – Board of Alderman

Carrboro Parking Study

Presented by
VHB

November, 15, 2016

Overview

- Project Background
- Summary of Findings
 - What have we heard?
 - What does the data say?
 - What does this mean?
 - Are there additional options to consider?
- Questions and Discussion

Project Background



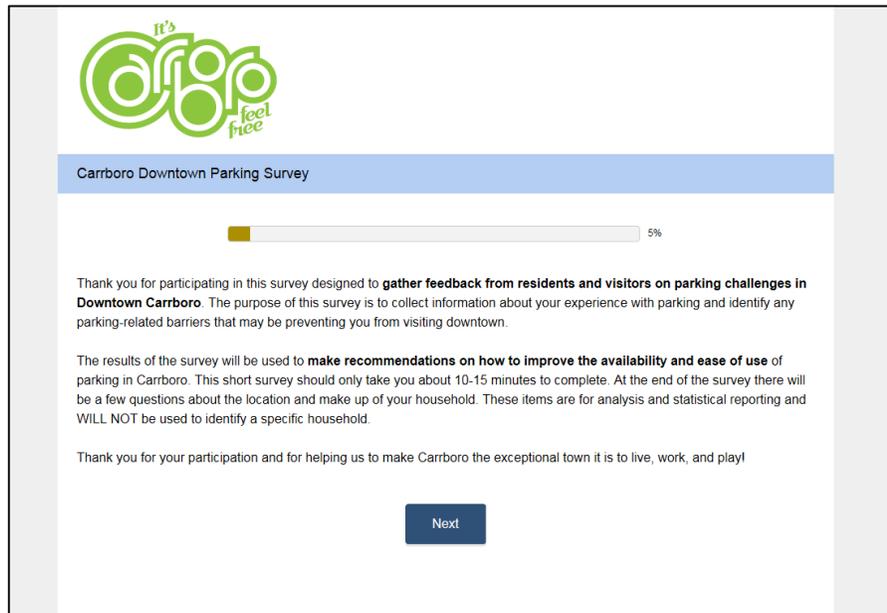
Project Collaborators

- This project has engaged with
 - Town of Carrboro staff
 - Town of Chapel Hill staff
 - CH-Carrboro Chamber of Commerce
 - UNC students/staff
 - Business owners
 - Local non-profit organizations
 - Residents
 - Farmers Market attendees

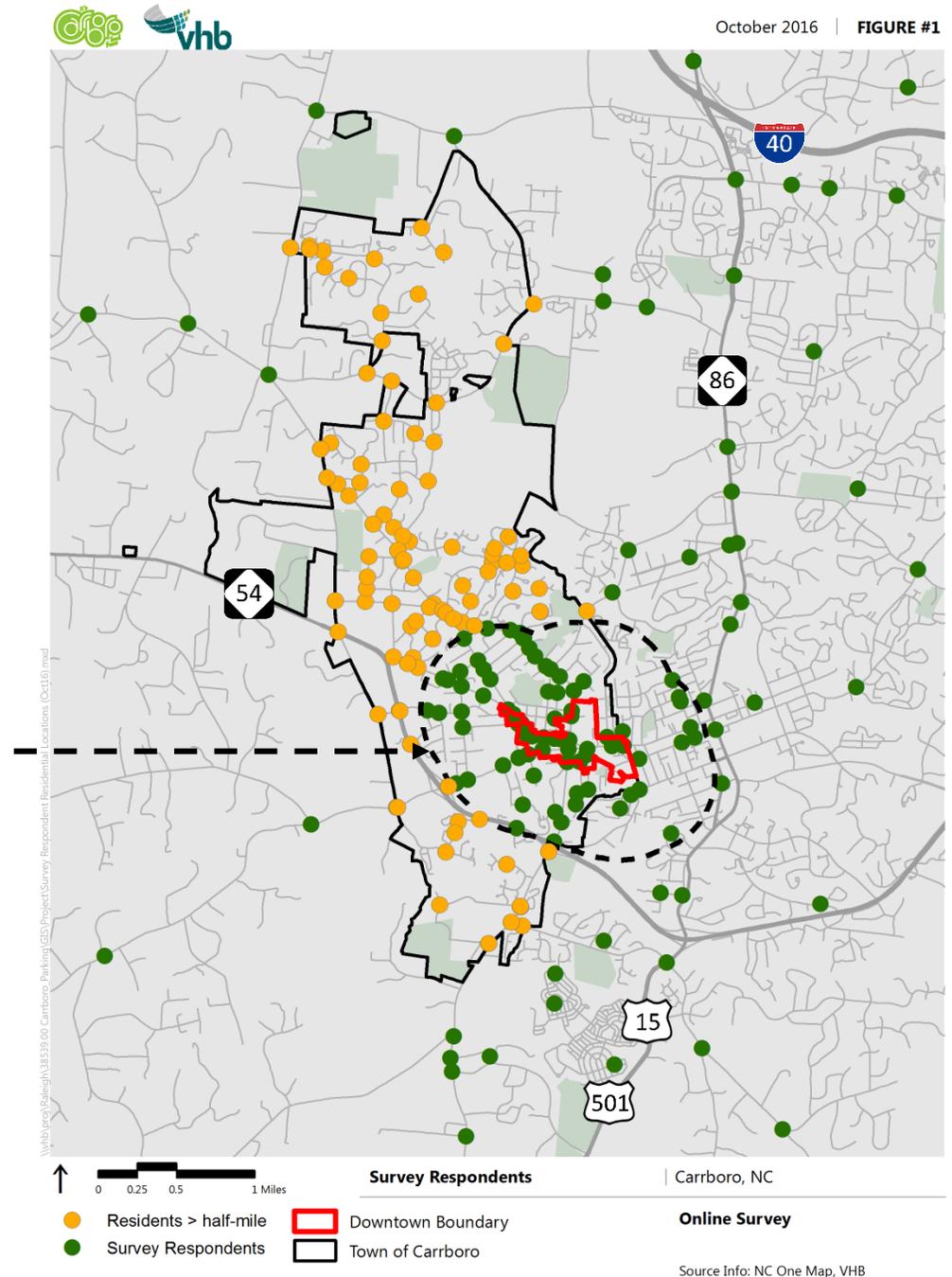


Public Outreach – Survey

- 602 Survey respondents to date
 - 538 provided location
 - 499 Orange County residents
 - 400 Town of Carrboro residents
 - 202 residents further than half-mile (**orange**)



Half-mile from Downtown

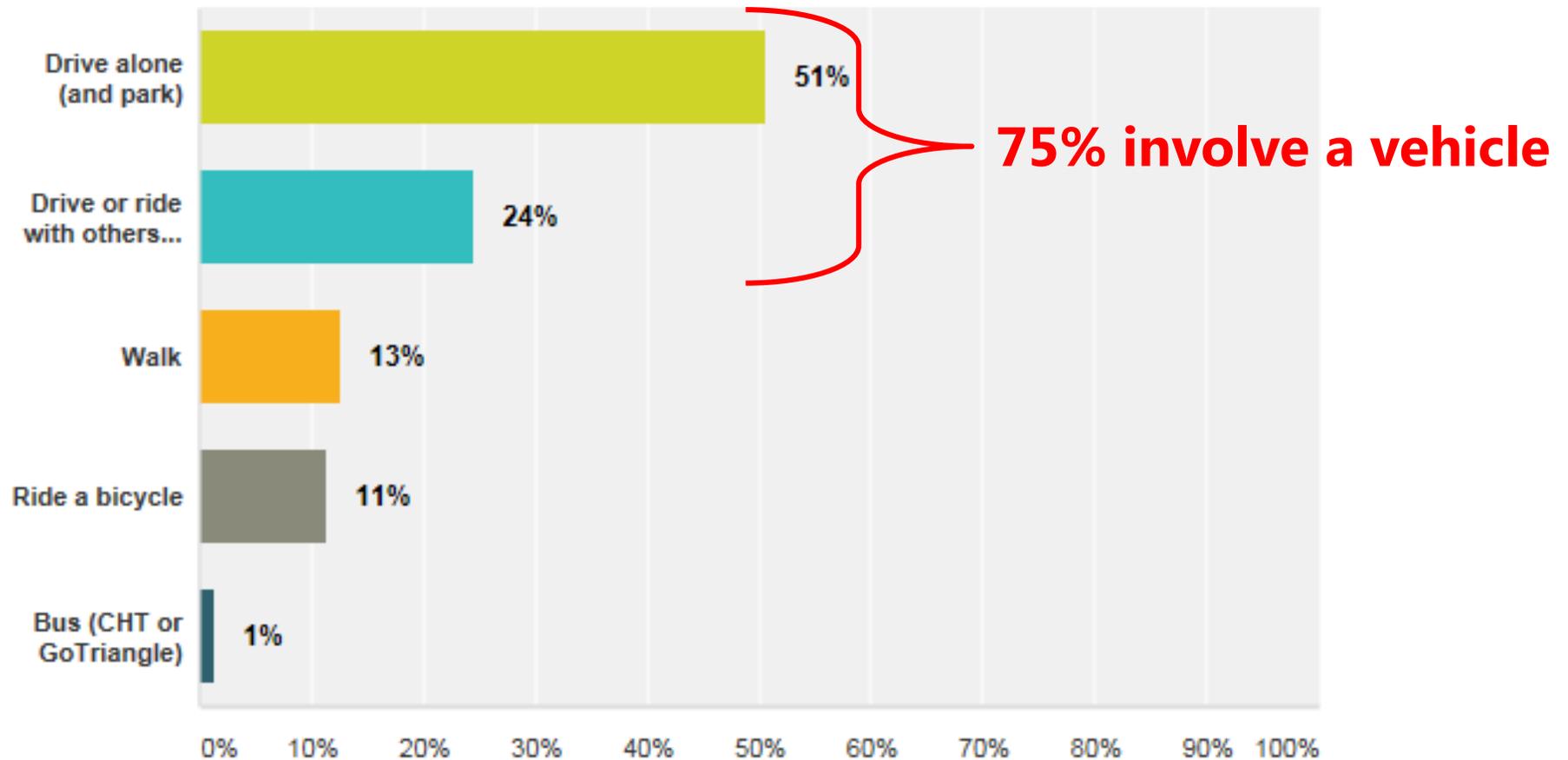


What have we heard?



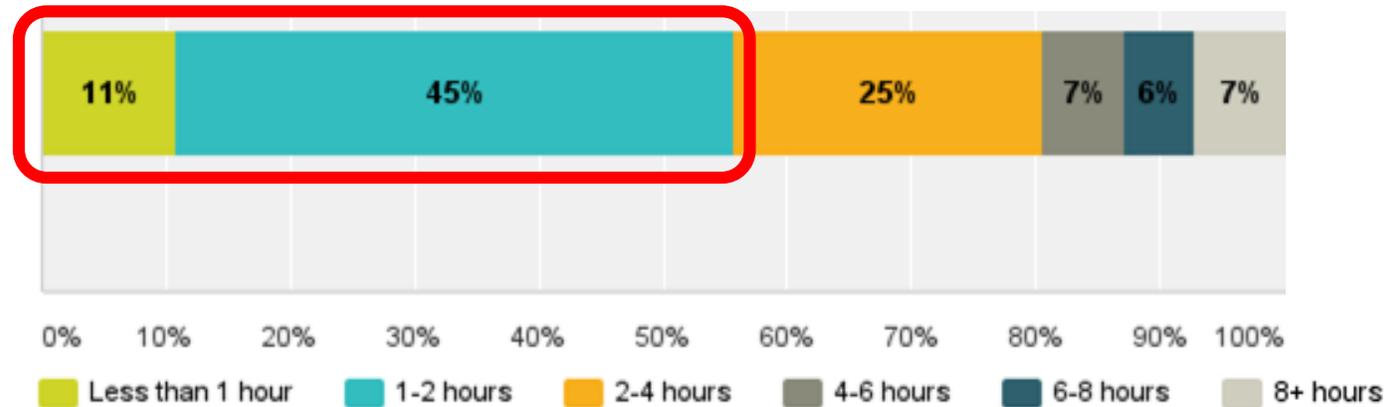
Public Outreach – Survey

- How do you typically travel to Downtown Carrboro?



Public Outreach – Survey

- How long do you TYPICALLY STAY when you visit?

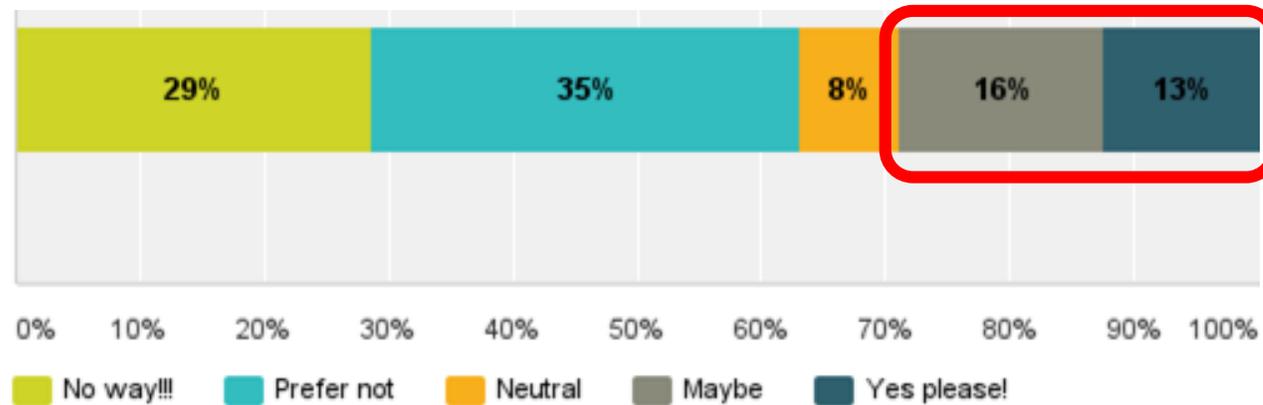


- 56% park \leq 2 hours
- 81% park \leq 4 hours

**Confirmed by Length of Stay analysis:
59% park \leq 2 hours**

Public Outreach – Survey

- Are you willing to PAY AN HOURLY FEE to park?

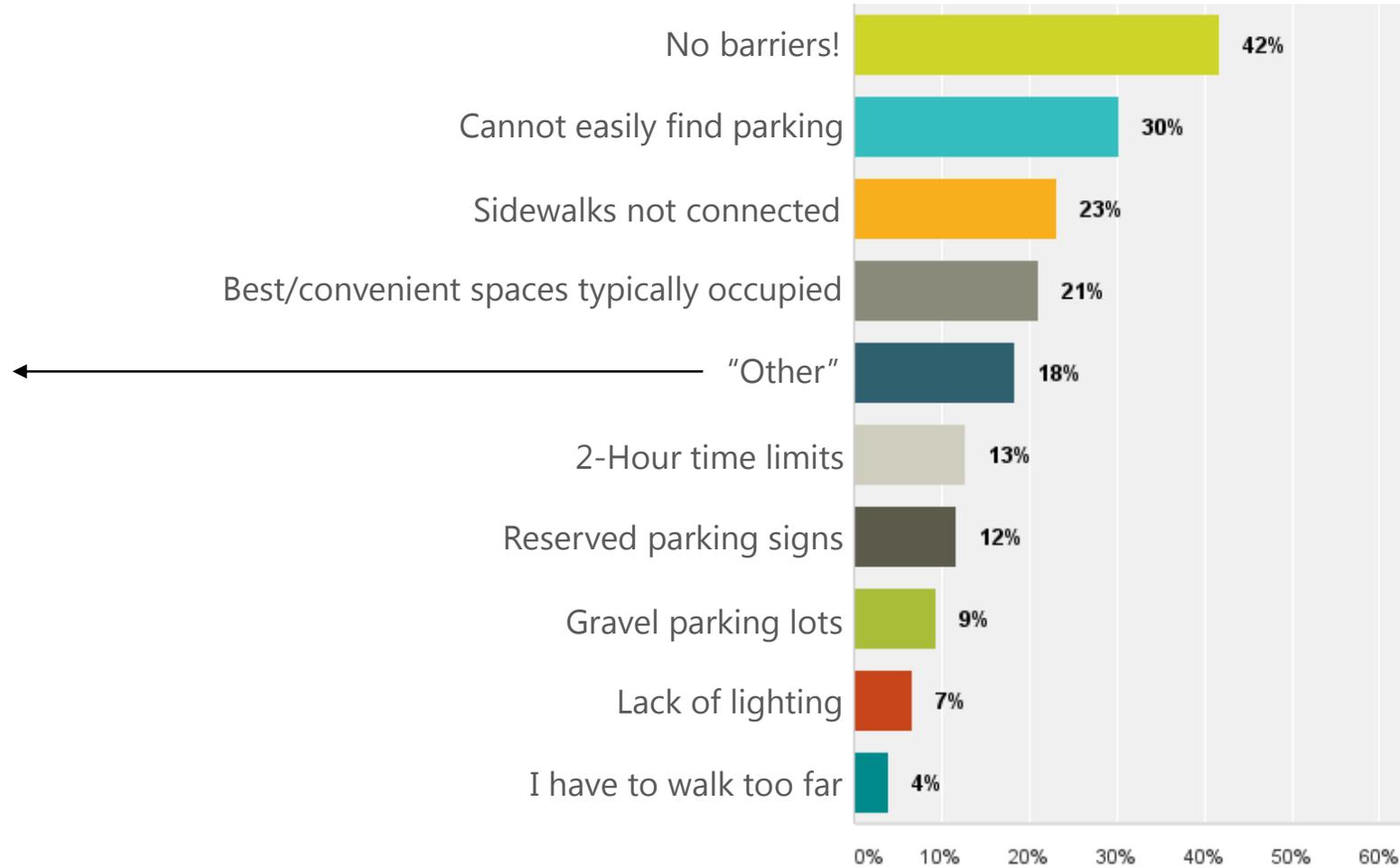


- 29% may be willing

Public Outreach – Survey

- What are the barriers that prevent you from visiting more frequently?

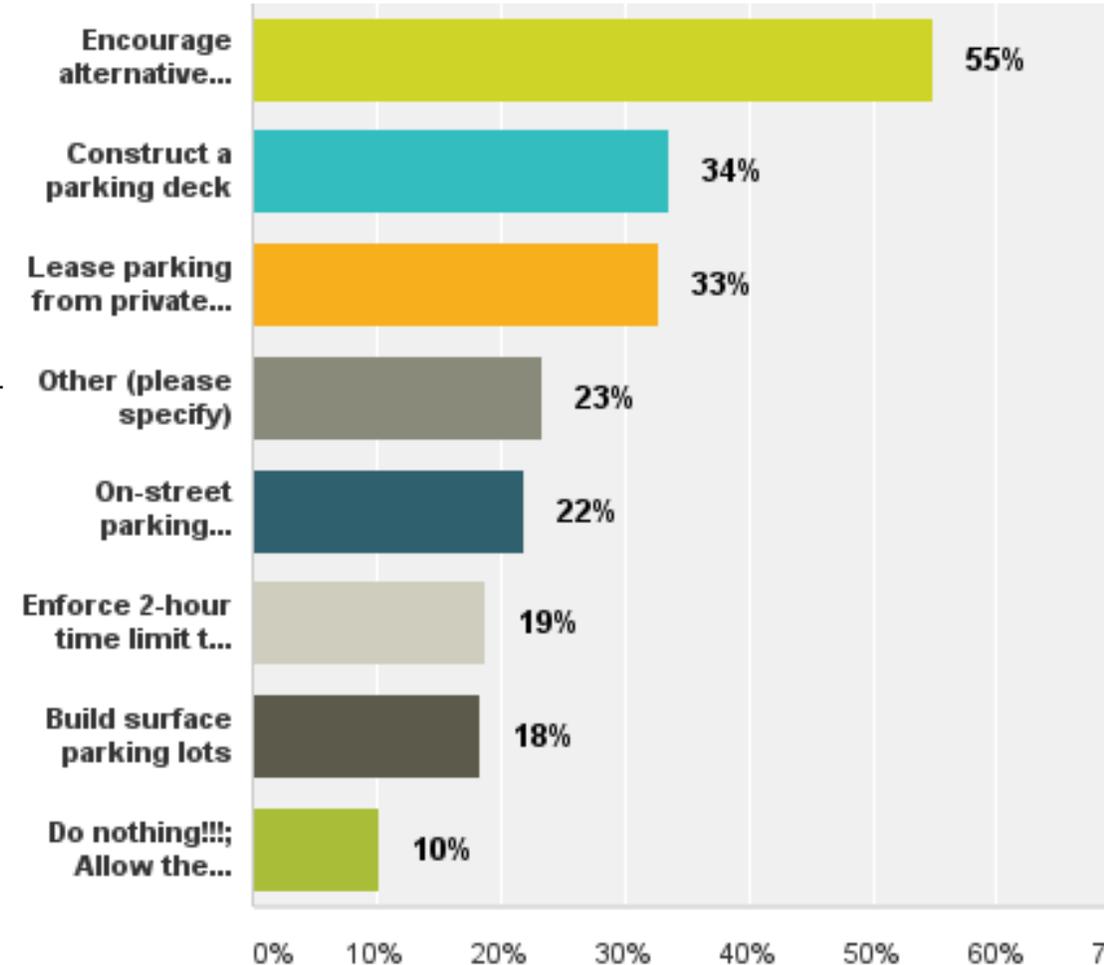
- “Not enough [ADA] handicap parking”
- “I would probably avoid a parking deck”
- “I avoid major events and parades”
- “Higher frequency bus service”
- “Carr Mill Mall parking enforcement”
- “**Predatory towing practices**”
- “**Unfamiliar where to park**”
- “Unmarked spaces”
- “Traffic”



Public Outreach – Survey

■ To improve parking in Downtown Carrboro the Town should...

- "Parking deck, but not too tall"
- "Construct more sidewalks" and "Expand sidewalks"
- "Address employee parking"
- "Bicycle and pedestrian connectivity"
- "Covered bicycle parking" ←
- **"Agreements for after-hours use of [empty] lots at night"**
- "Charge hourly rates for parking"
- **"Better signage"**
- "Different time limits (1-hr, 2-hr, and 4-hr) in some lots"
- "Enforce time limits"
- "Improve bus service" ... "later into evening"
- "Sell [public] surface lots to developers"



Public Outreach – Various

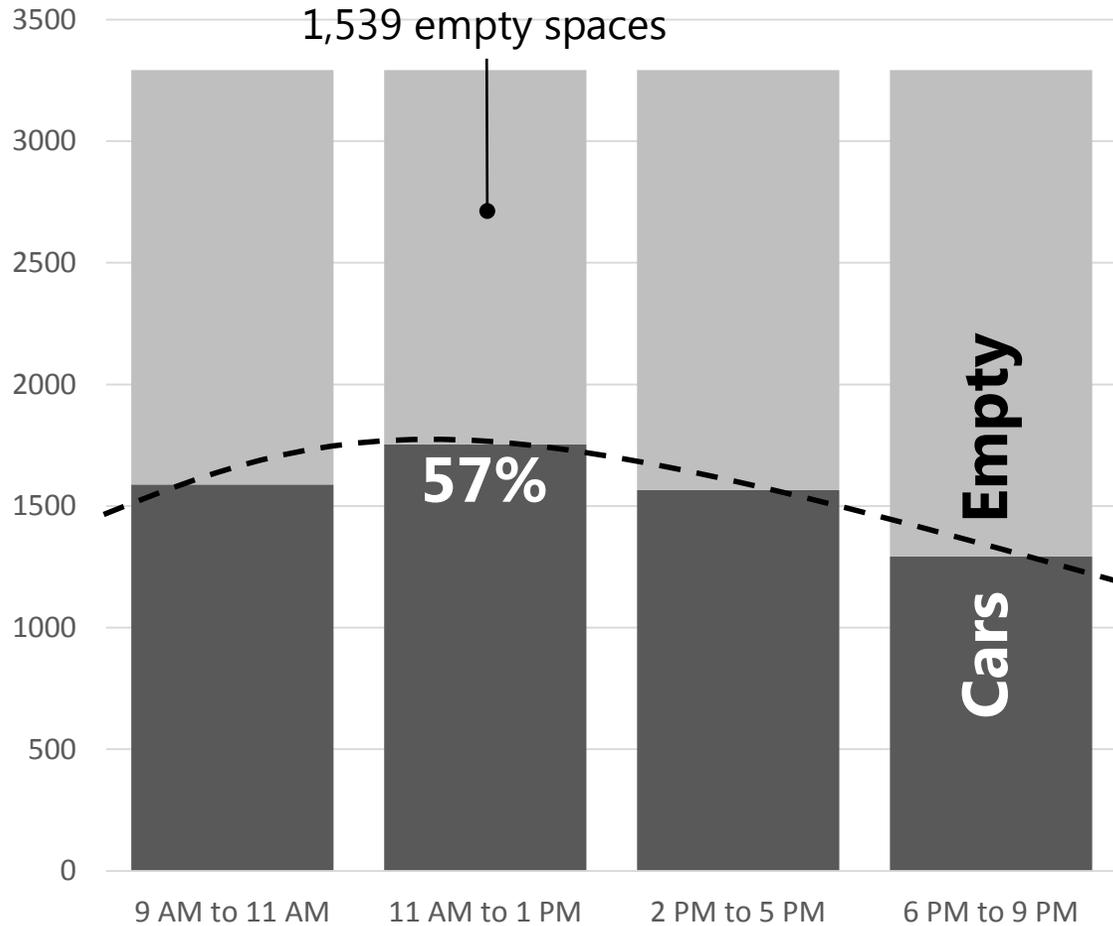
- “I’ve never struggled to park downtown”
- “Long-term (employee) parking is concern” perceived as greatest problem
 - “Enforcement [of 2-hour parking] is the key”
 - Annual business owner survey
- “Charge a fee for public parking”
- **Identify private lots where the public may park after 5 pm**
- Focus on center of downtown
- **Include wayfinding signage and lighting improvements**
- Peak period is lunchtime, however public lots peak during evening 6-9 PM

What does the data say?

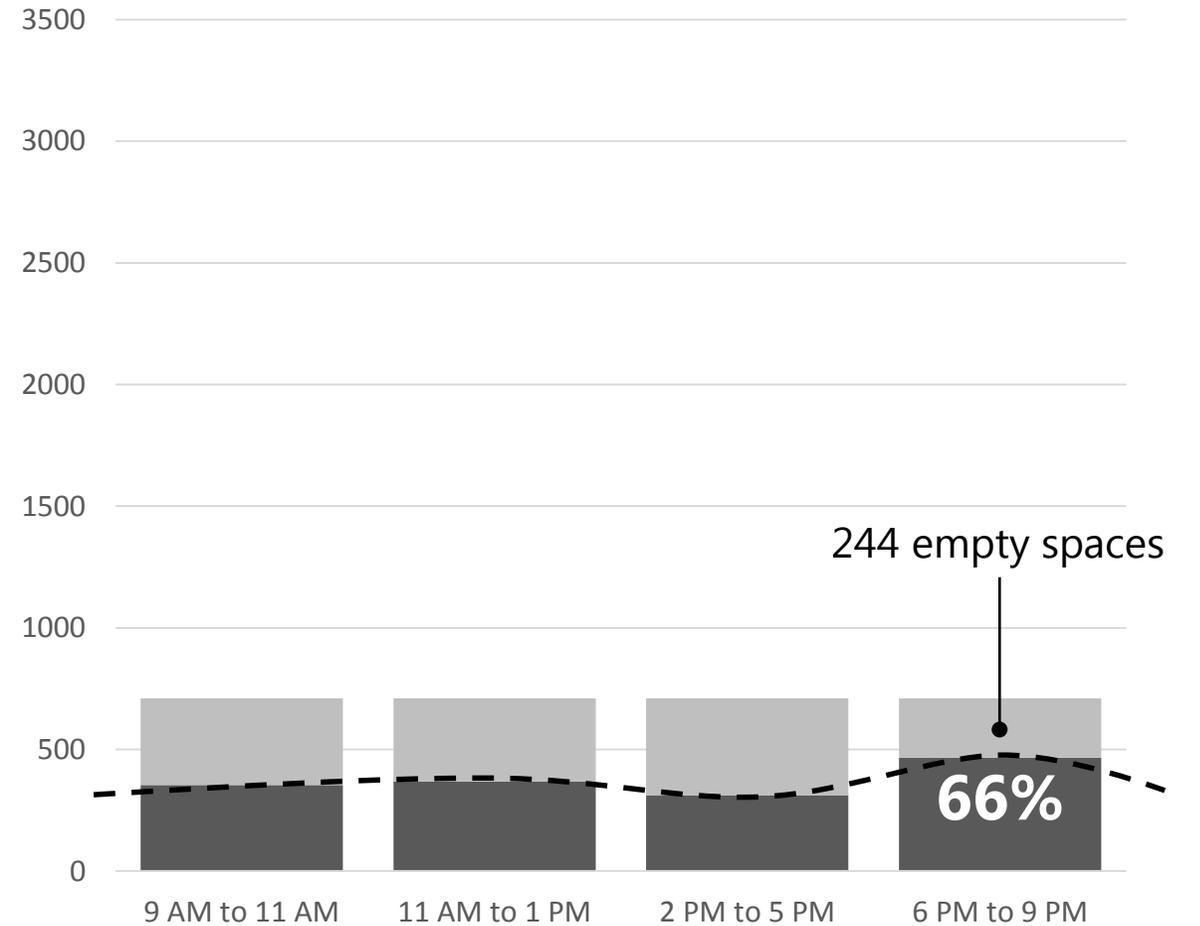


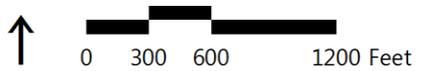
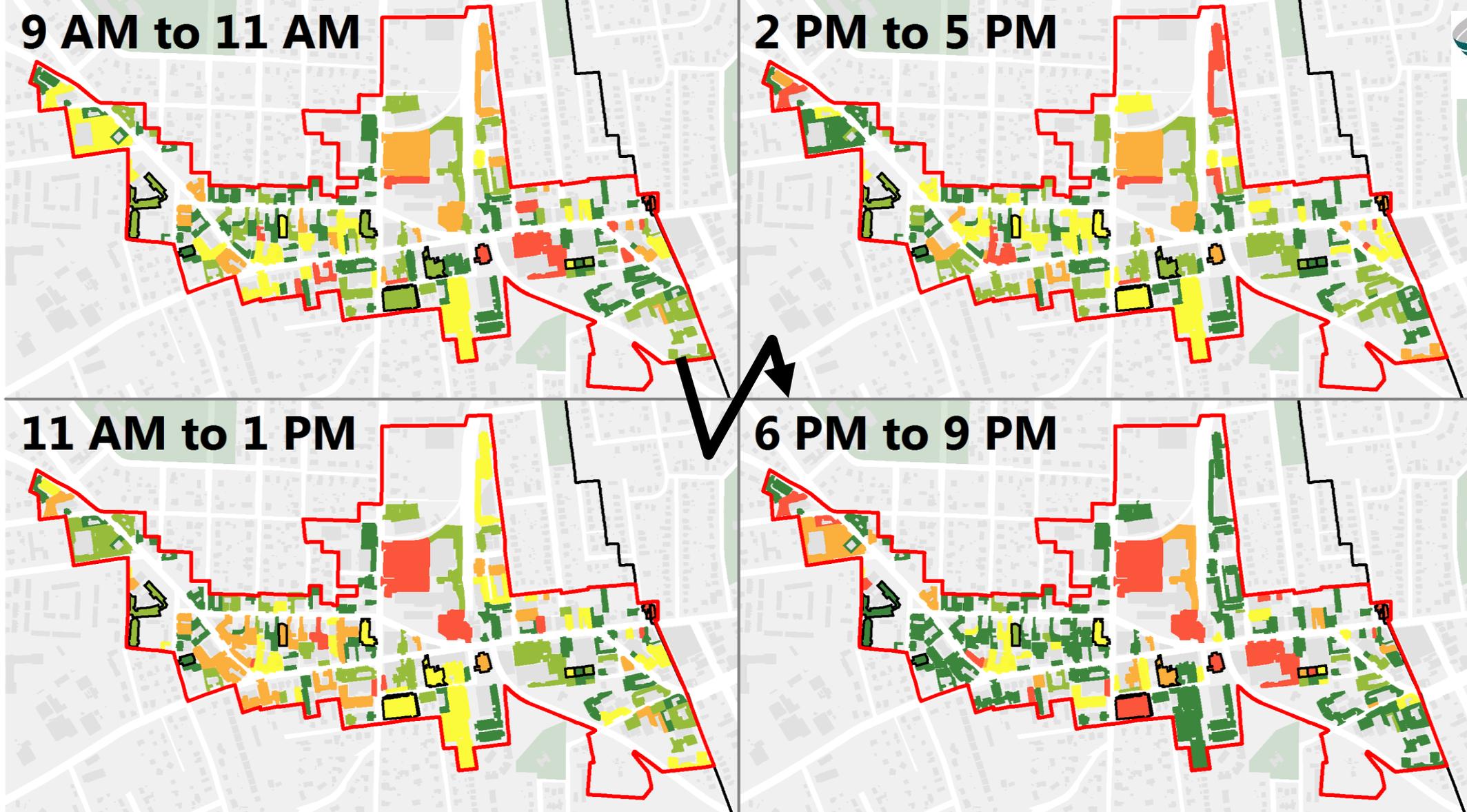
Data Collection – Utilization

Private Parking



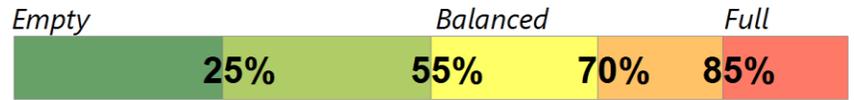
Public Parking





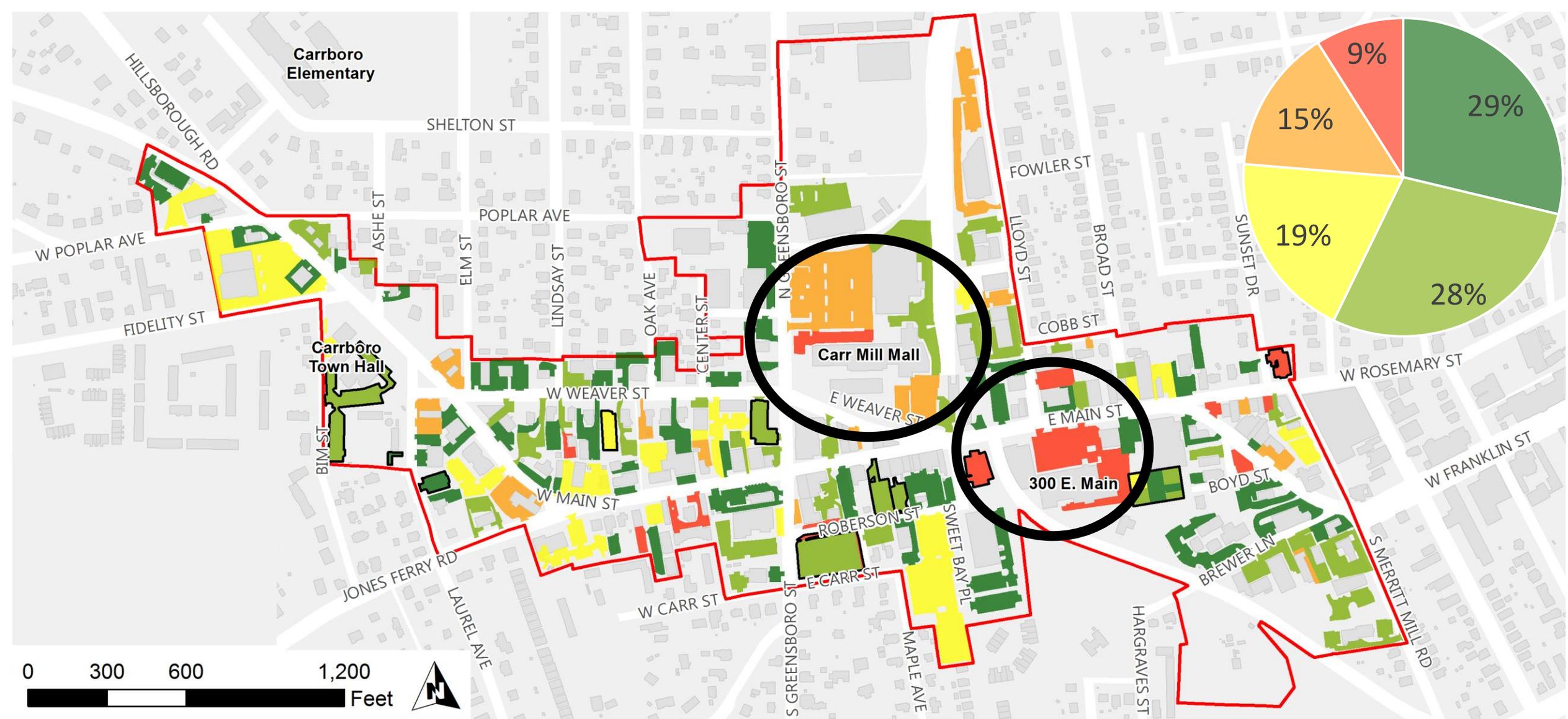
- Downtown Boundary
- Town of Carrboro
- Building Footprint
- Public Lots

Parking Occupancy



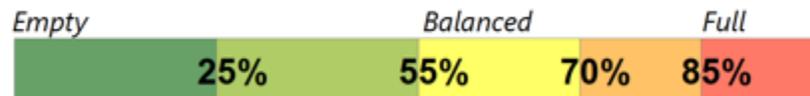
Parking Analysis

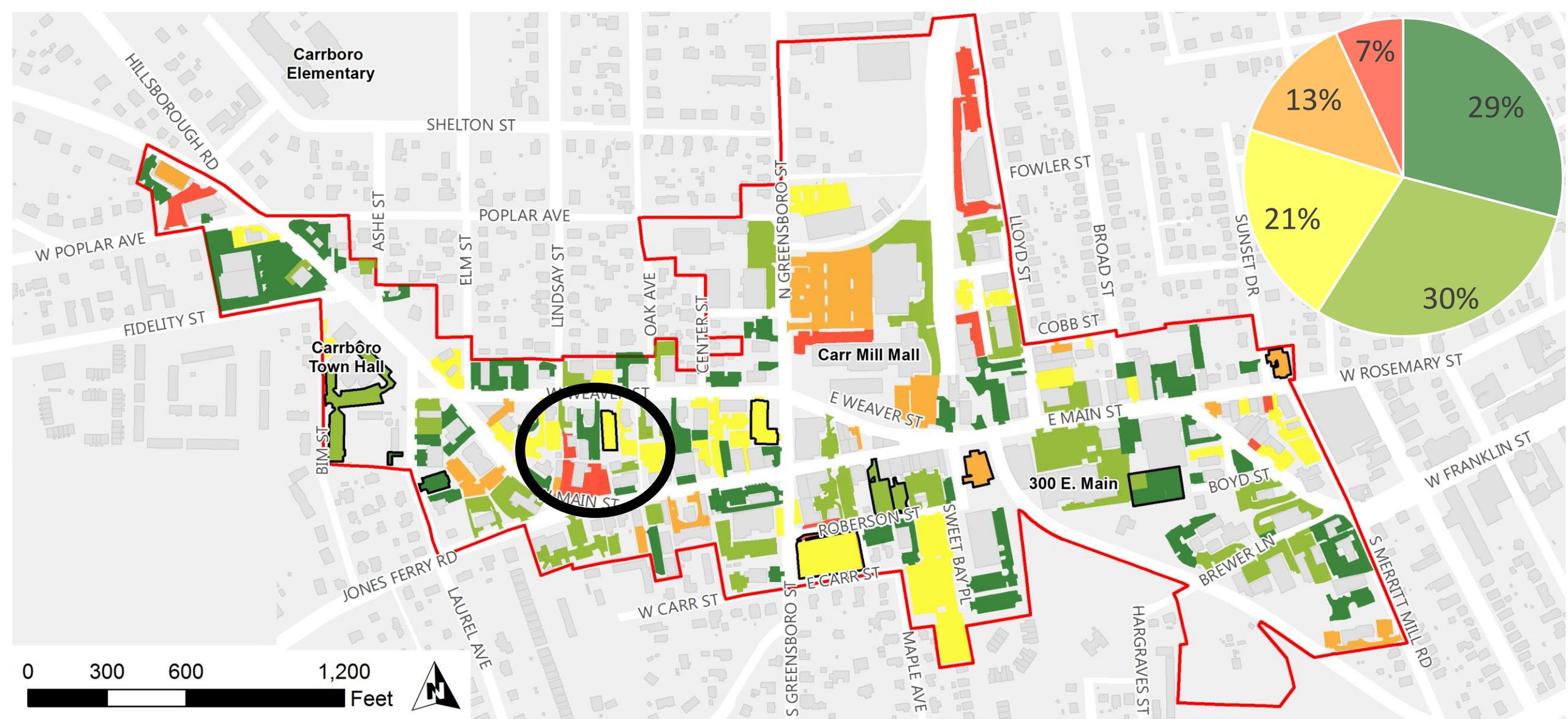
Parking Occupancy by Time of Day | Carrboro, NC



9 AM to 11 AM

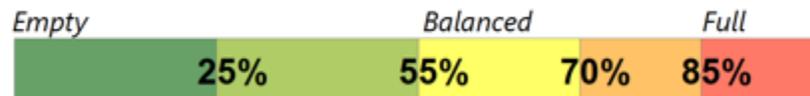
Parking Occupancy

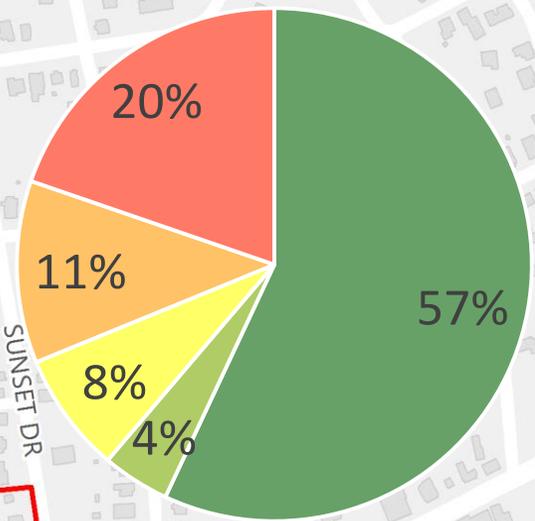
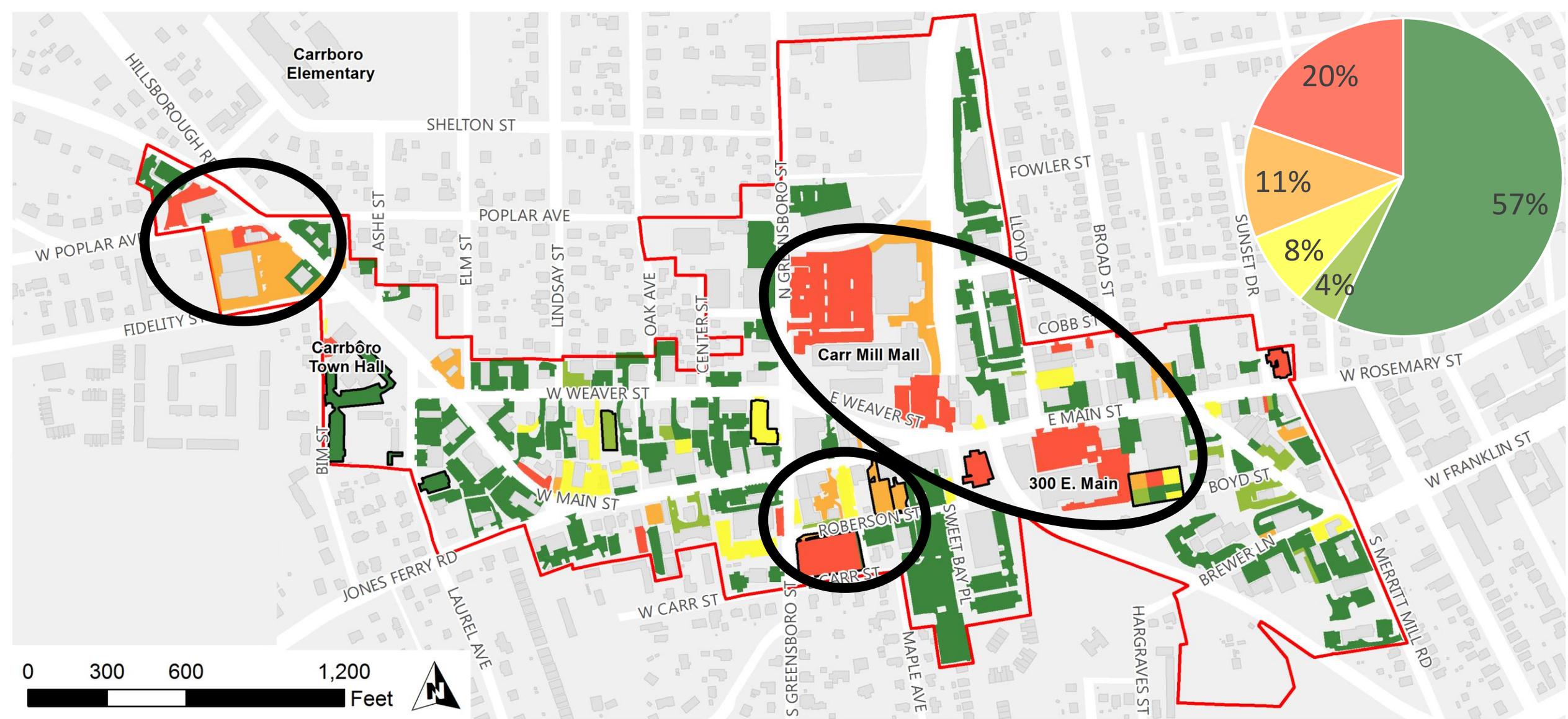




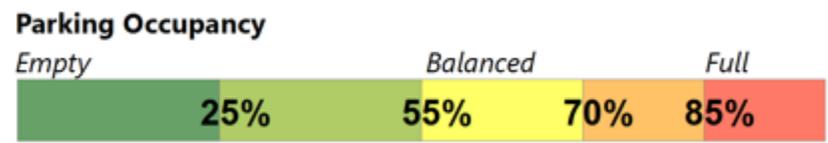
2 PM to 5 PM

Parking Occupancy





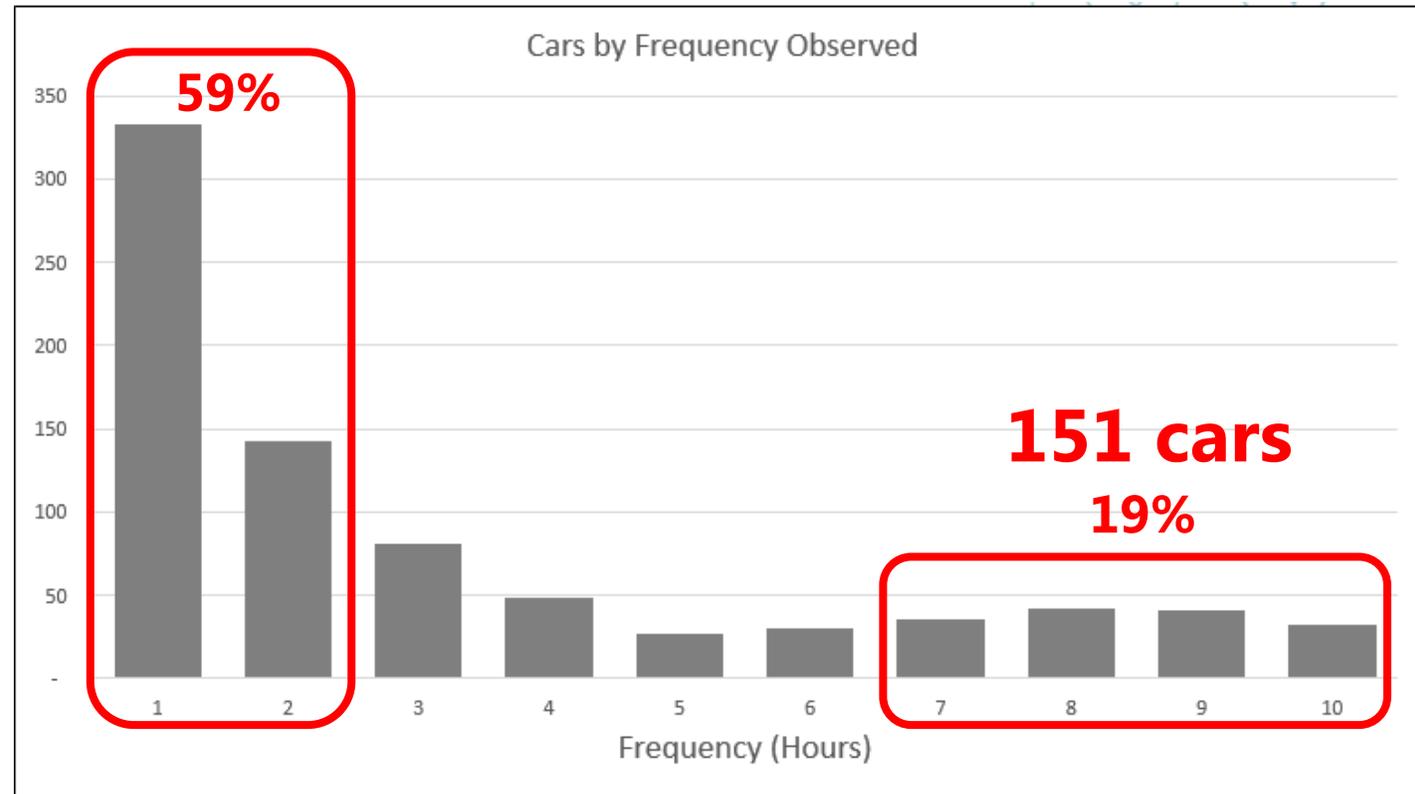
6 PM to 9 PM



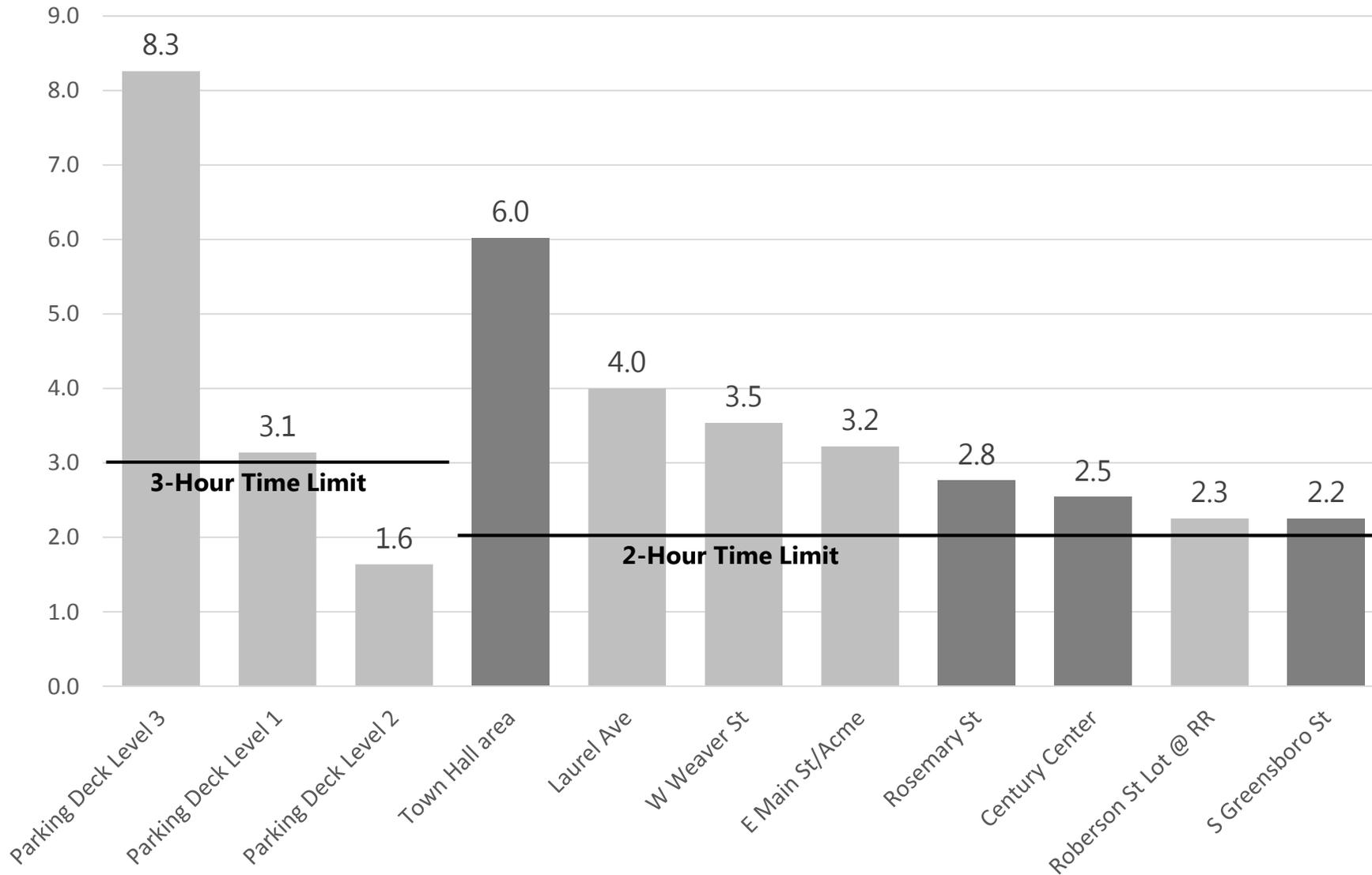
*Many **private** lots are empty*

Parking Turnover – Length of Stay Analysis

- Public parking lots only, license plate observations 8 AM to 5 PM
- **2,646** individual license plates were observed
- **813** unique license plates (cars)



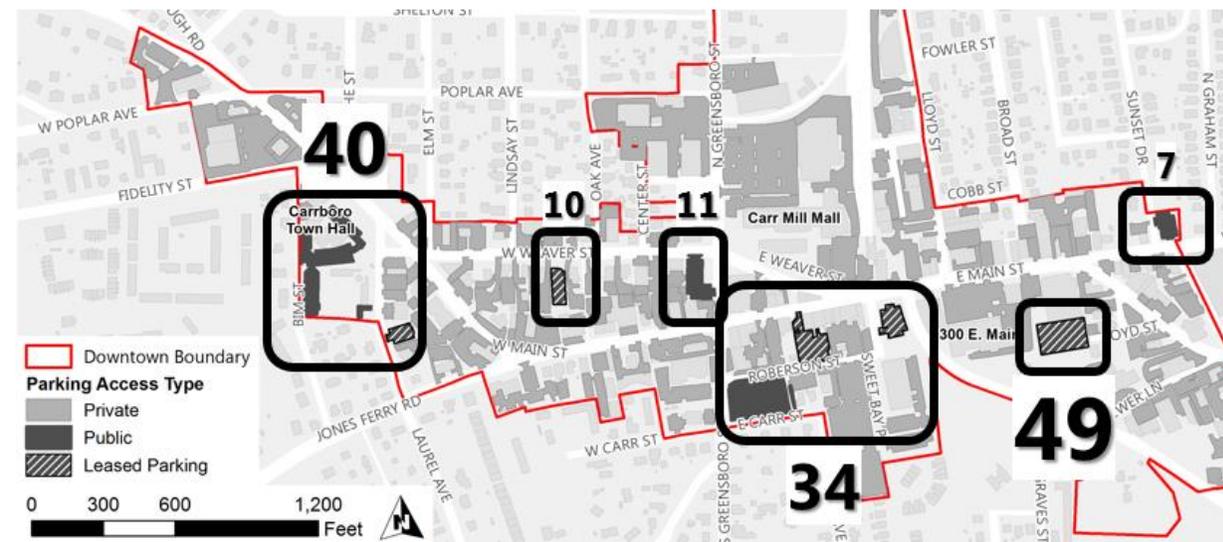
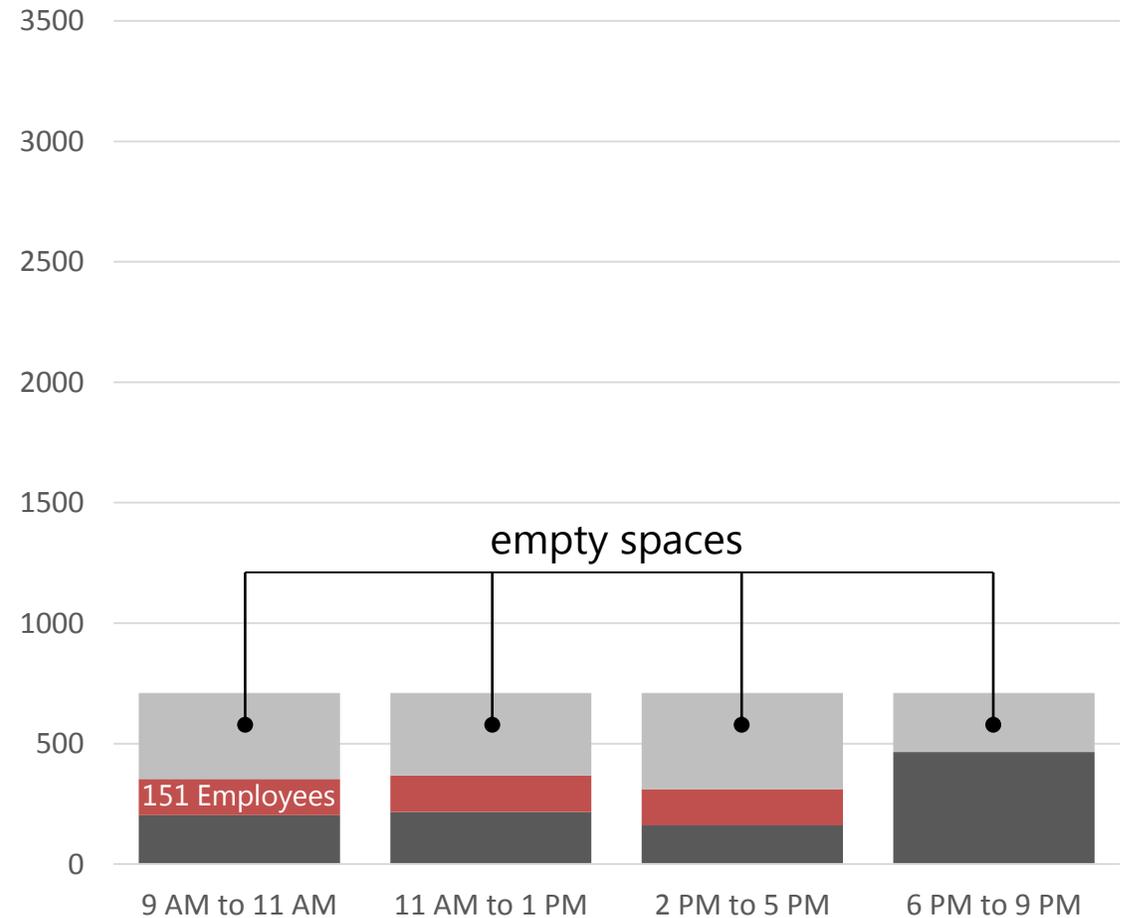
Parking Turnover – *Average Length of Stay* (hours)



Data Collection – Employee Parking

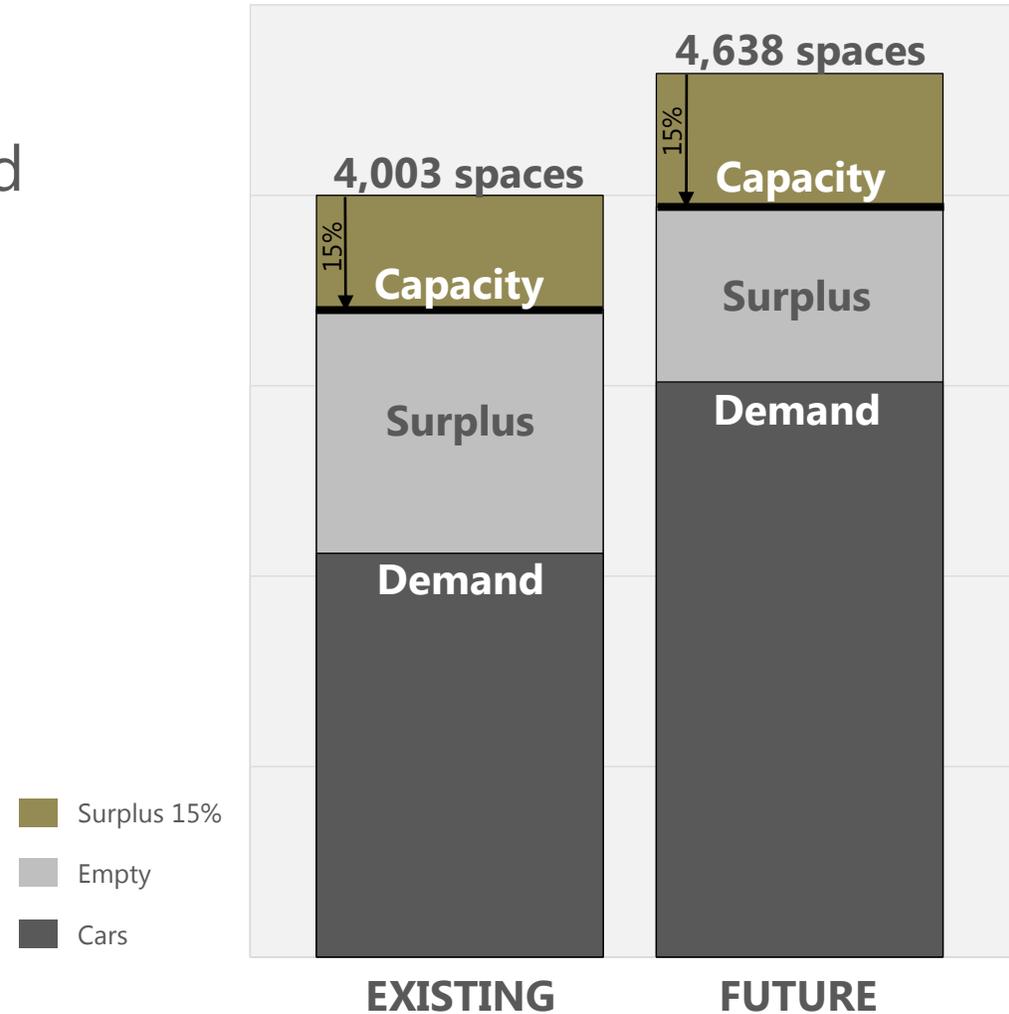
- Is employee parking a problem?
 - Yes, however not a *significant* problem
- **151 cars parked \geq 7 hours**
 - Assumed to be employees

Public Parking



Future Parking Demand Estimation

- Existing supply is adequate to meet demand
- Looking 5-10 years from now
 - Future supply is adequate to meet future demand
 - Surplus of parking could support:
 - 123,000 sqft Office
 - 92,200 sqft Retail
 - 30,700 sqft Dining



What does this mean?



What does this mean?

- **Quantitative** – the data suggests...
 - Land Use Ordinance is on target and effective
 - Existing supply is adequate for existing demand
 - Future supply will be adequate for future demand (5-10 years)
- **Qualitative** – public outreach suggests...
 - Improvements to visibility/signage/lighting of public lots
 - Improvements to sidewalk connectivity
 - Shared parking arrangements, especially after 5 PM

What does this mean? Qualitative

- Parking Management Strategies to effectively balance demand
 - Education Information and signage
 - Encouragement Incentives
 - Enforcement Parking Enforcement
 - Evaluation Data collection

Education

- **Signage**
 - Consistency of message
 - Standardization of sign type
 - Limit confusion
- Long-term employee parking
 - Low-demand areas
- Walk-times map/signs



Source: BCBS of NC

Public Signs



Private Signs

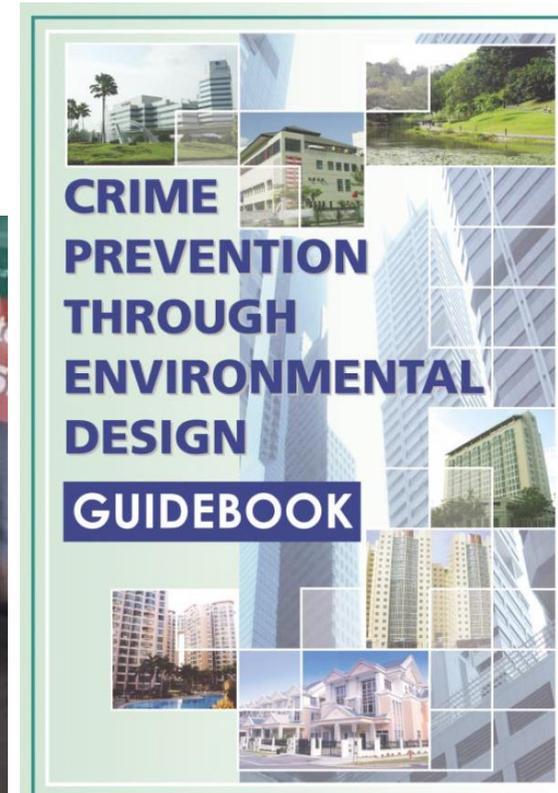


Encouragement

- **Lighting and Sidewalk improvements**
- Perception of security
 - Crime Prevention Through Environmental Design (CPTED) concepts
- Bicycle Friendly Businesses
- Healthy lifestyle initiatives



Source: CBC



Source: NCPC

Enforcement

- Downtown Ambassador initiative
 - Be visible/friendly
 - Provide direction
- **Time Limited parking** for limited number of spaces
 - 30-min
 - 1-2-4 hour areas



Source: City of Coral Gables, FL

Evaluation

- Data collection program (annual)
- Online survey or wikimap
- Formation of downtown parking committee/board
- **Shared Parking Arrangements**
 - Private-Private arrangements during the day
 - Public-Private arrangements after 5 PM
 - “Public parking after 5 PM” sign plaque



Are their additional
options to consider?



Engineering – Additional Considerations

Not Recommendations

- Lot Design and Restriping
- Structured parking options
 - Site constraints
- Paid parking technologies
 - Hardware - paystations
 - Software – mobile Apps



Source: Pay by Phone



Source: Park Mobile



Source: T2 Systems

Questions and Discussion

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