



City of Rochester  
Rochester Parking Study

# Findings & Draft Strategies Discussion







# Content

1. Project Goals
2. Inventory
3. Utilization
4. Modeling Rochester Demand
5. Draft Strategies



# Project Goals

# Rochester Goals

## *Transportation Master Plan (2020)*

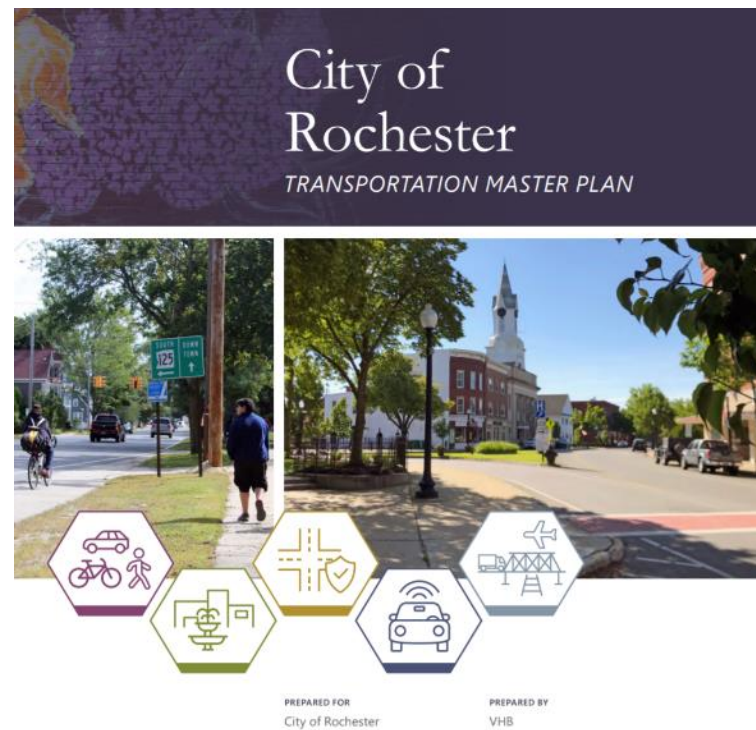
- Multimodal connectivity
- Vibrant and Walkable Downtown Village Centers
- Roadway/Intersection Safety and Congestion Improvements
- Technology/Smart City Components

## *Downtown Master Plan (2020)*

- **Resilient:** adaptive reuse of buildings, green infrastructure
- **Walkable:** Mixed use development, vibrant streetscape
- **Inclusive:** Cohesive branding to visitors and residents alike
- **Creative:** Innovative infill development, foster small business/entrepreneurship

## *Greening America's Communities Plan (2018)*

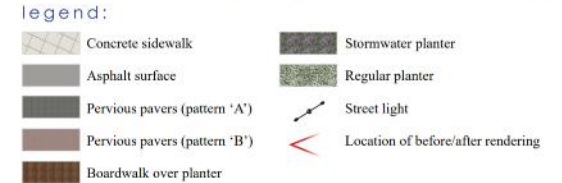
- Make downtown more bike and pedestrian friendly
- Address stormwater management issues
- Support local businesses



MASTER PLAN



Figure 11:



## DESTINATION ROCHESTER 2030 Downtown Master Plan



A framework for *economic redevelopment, creative placemaking, and a resilient path forward* in the Downtown

# Parking Goals

## ***Transportation Master Plan***

- Sort out long-term and short-term parking needs and parking regulations
- Conduct a parking garage feasibility analysis
- Establish a parking committee and plan to increase parking revenue
- Conduct a downtown traffic circulation and connectivity study
- Make Downtown roadways more inviting to non-motorized users

## ***Downtown Master Plan***

- Manage parking demand efficiently
- Make the best use of public lands for parking as possible
- Create a vibrant downtown streetscape
- Encourage small-scale, incremental development that utilizes infill vacant lots and revitalizes underutilized buildings

## ***Greening America's Communities Plan***

- Advance Master Plan design components along North Main Street and within Union Street parking lot

## ***Parking System Goals:***

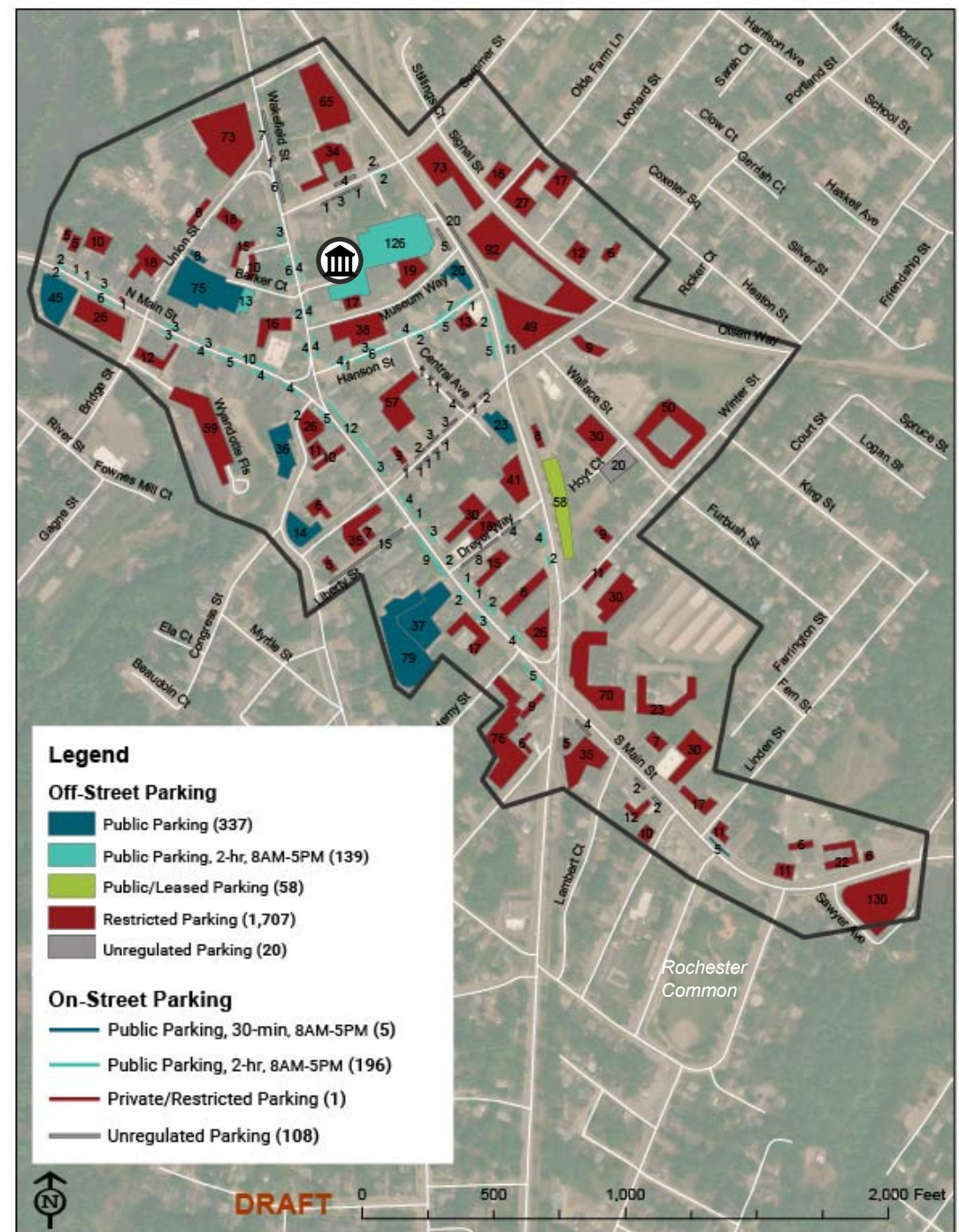
1. Plan for short- and long-term parking needs
2. Explore and identify opportunities to add additional supply
3. Coordinate parking management
4. Support resilient built environment, including small-scale development
5. Foster a walkable downtown
6. A system that is accessible to residents and visitors alike

**Inventory**



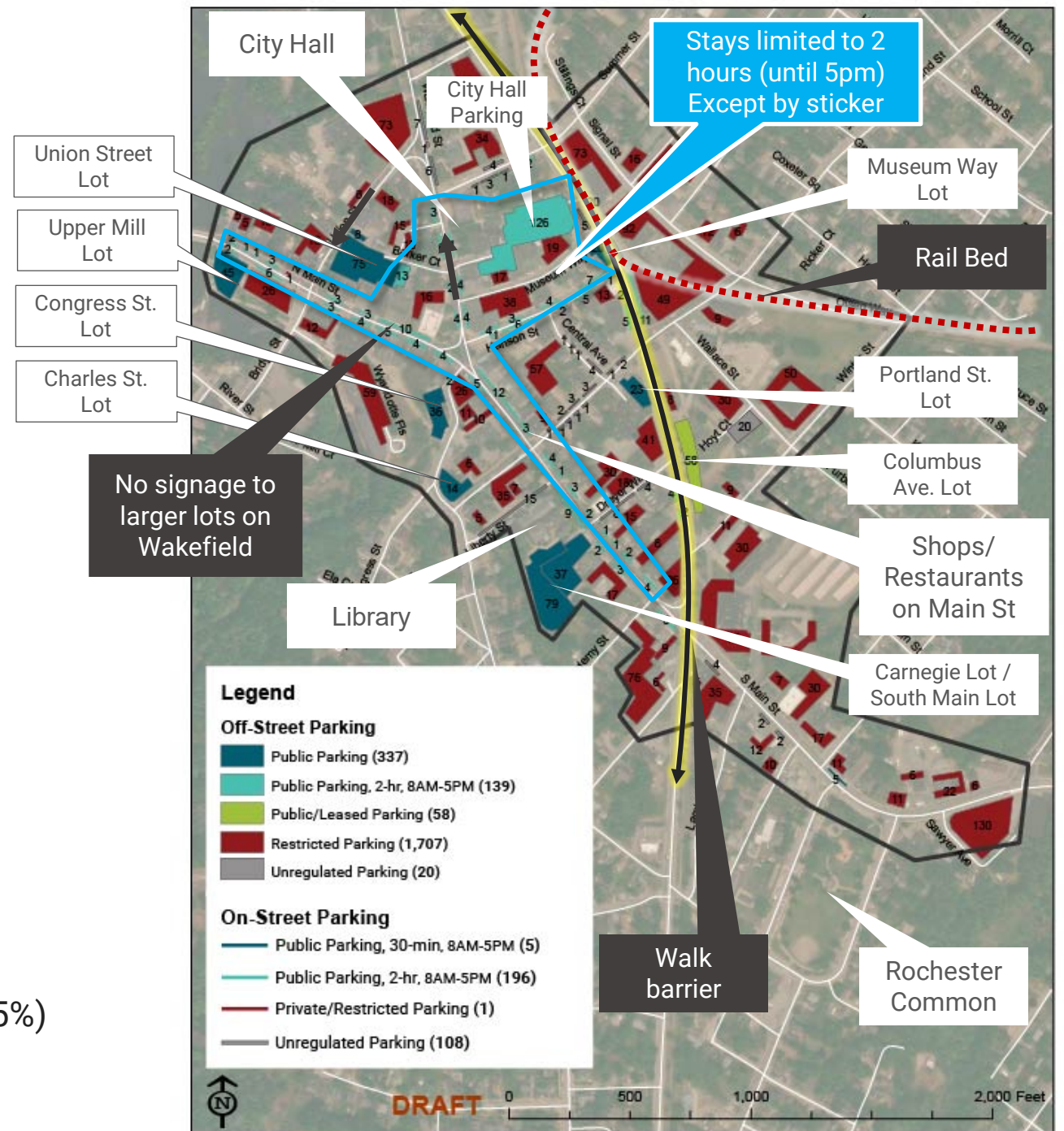
# Inventory

- **2,571** total spaces
  - **2,261** off-street (88% of total)
    - 13% of land in study area
  - **310** on-street (12% of total)
- **Regulations:**
  - **1,708** restricted (private) spaces (~67%)
  - **735** spaces in public supply (~28%)
    - 534 off-street spaces
      - 139 spaces – 2-hour limit  
8:00 am to 5:00 pm
    - 201 on-street spaces
      - 5 spaces – 30-min limit  
8:00 am to 5:00 pm
      - 196 spaces – 2-hour limit  
8:00 am to 5:00 pm
  - **128** unregulated (unsigned) spaces (~5%)



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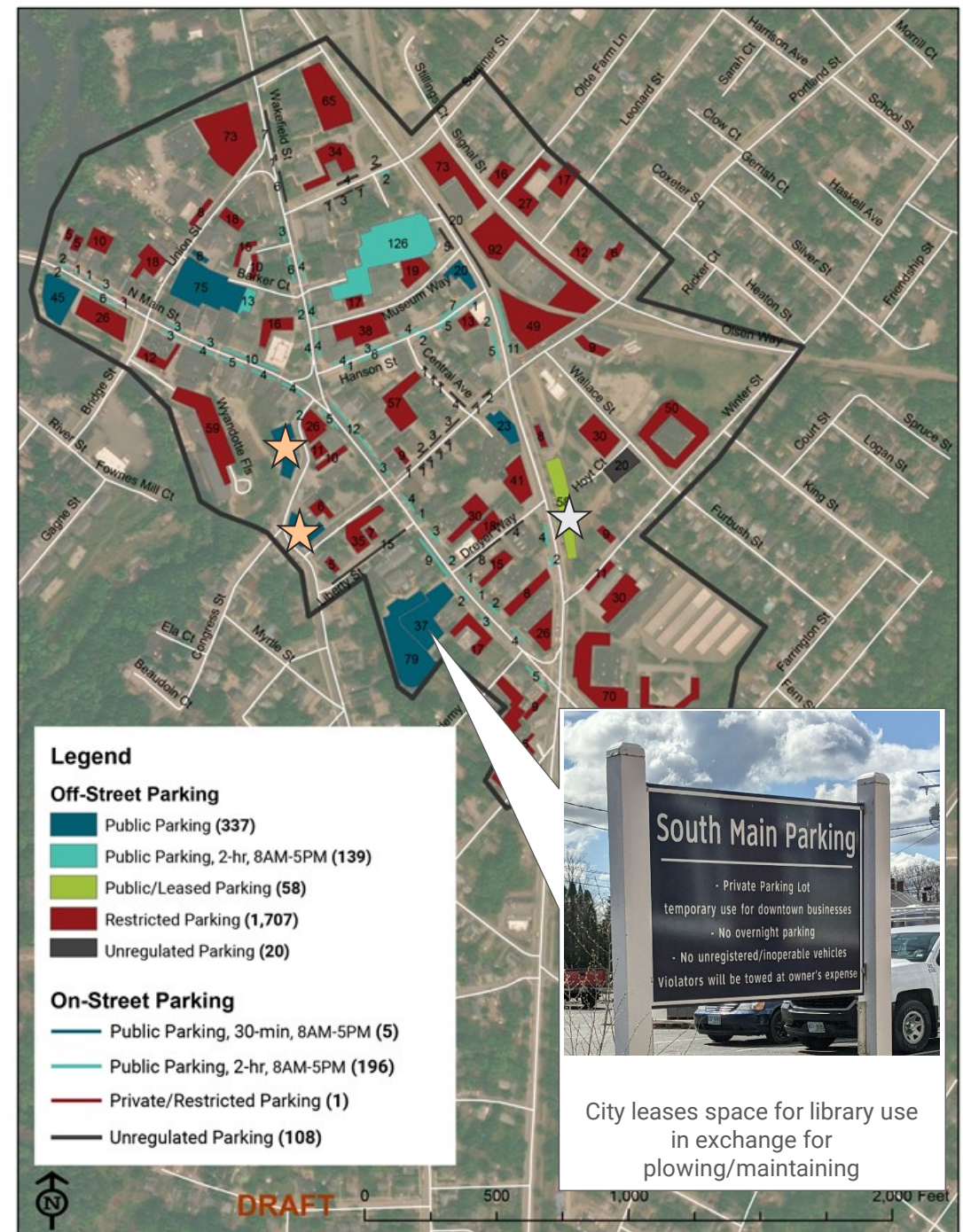




# Leases

- City is leasing some privately owned spaces for limited public use. Price is providing in-kind services (plowing, striping, etc.).
- Businesses / developments lease specific publicly owned spaces.
- Some spaces undervalued
- Sample leases agreements with City as lessor:

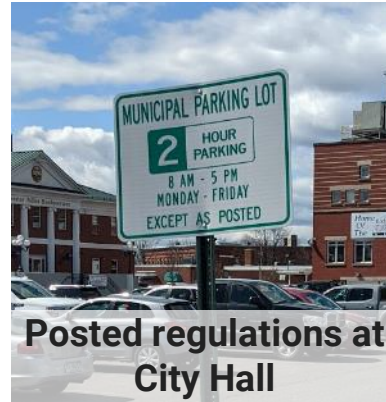
Lot	Spaces under agreement	Relationship	Access	Price
Columbus Ave. Parking Lot	60	Bank leasing parking from City	Service Credit Union-M-F 6A-6P, Sat 6A-1P Federal holidays and times not mentioned above – open to public	\$1,500/year (~\$2/space per month)
Congress St. Parking Lot	45	Residential development leasing parking from City	Exclusive 24-hour use. City to plow, stripe, and light.	Progressive: starting with \$15 per space per month to \$30 per space per month by year 16.





# Site Observations

- Abundant wayfinding
  - Mix of branding
- Unclear regulations in some places
  - Union St. Lot – unrestricted vs. 2-hour parking
  - Congress St. Lots – non-residential use
- Columbus Ave. serves as a barrier
  - Union St. Lot – unrestricted vs. 2-hour parking
  - City Hall Lot – non-employee use
  - Congress St. Lots – non-residential use
- Streeterie on North Main Street using on-street parking for active use.





# Issues / Opportunities Identified by Stakeholders

## Issues

- Visitors are **uncomfortable walking** long distances
- Parking crunch felt on **Friday and Saturday nights**
- **Private lots are encroached upon on nights**
  - Opera House use mentioned
  - Some towing has occurred
  - Parking is treated informally by visitors
- Complaints about **long-term parking downtown affecting customer access**
- Second and third story development **can tap into existing parking**

## Opportunities

- Re-design of Union St. Lot will add 30-40 spaces
- City and community **receptive to conversion of on-street spaces for “streeteries”** (e.g. outdoor dining)
- City is **running out of public spaces to lease** to residential users
- Opportunity to **tie residential uses along Charles Street with Library Lot** spaces
- City may soon **purchase First Church Congregational** Parking
- **Little wayfinding between lots and attractions**, but demand does not seem high

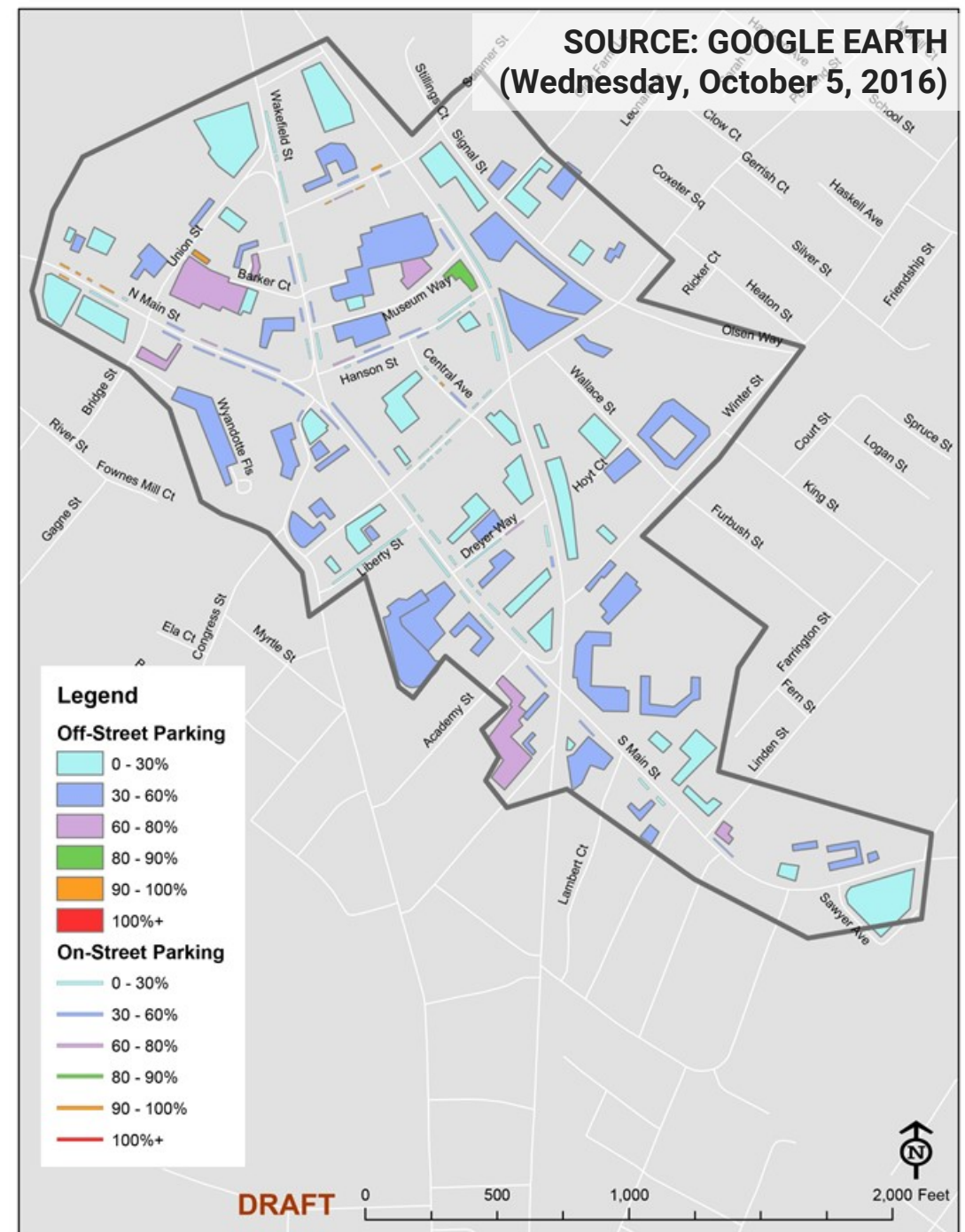
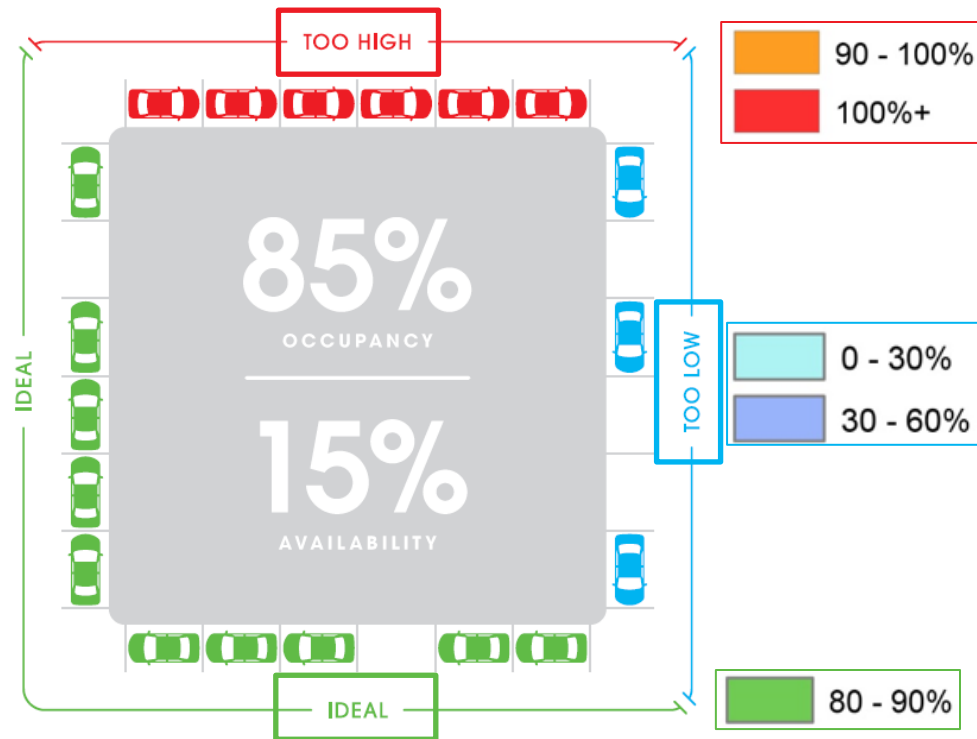


**Utilization**



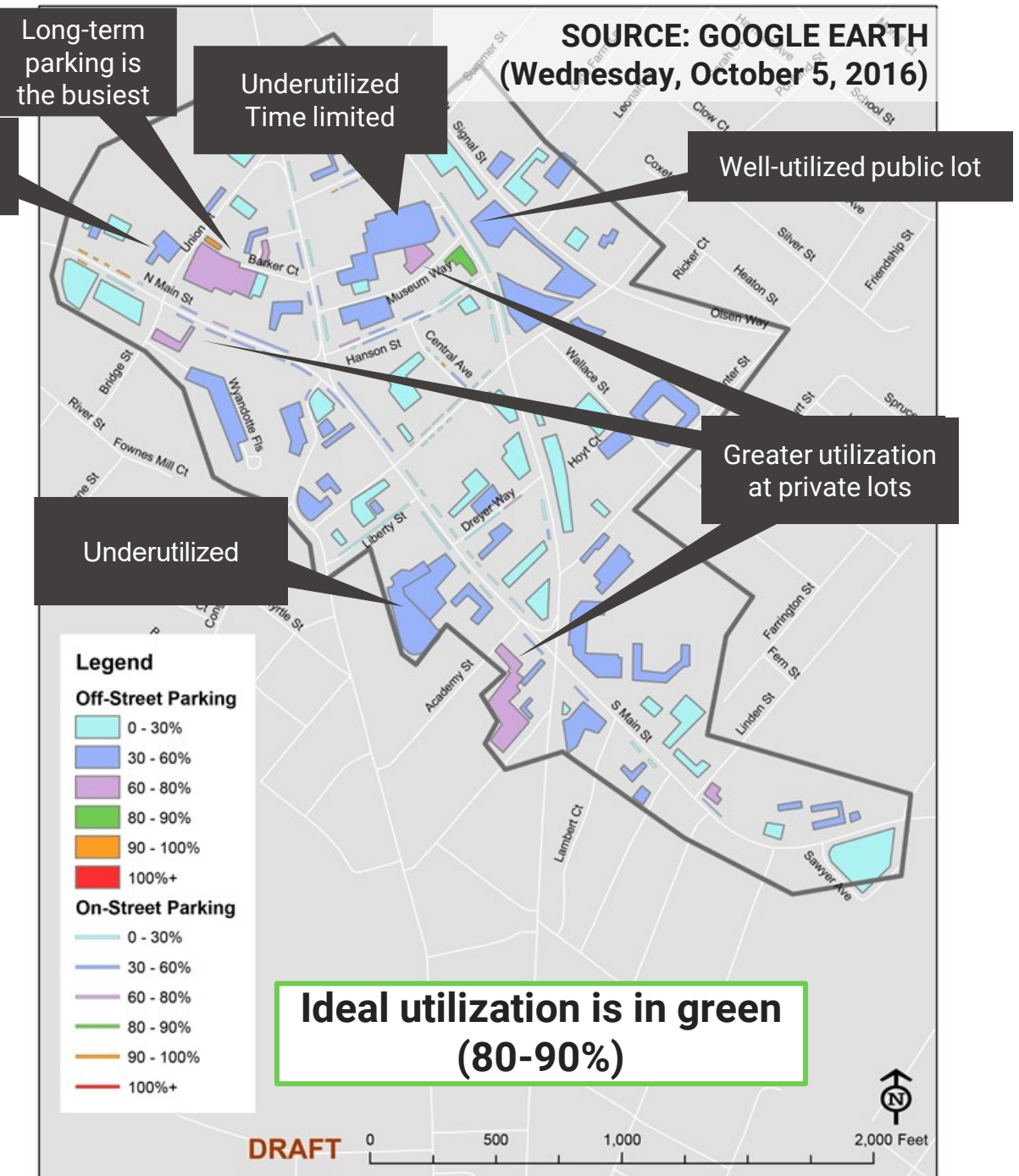
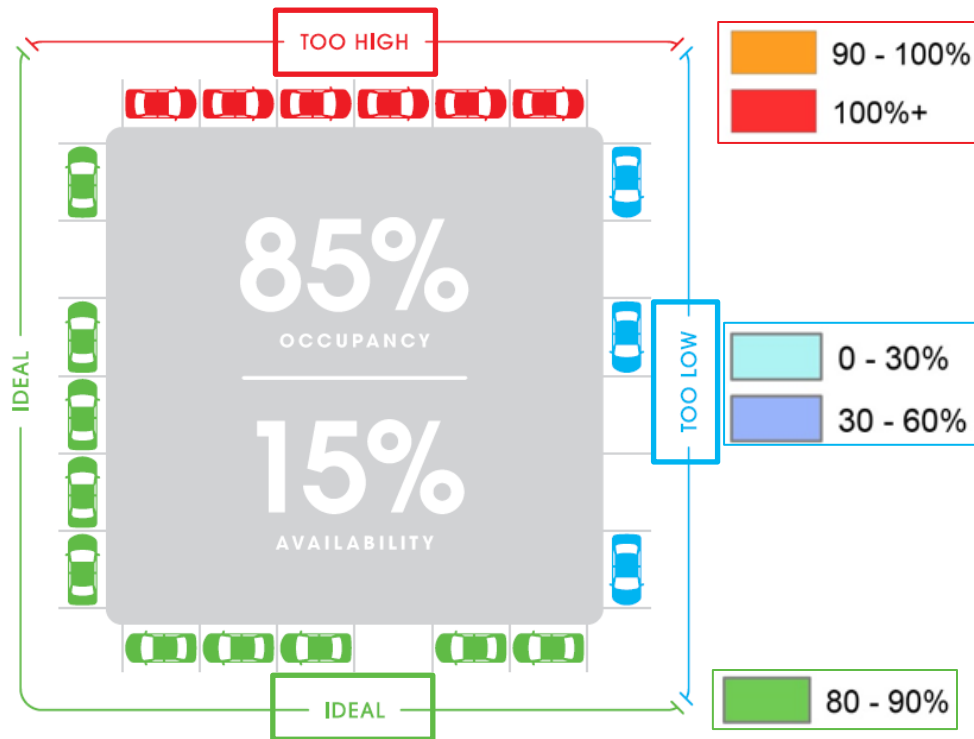
# 2016 Utilization

- 861 spaces **occupied** (34%)
  - **On-street** – 771 of 2,261 (34%)
  - **Off-Street** – 90 of 310 (29%)
- 1,710 spaces **empty** (66%)



# 2016 Utilization

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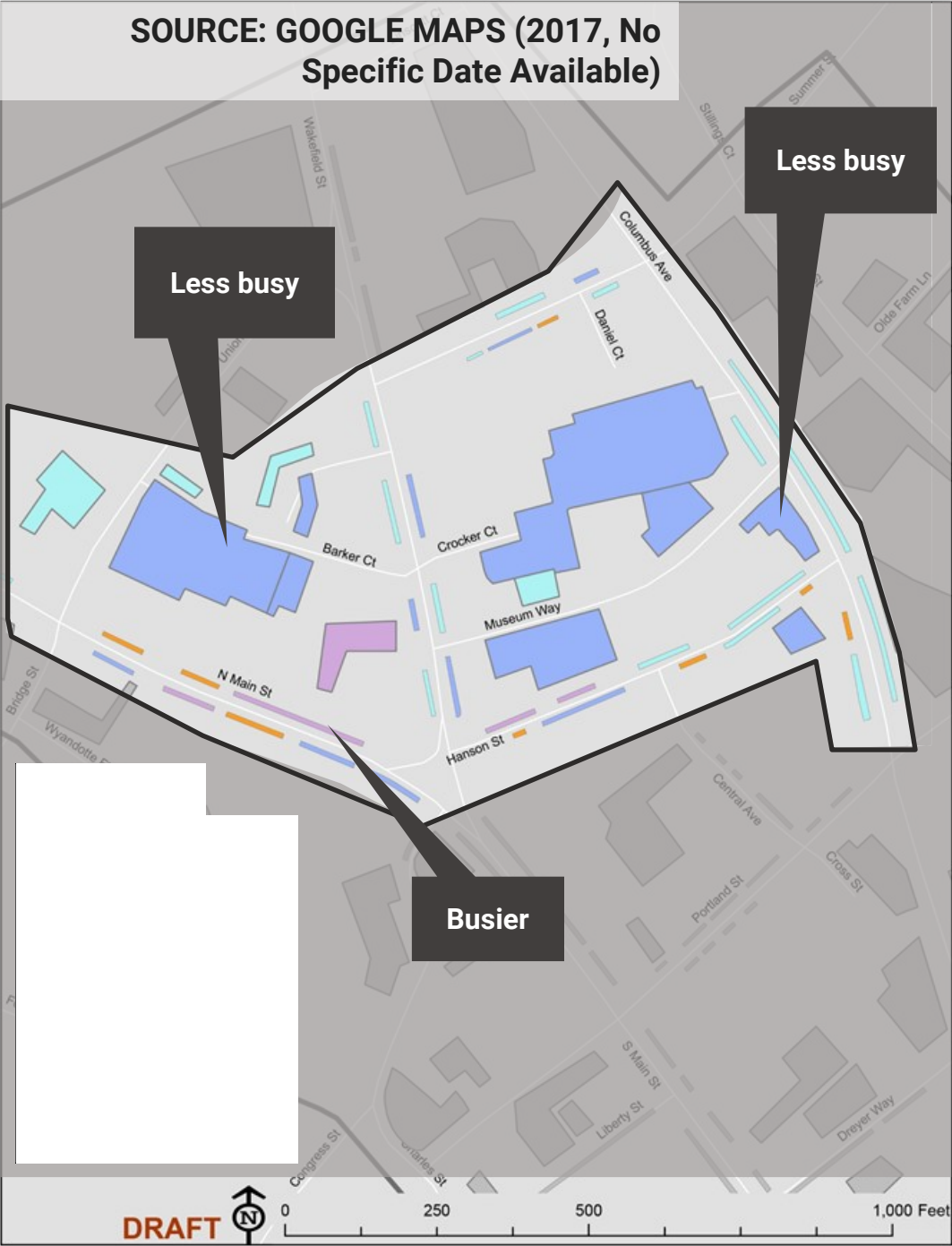
# Utilization Comparison: 2016

Parking Type	Inventory	2016 Counts	2016 Utilization
Off-Street Parking	388	209	54%
On-Street Parking	152	51	34%
Total	540	260	48%



# Utilization Comparison: 2017

Parking Type	Inventory	2016 Counts	2016 Utilization	2017 Counts	2017 Utilization
Off-Street Parking	388	209	54%	171	44%
On-Street Parking	152	51	34%	55	36%
Total	540	260	48%	226	42%



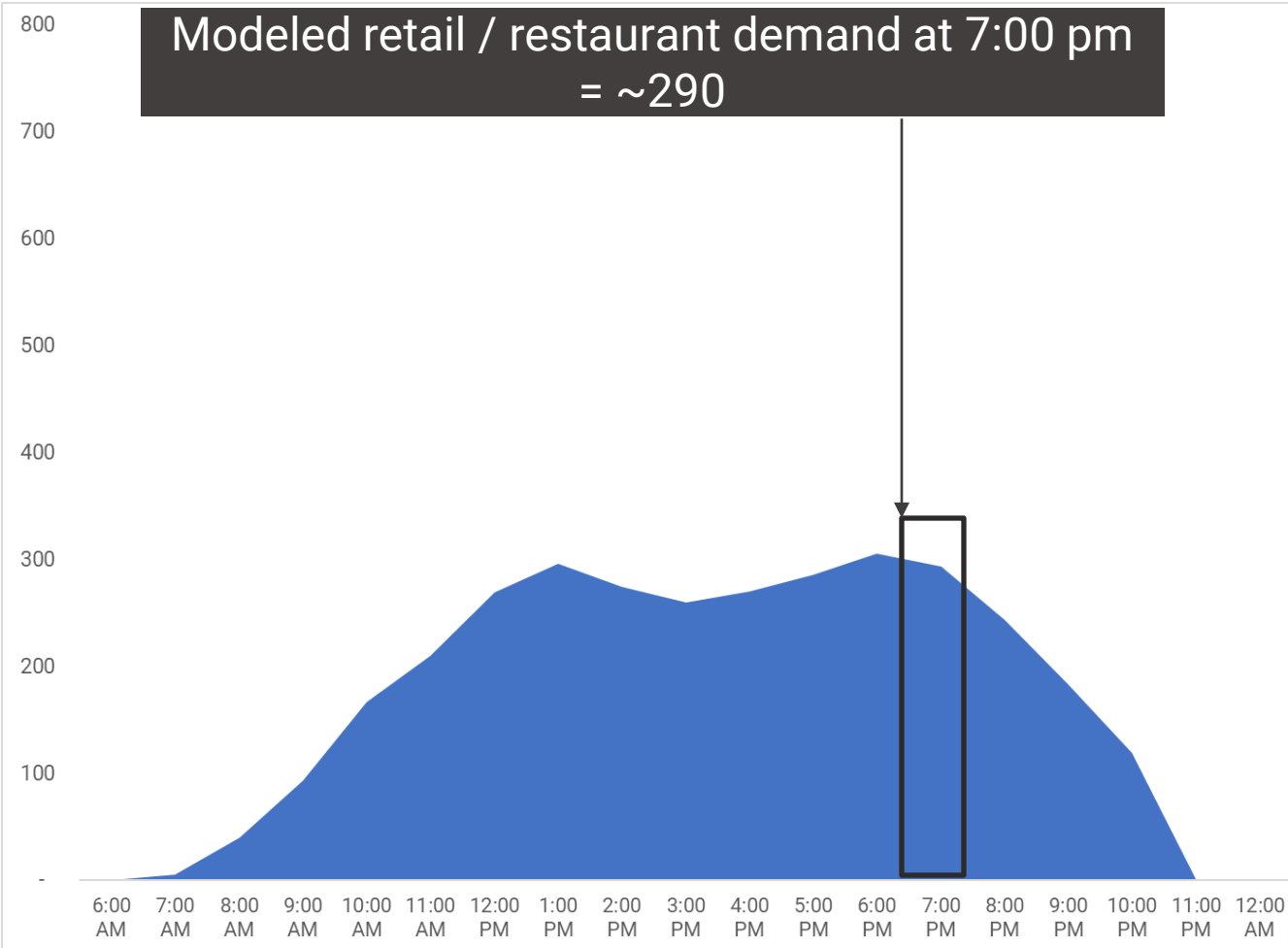


# Evening demand is relatively high (~80%)

~360 public spaces in the core of downtown



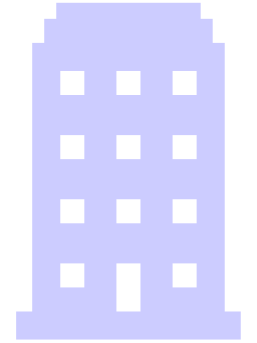
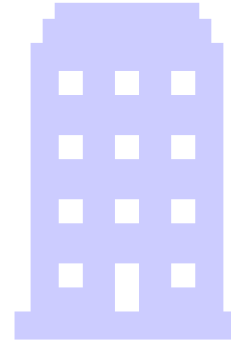
Modeled retail / restaurant demand at 7:00 pm  
= ~290



# Modeling Rochester Parking Demand



# Typical Parking Analysis



# Typical Parking Analysis



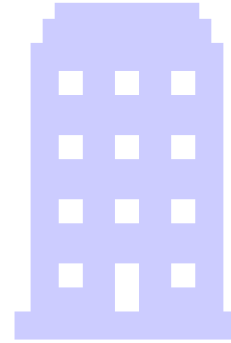
**XX cars  
parked at peak**



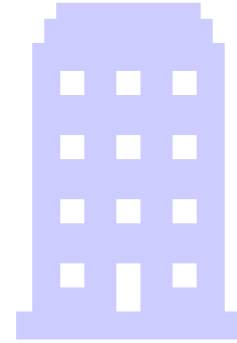
**XX cars  
parked at peak**



**XX cars  
parked at peak**



**YY cars  
parked at peak**



**YY cars  
parked at peak**



# Typical Parking Analysis



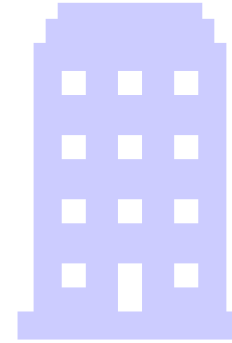
XX cars  
parked at peak



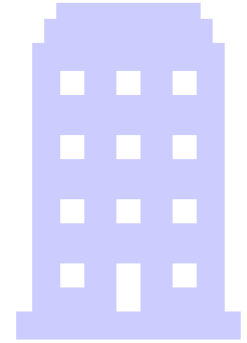
XX cars  
parked at peak



XX cars  
parked at peak



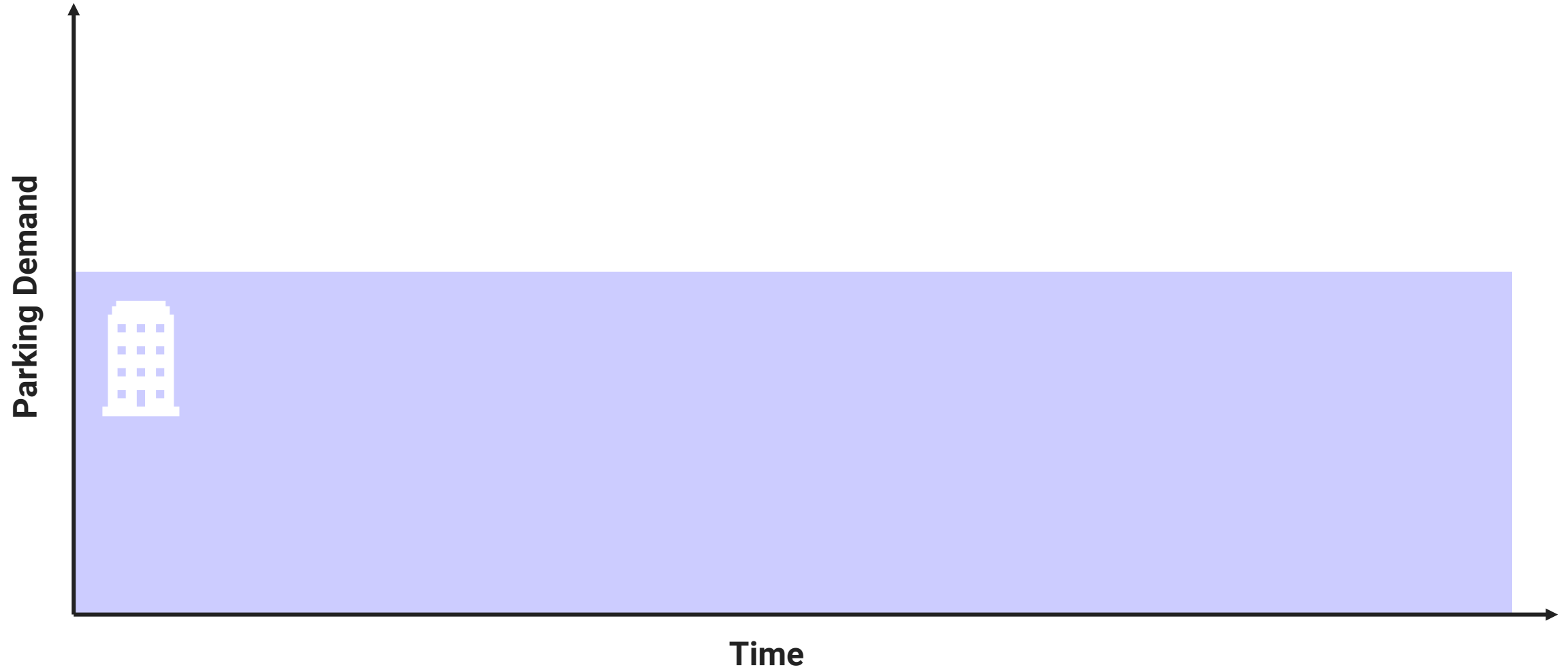
YY cars  
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YY cars  
parked at peak

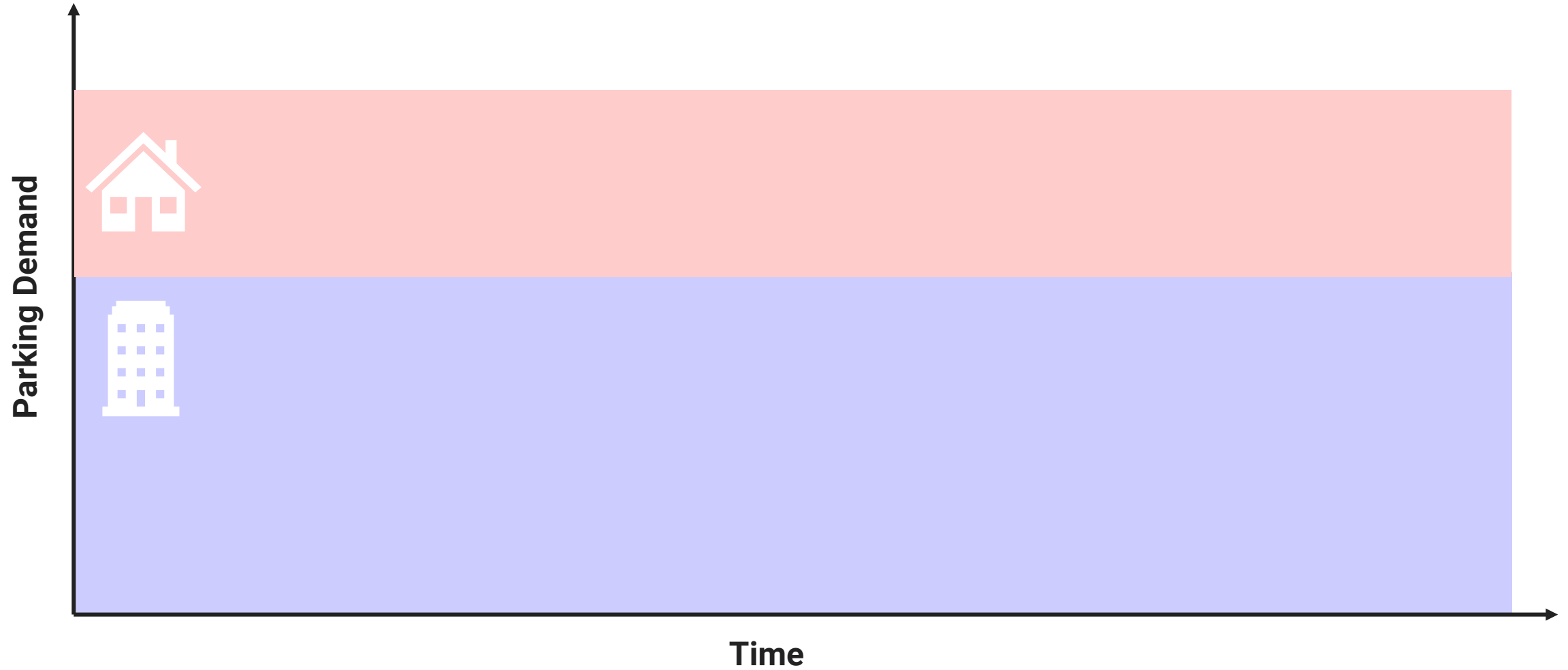
**Source: Institute for Transportation Engineers**  
**Data collected nationwide**  
**Primarily in suburban locations**

# Typical Parking Analysis





# Typical Parking Analysis



# Typical Parking Analysis



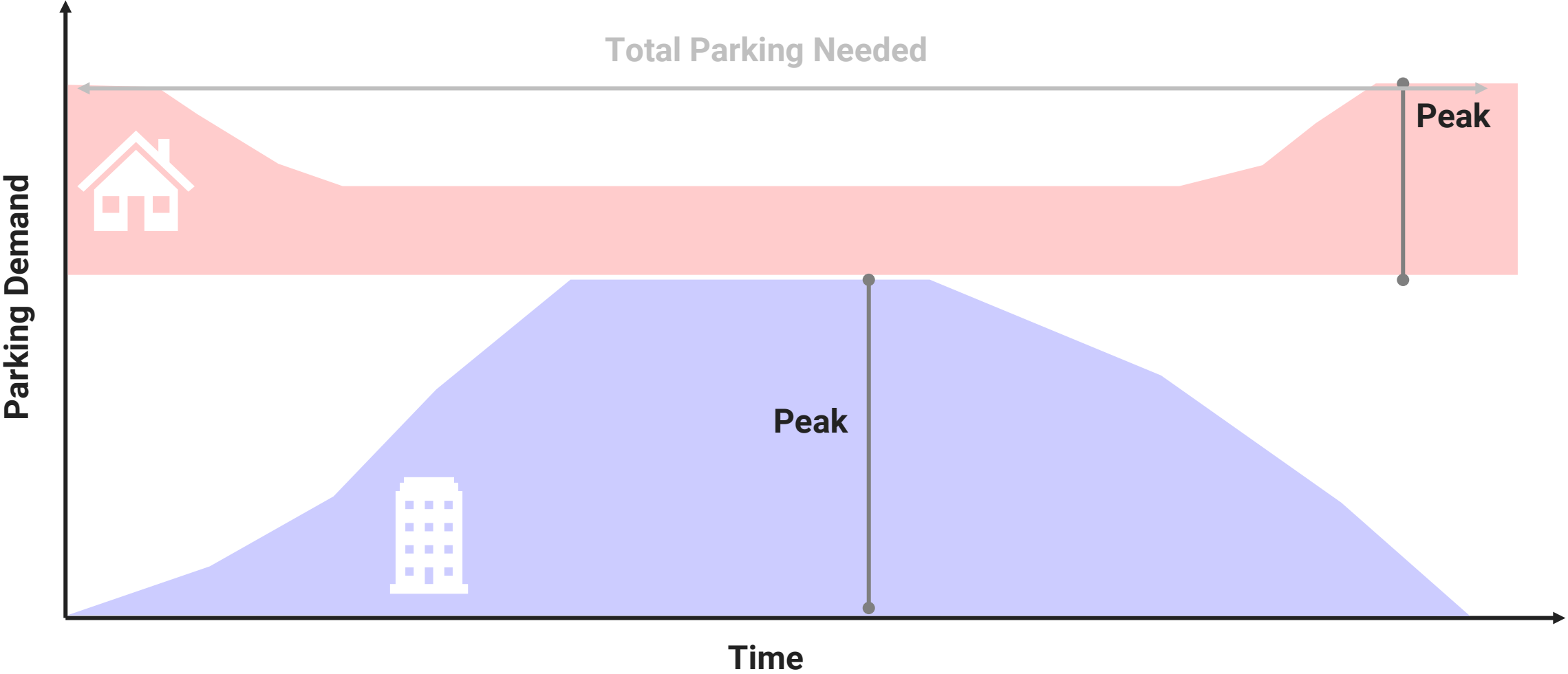


# Results

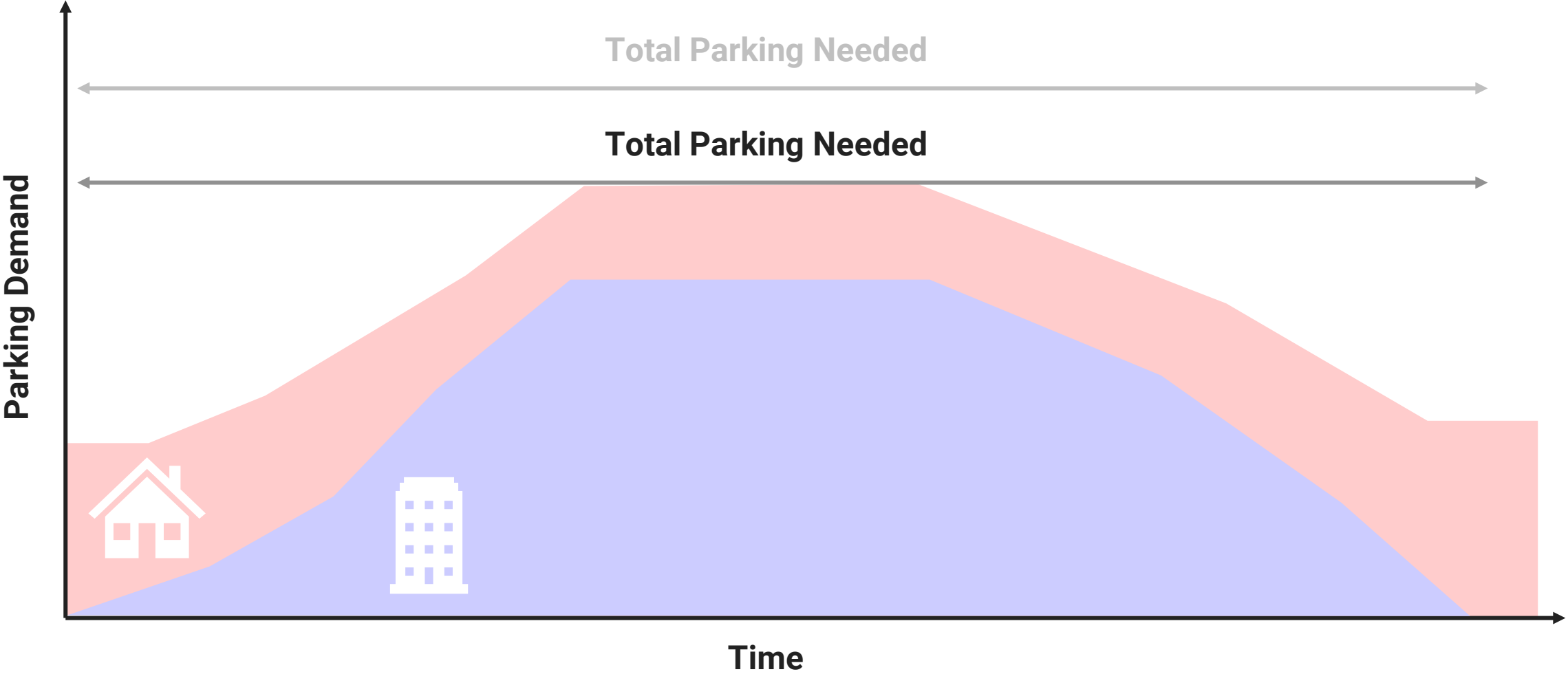
Underutilized parking in non-peak times



# Realistic Parking Analysis

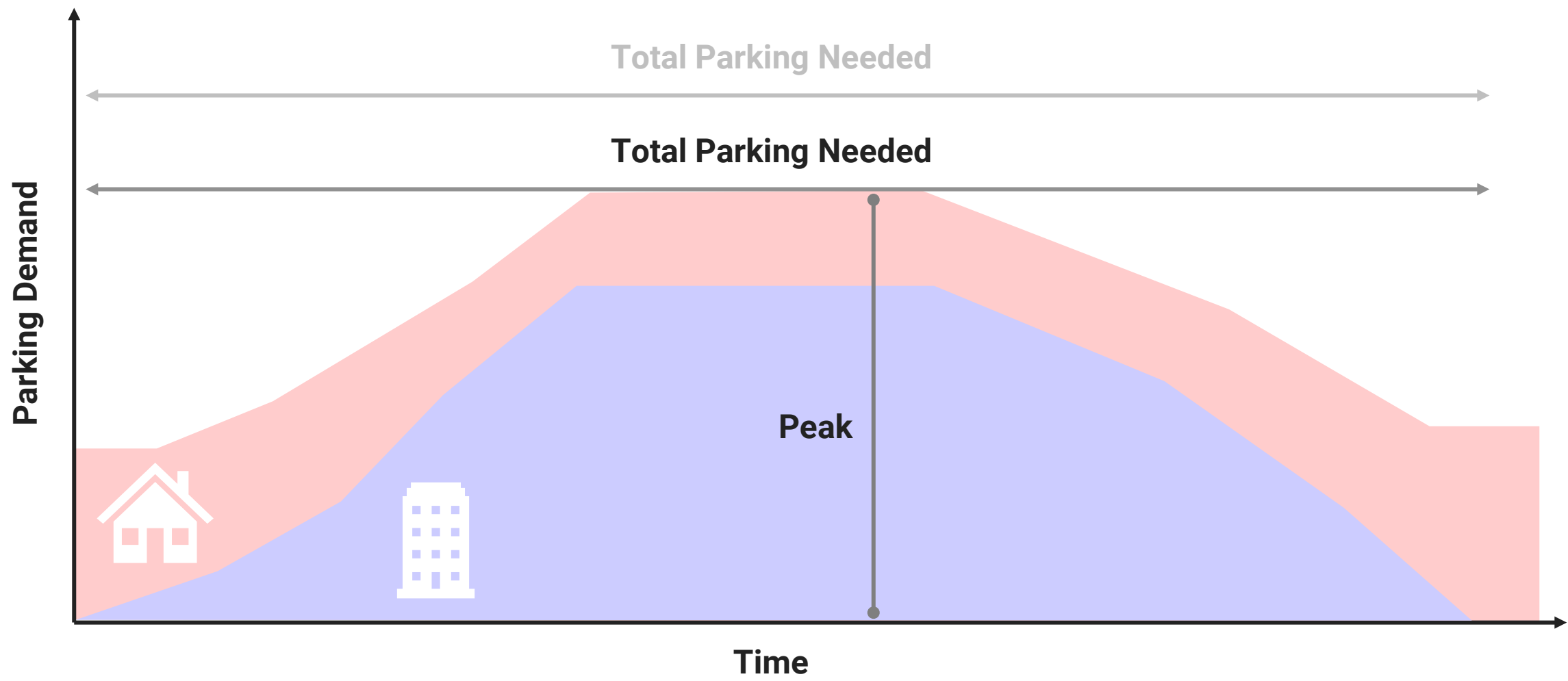


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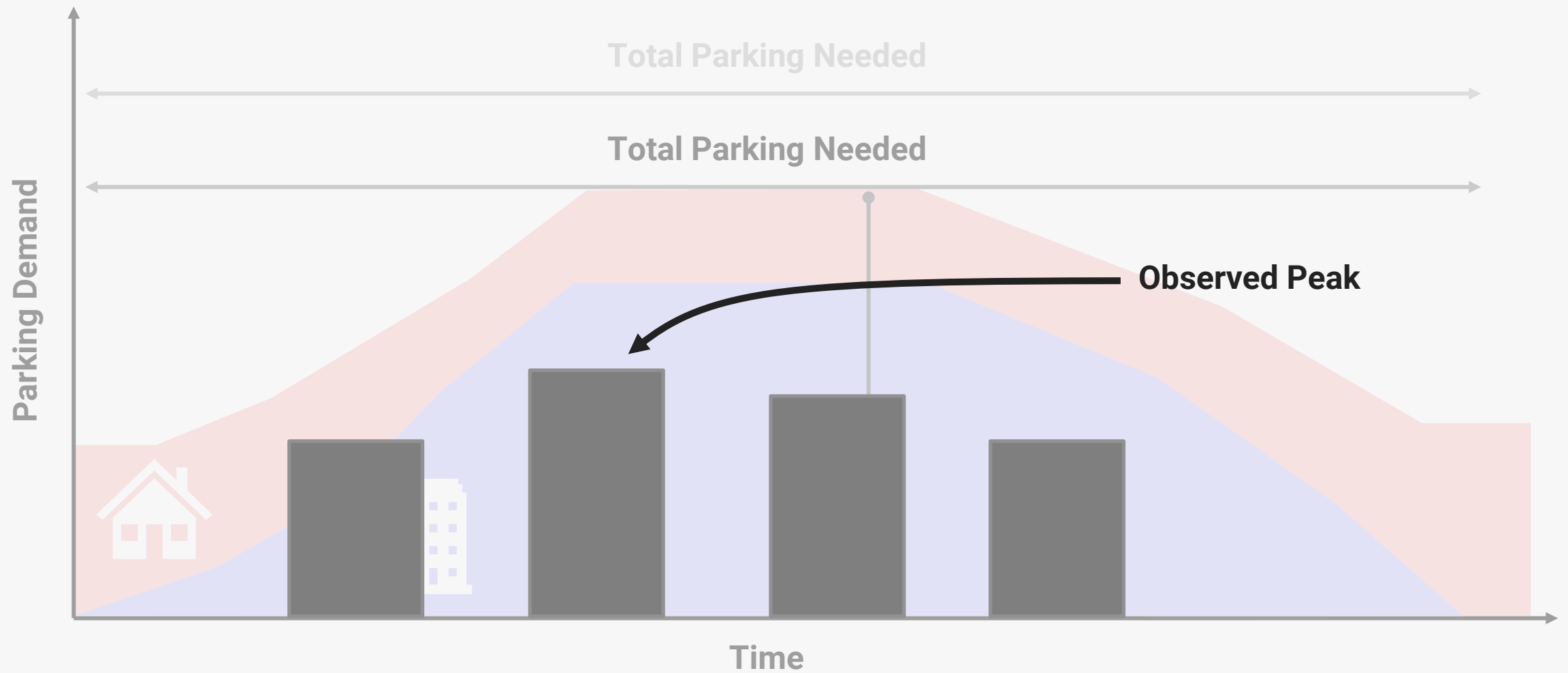




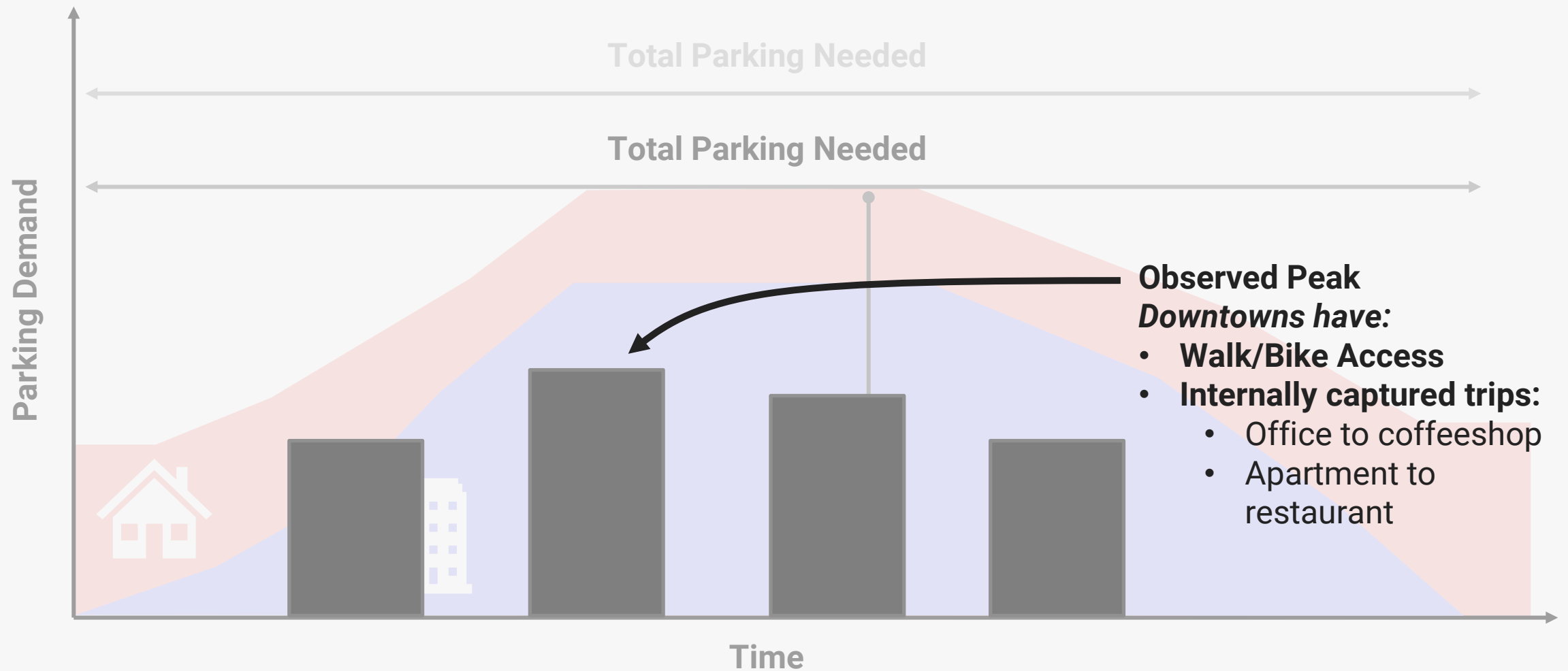
# Realistic Parking Analysis



# Realistic Parking Analysis: Calibration

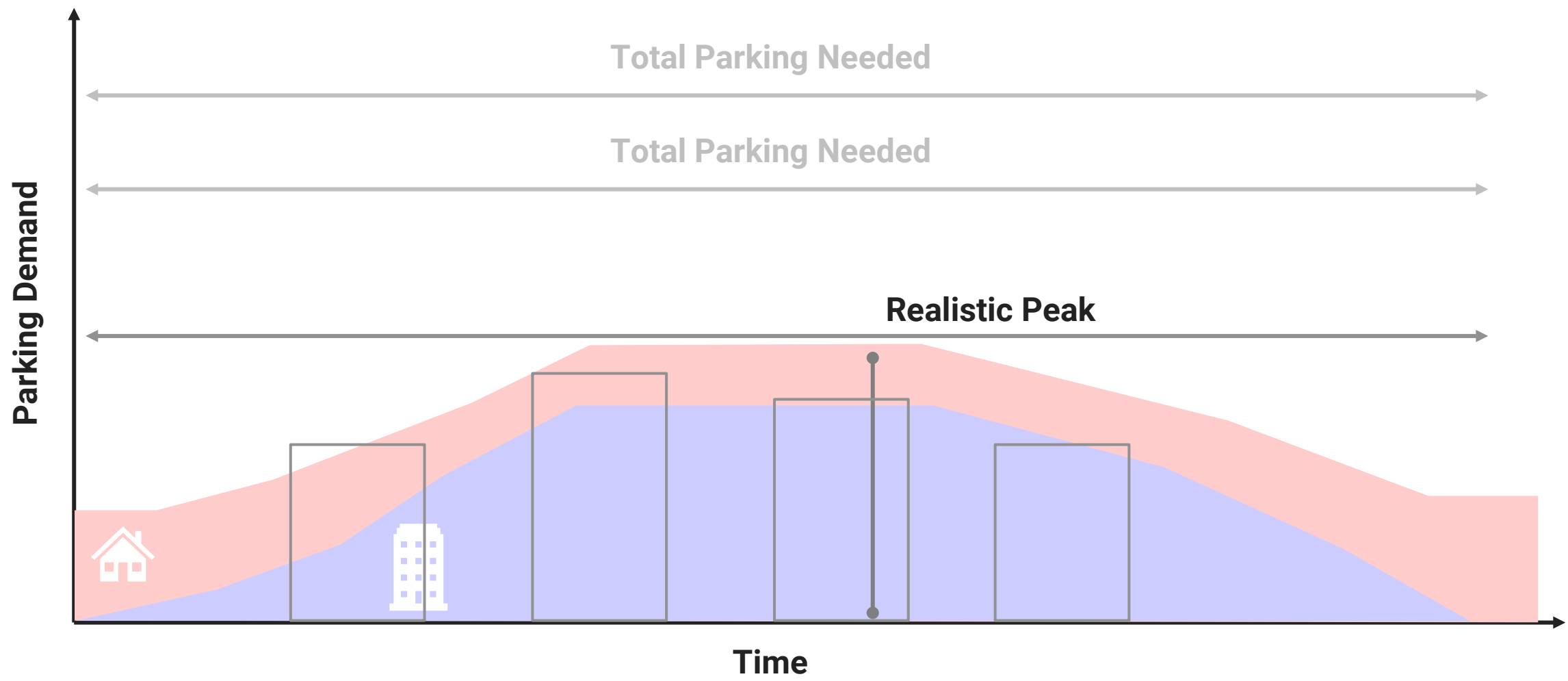


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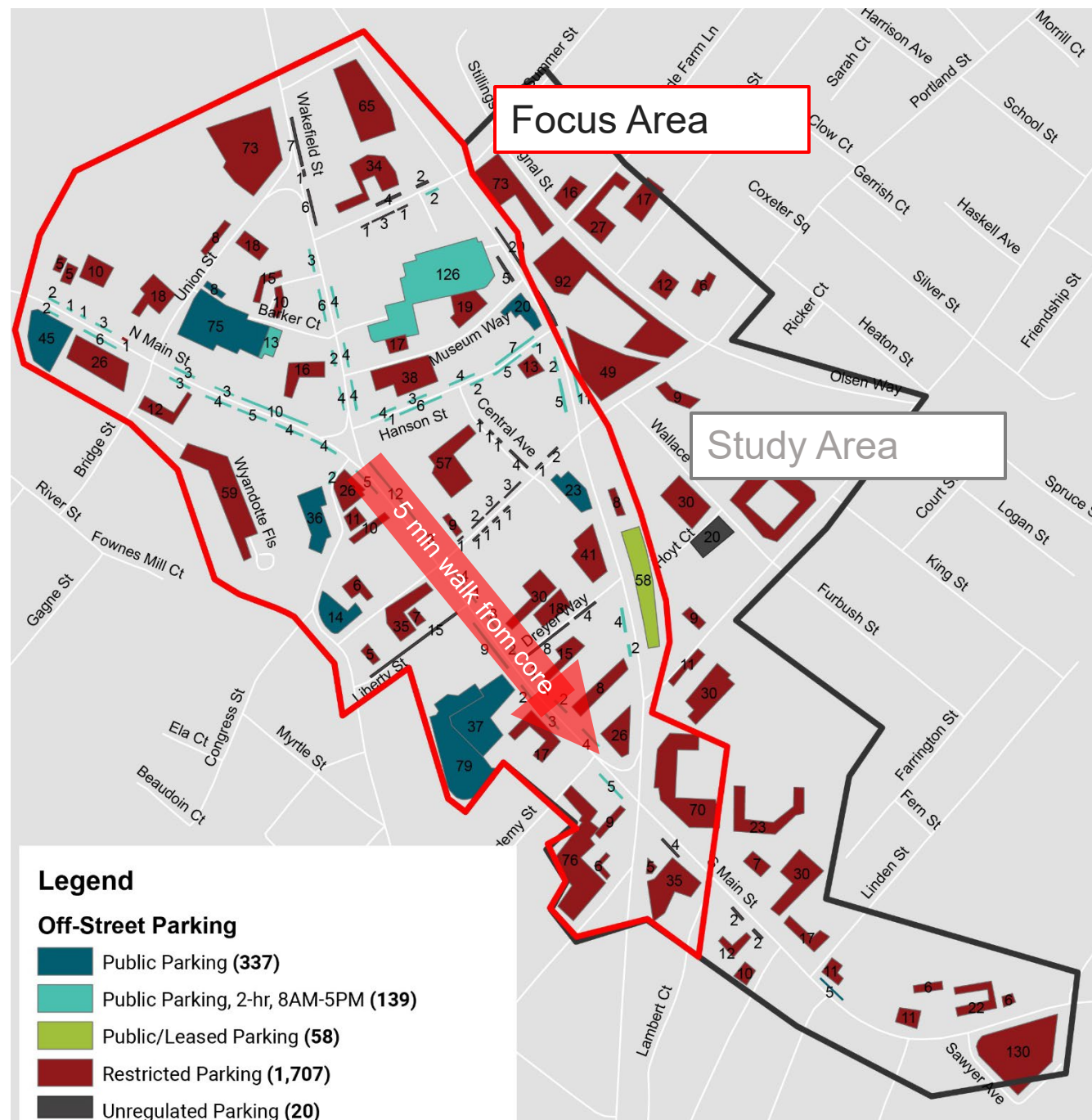


# Realistic Parking Analysis



# Modeling Rochester Parking Demand

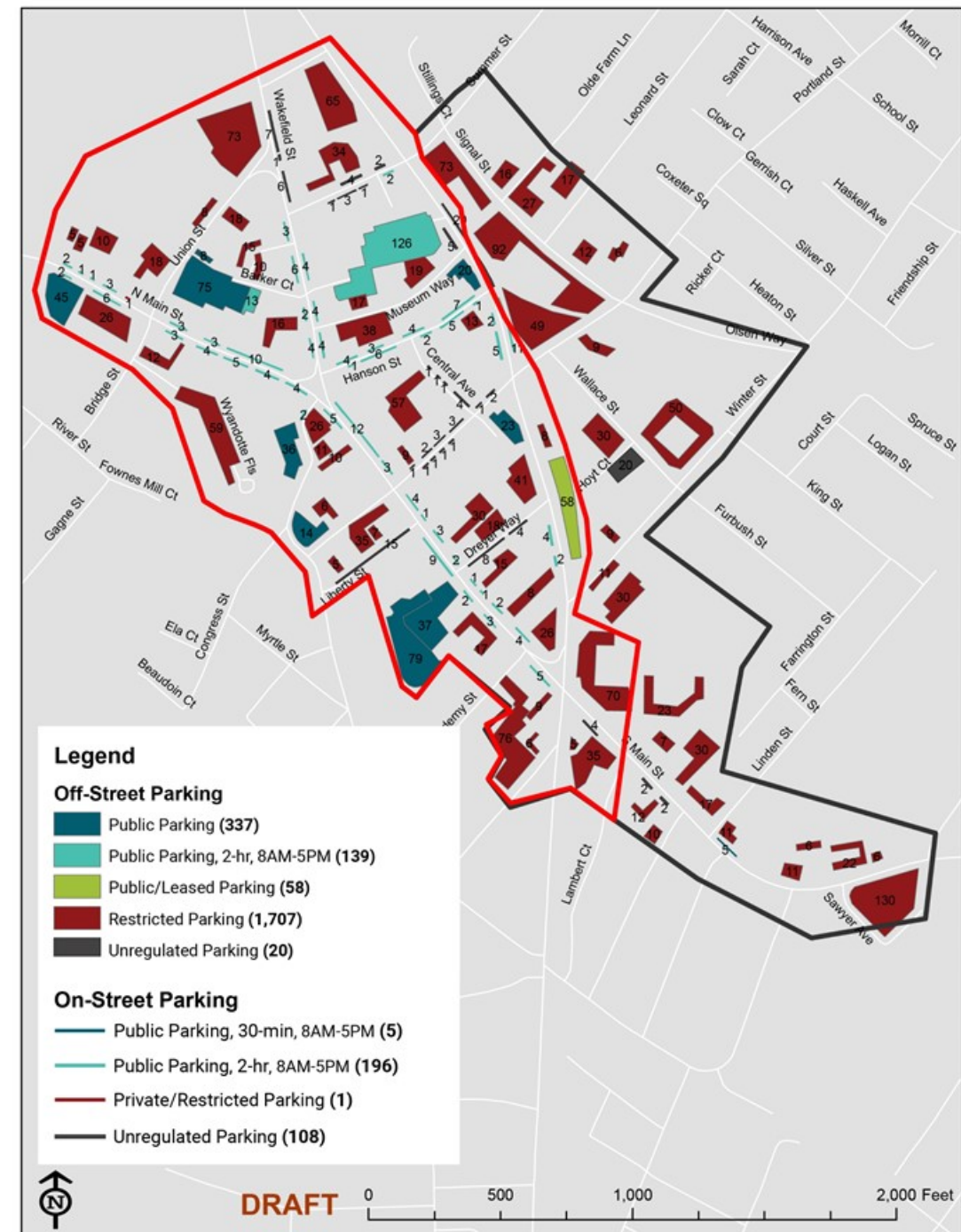
- Focus on a realistic 5-minute walk area from the 'core' of downtown ("Focus Area")
- Tabulate land uses
- Compare land use to parking demand to create Rochester-specific parking generation rate



# Land Uses in Focus Area

Land Use	Size	Units
Office	264,000	Square Feet
Retail (inc. services such as hair salons)	114,500	Square Feet
Restaurant	37,600	Square Feet
Industrial	2,500	Square Feet
Recreation	54,000	Square Feet
Institution (Church, Museum, Library)	124,300	Square Feet
Hospital	26,500	Square Feet
Apartments	279	Units
Services (Auto Shops)	23,200	Square Feet
Bank	43,700	Square Feet
<b>Parking Spaces</b>	<b>1,899</b>	<b>Spaces</b>

Source: Stantec analysis/windshield review of Rochester Assessing data, 2021.





# Standard Parking Analysis

Assumes that every single business and residence needs all its parking at every hour of the day.

2,500

Industry Standard Requirement – 2,068 spaces

2,000

Existing Parking Supply – 1,899 spaces

Parking Supply w/Reserve (90%) – 1,709 spaces

1,500

Rochester's existing parking supply:  
~1,900 spaces in the focus area.

Spaces are considered to be full at  
about 90%, so the model compares  
potential demand to a "reserve" parking  
supply of 90% of total.

1,000

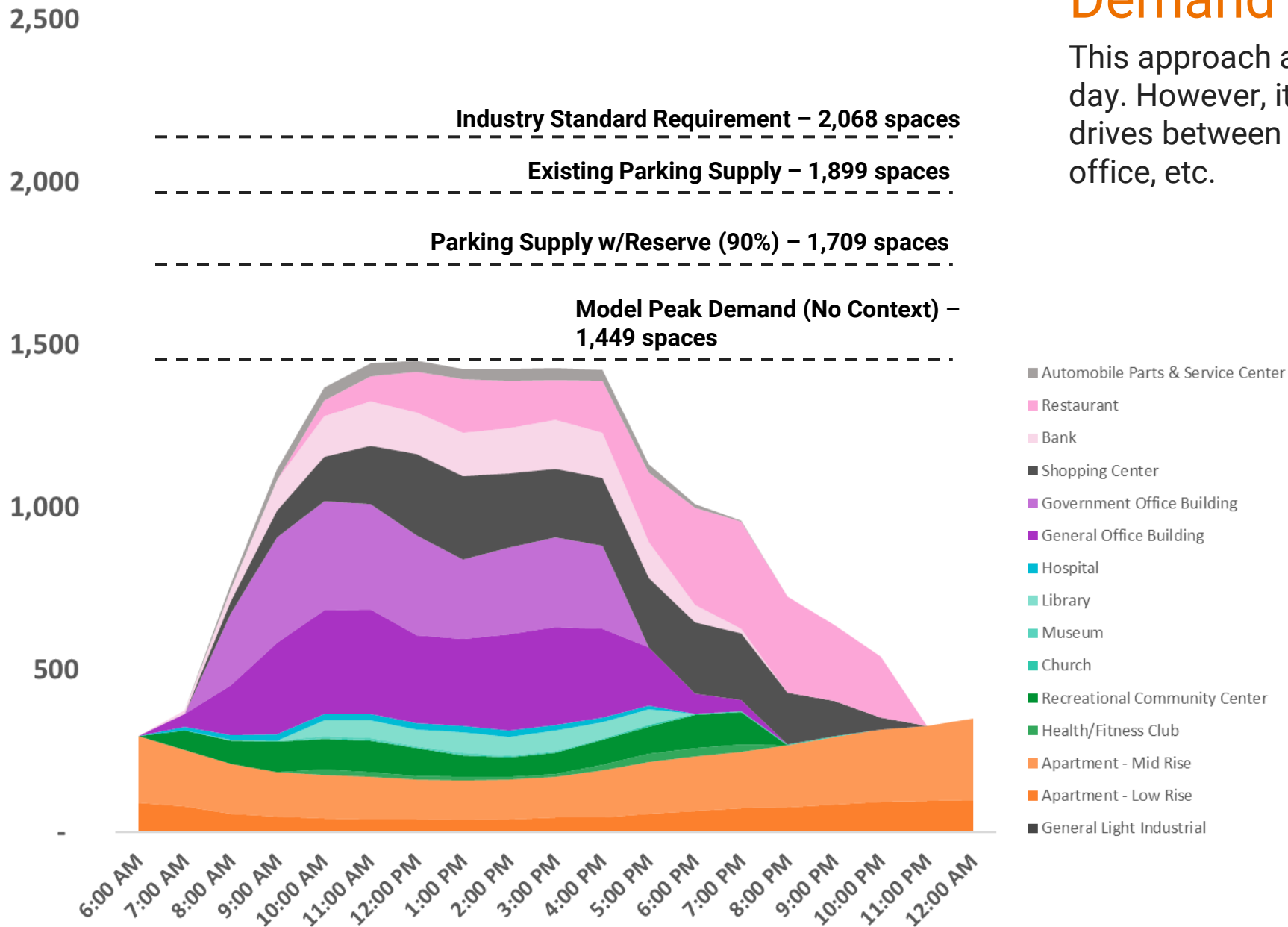
500

- Automobile Parts & Service Center
- Restaurant
- Bank
- Shopping Center
- Government Office Building
- General Office Building
- Hospital
- Library
- Museum
- Church
- Recreational Community Center
- Health/Fitness Club
- Apartment - Mid Rise
- Apartment - Low Rise
- General Light Industrial

6:00 AM  
7:00 AM  
8:00 AM  
9:00 AM  
10:00 AM  
11:00 AM  
12:00 PM  
1:00 PM  
2:00 PM  
3:00 PM  
4:00 PM  
5:00 PM  
6:00 PM  
7:00 PM  
8:00 PM  
9:00 PM  
10:00 PM  
11:00 PM  
12:00 AM

## Demand v. Time

This approach accounts for demand by time of day. However, it still assumes that everyone drives between each business, from home to the office, etc.



# Parking Demand w/Context

Adjusts for: vacancies, people who walk between businesses, some people walking, biking, being dropped off, etc.

2,500

2,000

1,500

1,000

500

6:00 AM  
7:00 AM  
8:00 AM  
9:00 AM  
10:00 AM  
11:00 AM  
12:00 PM  
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10:00 PM  
11:00 PM  
12:00 AM

Industry Standard Requirement – 2,068 spaces

Existing Parking Supply – 1,899 spaces

Parking Supply w/Reserve (90%) – 1,709 spaces

Model Peak Demand (with Context) –  
821 spaces

650

Evening Commercial  
Demand: ~290

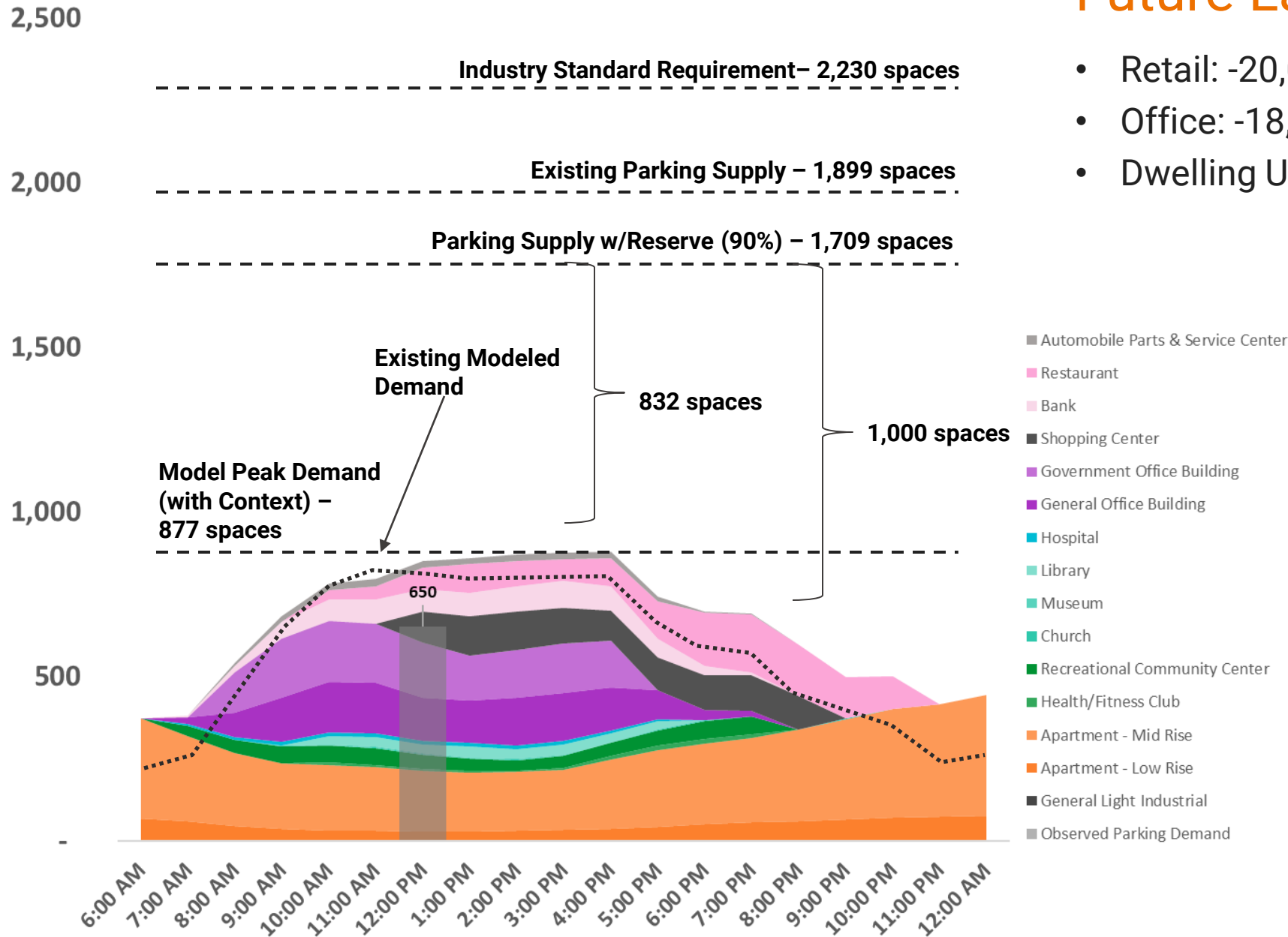
Evening Residential  
Demand: ~250

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- Restaurant
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- Government Office Building
- General Office Building
- Hospital
- Library
- Museum
- Church
- Recreational Community Center
- Health/Fitness Club
- Apartment - Mid Rise
- Apartment - Low Rise
- General Light Industrial
- Observed Parking Demand



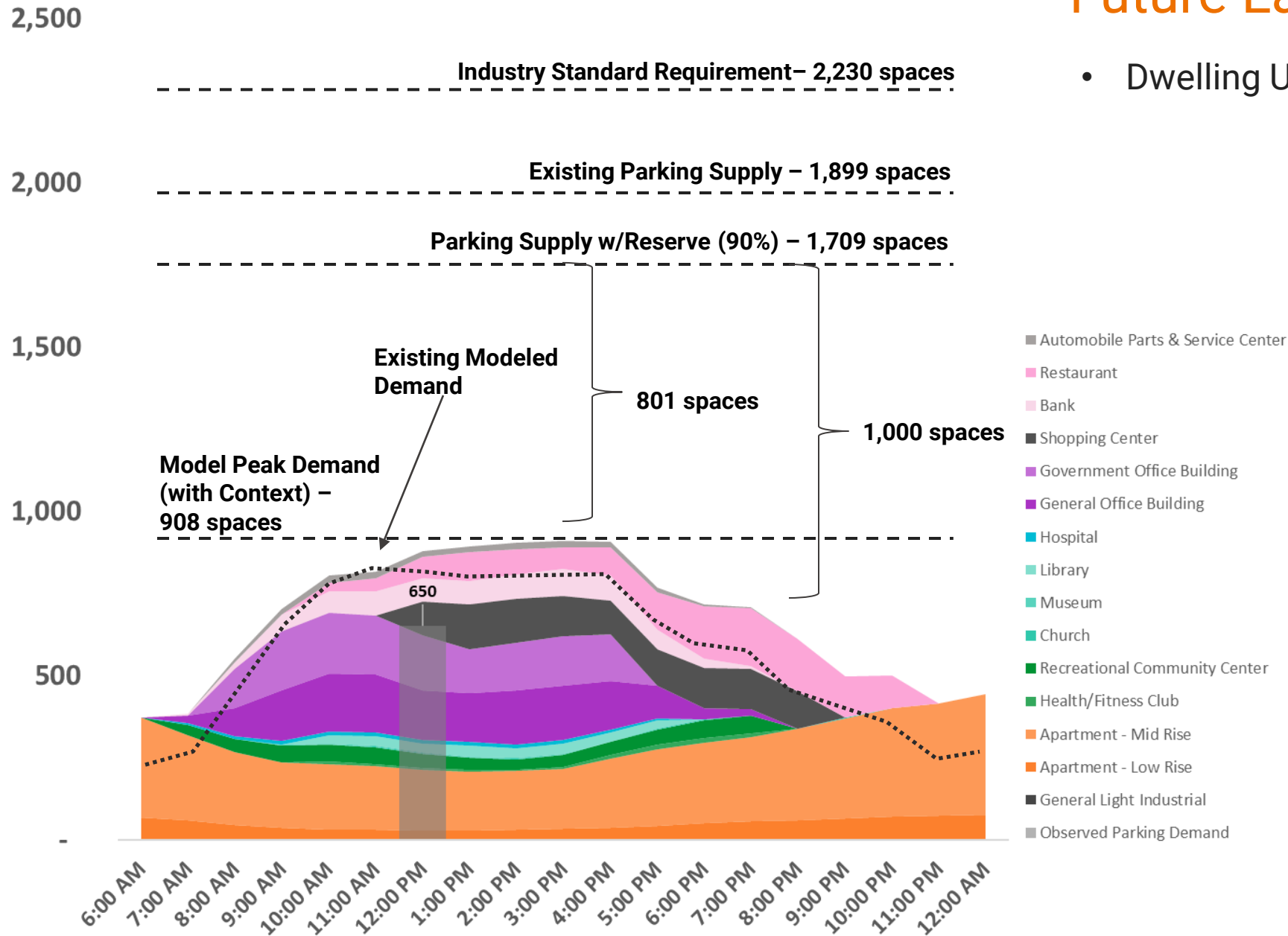
# Future Land Use Scenario A

- Retail: -20,000 sqft
- Office: -18,000 sqft
- Dwelling Units: +180



# Future Land Use Scenario B

- Dwelling Units: +180



**Draft Strategies**

# Extend or Remove Time Limits

## Project Goals

1. Plan for short- and long-term parking needs
2. Explore and identify opportunities to add additional supply
3. Coordinate parking management
4. Support resilient built environment, including small-scale development
5. Foster a walkable downtown
6. A system that is accessible to residents and visitors alike

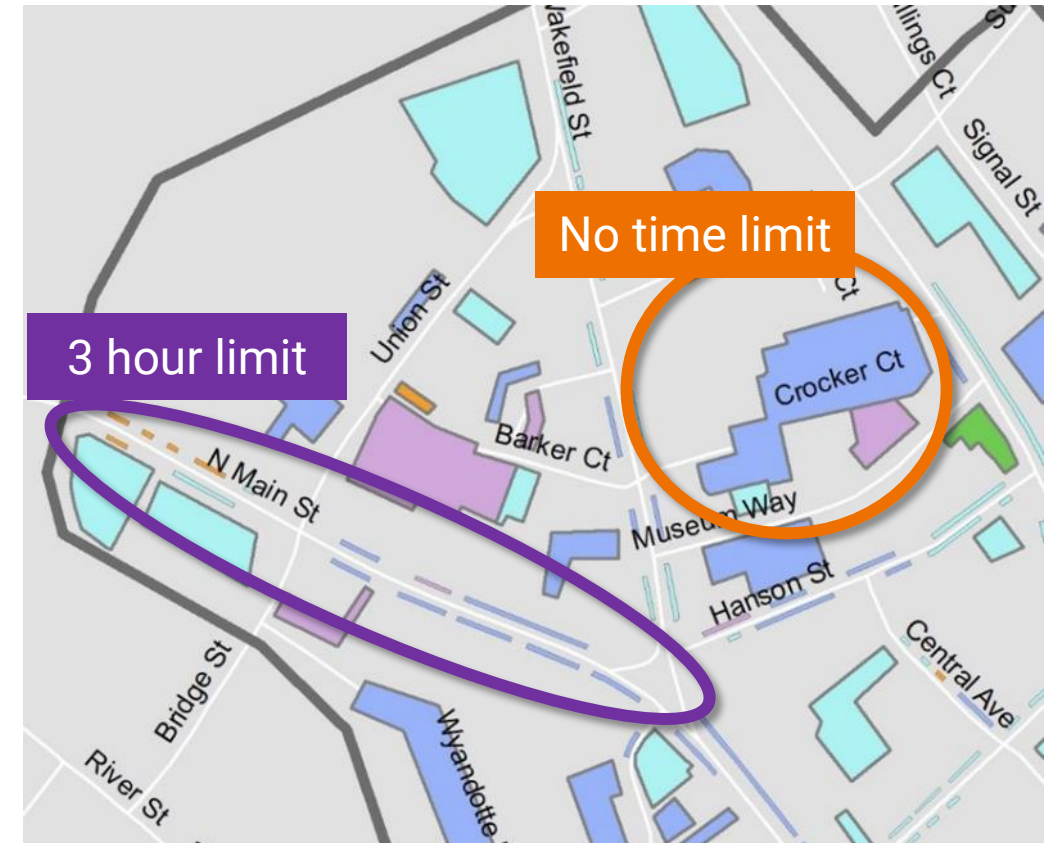
Motorists make decisions on where to park based on regulations. **Time restrictions can limit one's ability to enjoy retail and dining in Downtown Rochester.**

To encourage access while maintaining availability in key spaces, time limits could be adjusted to:

- Allow people to stay longer in desirable on-street spaces on Main Street
- Remove time limits in the City Hall lot so people can use it for long-term parking needs

By scaling back time limits or removing time limits completely in selected locations, visitors can access Rochester without feeling they need to leave, or concern about receiving a parking ticket.

**This user-friendly strategy can serve as a precursor to pricing in the future, should demand rise.**





# Consider Metering Main Street to Maintain Front-Door Availability in the Evening

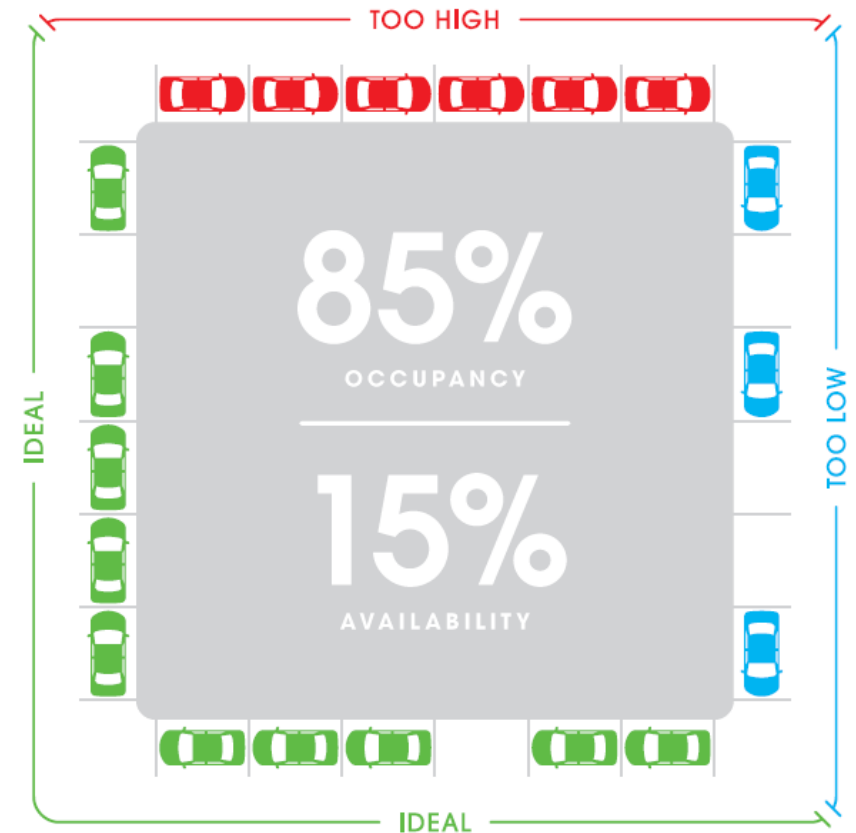
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**Time limits on Main Street end at 5:00 pm, meaning that those spaces are both the most convenient and completely unregulated.** This likely contributes to a front-door parking crunch.

Metering these spaces to create availability will encourage some motorists, particularly longer-term parkers, to choose to park slightly farther away, keeping these spaces free for customers. Specifically:

- Use price, not time limits, to manage parking so people can stay as long as they want.
- **Extend time limits from 5:00 pm to 9:00 or 10:00 pm**
  - Prevents employees from taking prime spaces
- Use pay-by-phone
  - People who can't use can park further away
  - No need for additional infrastructure
- Keep peripheral lots free
- Long-term:
  - Use revenue to support mobility improvements or a garage
  - Expand metered hours



## Project Goals

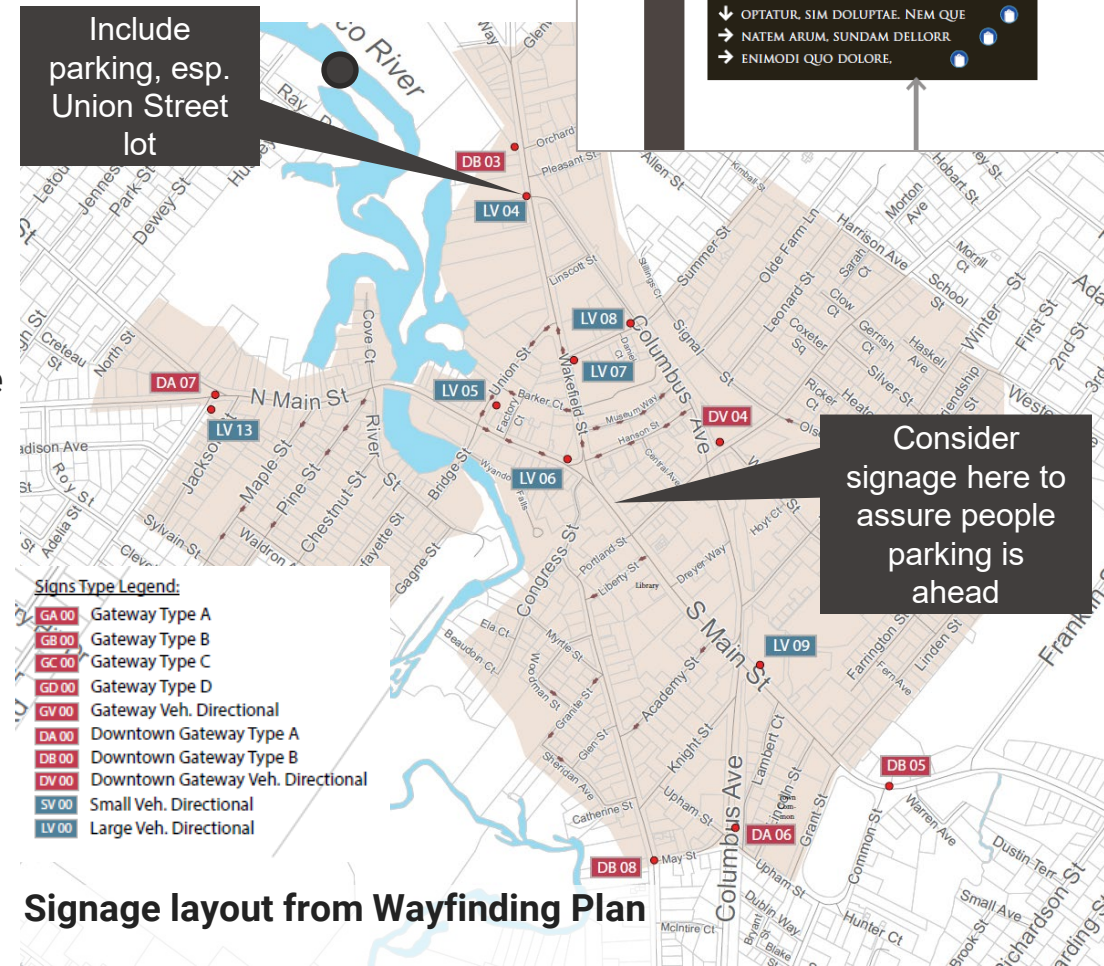
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# Expand Existing Wayfinding, Following Wayfinding Plan (2018)

Rochester should pursue its existing wayfinding plan, including parking. Key recommendations for incorporating parking include:

- Include **“short-term” and “long-term” parking distinctions**, esp. for motorist signage.
- Standardize all parking signage to include the blue “P”
- Include **parking in pedestrian-level signage** so people can find their vehicles at the end of their trip.
- Prepare, maintain, and deploy **temporary signage** for special events, or to communicate when on-street spaces may be used for other purposes.
- Standardize **lot names**

All wayfinding signage should include parking, as recommended by the Wayfinding Plan



Signage layout from Wayfinding Plan



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# Implement Standard Shared Parking Practices

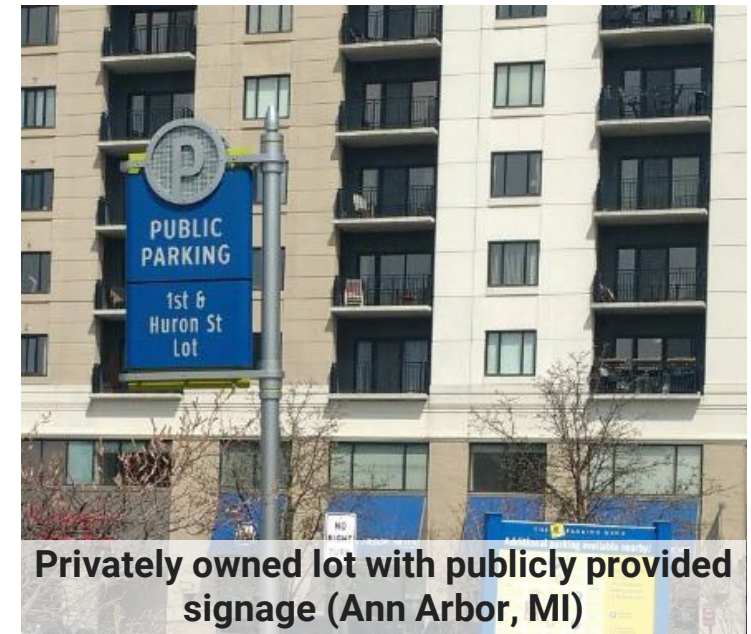
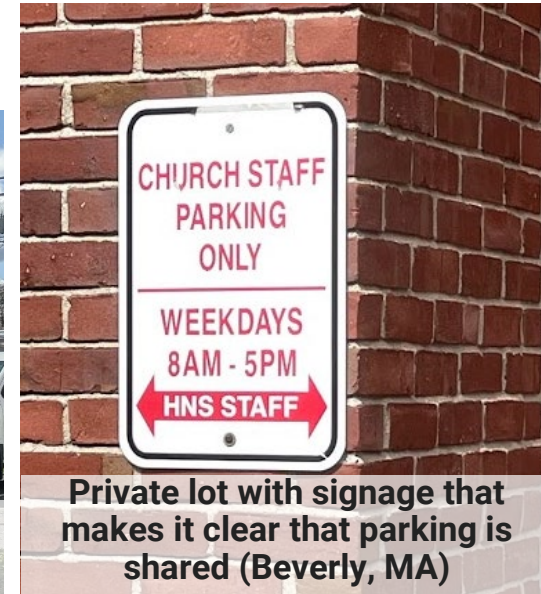
Parking utilization rates in Downtown Rochester show that, during traditional weekday midday peak periods when offices are open and some retail and dining is occurring, there is considerable capacity in the parking system. **In the evenings when daytime businesses are closed, there is likely more parking that goes unused.**

The North Main Street corridor currently features 1,900 spaces within a 5-minute walk, 1,250 of which are empty during the midday peak period. These represent nearly **\$6 million in construction costs** for new surface parking. Some potential shared opportunities include:

- Large lot associated with the former Ben Franklin Crafts store
- Grace Community Church near Wakefield Street

There are many ways shared parking can work, including using privately owned parking for:

- Any user to park at any time of day
- Any user to park during the “off hours”
- Specific users (i.e. employees or residents) via permits or agreements



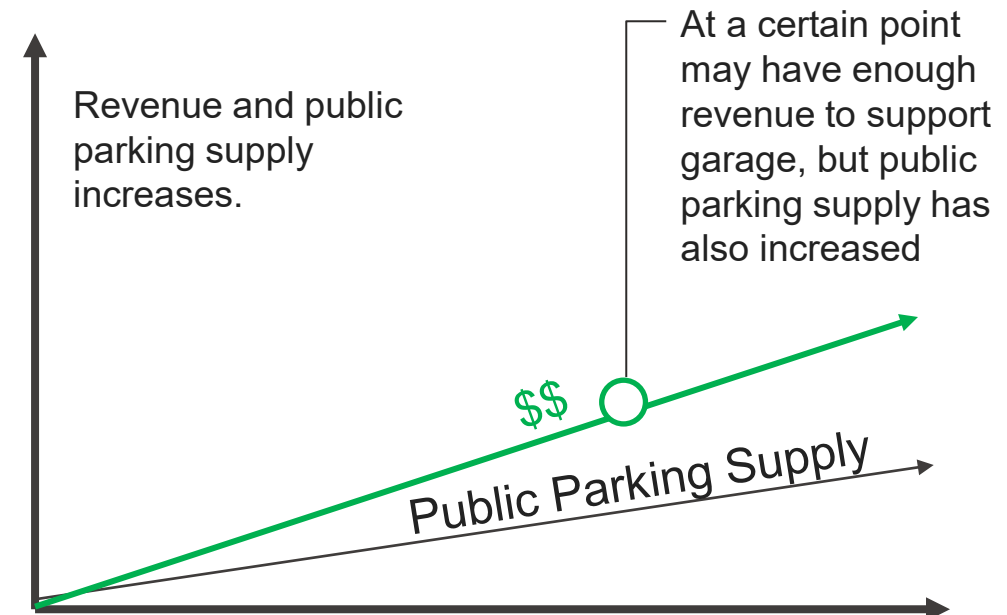
## Project Goals

# Implement Standard Shared Parking Practices for Residential / Long-Term

Today, capacity exists in the parking system, but regulations limit access to spaces. Parking uses valuable land downtown, so **parking programs should maximize the use of each space.**

Specifically:

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



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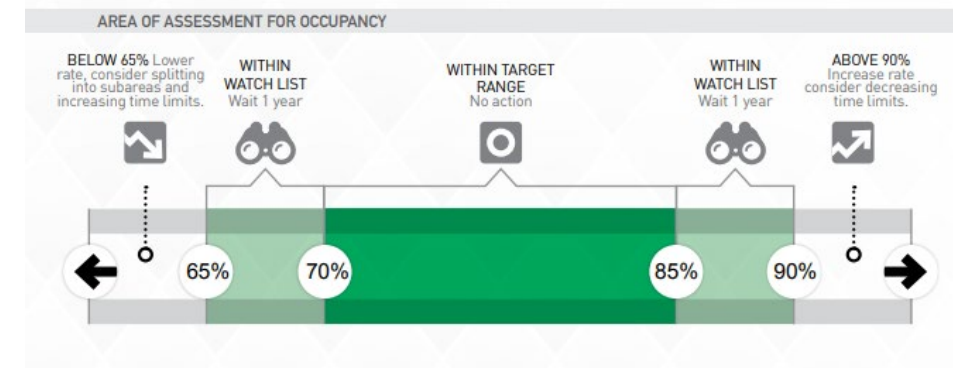
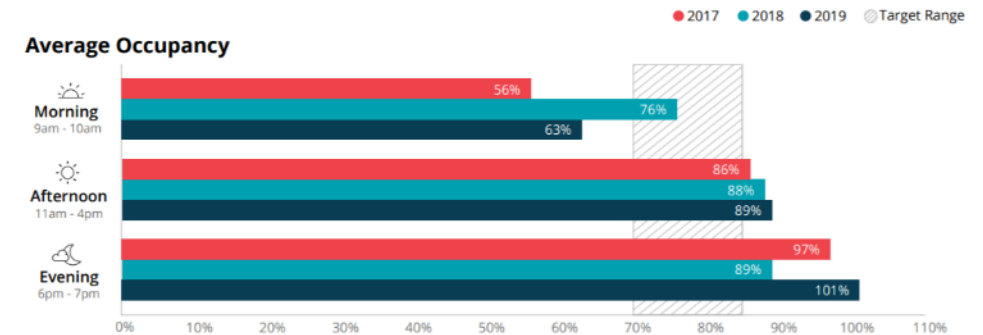
# Track Performance over Time

## Project Goals

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Understanding how supply and demand are connected to one another is vital to help the community make informed decisions on when to pursue new parking opportunities. A monitoring program for Rochester would include:

- Counting parking activity every six months, tracking utilization by location and type of regulation.
- Reporting on occupancy in a publicly available report.
- **Additional counts should be conducted on an annual basis on a busy Friday or Saturday night**, representing the busiest parking conditions.
- Using this information to support additional development, including tracking the need for additional supply.



# Reinvest Parking Revenue in Downtown

## Project Goals

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2. Explore and identify opportunities to add additional supply
3. Coordinate parking management
4. Support resilient built environment, including small-scale development
5. Foster a walkable downtown
6. A system that is accessible to residents and visitors alike

**Implementing metered parking and a pass program will generate revenue for downtown.** As this funding grows, it should be directly reinvested in downtown to support:

- Enforcement (one person, a few days / hours a week)
- Expansion of public supply
- Mobility projects
- Parking access improvements (better lighting, sidewalks, signage, landscaping, etc.)

Signage and marketing related to any change in programs should include the fact that funds are being directly reinvested back into downtown.



**MAPC PLANNING**

## PARKING BENEFIT DISTRICTS

### A new way to fund transportation

Looking for ways to purchase smart meters – or use existing parking revenues for transportation improvements? Would you like to see more benches, street trees, and lighting in your downtown? Parking benefit districts may be your answer.

A parking benefit district is a specific geographic area in which parking revenues can be collected and reinvested to fund a wide range of transportation-related improvements.

The enabling legislation gives communities greater control over parking supply and demand, and allows them to leverage parking management strategies for neighborhood revitalization and economic development.

MAPC can help you community navigate parking benefit districts legislation, determine the best places for a district and help identify an appropriate management structure. Call us today!

### Revenue from Parking Benefit Districts can fund:

- Acquisition, installation, maintenance, and operation of parking meters and other parking payment and enforcement technology
- Regulation of parking
- Salaries of parking management personnel
- Improvements to the public realm like street trees, parklets and curb cuts
- Transportation improvements, which include, but are not limited to, the operations of mass transit and facilities for biking and walking

# Management Practices

## Project Goals

1. Plan for short- and long-term parking needs
2. Explore and identify opportunities to add additional supply
3. Coordinate parking management
4. Support resilient built environment, including small-scale development
5. Foster a walkable downtown
6. A system that is accessible to residents and visitors alike

As parking changes in downtown, there are accompanying changes to make in a parking management program. These include:

- **Parking enforcement can shift to an “ambassador” role**, where ambassadors also offer information about downtown and alternative parking options.
  - Supporting a night/weekend pass program will require minimal enforcement ‘sweeps:’ one in the evening to ensure parked cars have passes
  - For all-day passes in otherwise time limited or metered situations, two midday sweeps + evening sweep
- **Maintaining a parking inventory (building on data from this study)**
- Monitoring and reporting on utilization

## Parking Happy In Hyannis

May 27, 2015 • Add Comment • by Brian Tarcy



In the Bismore Park parking lot, which utilizes a kiosk and a parking app to pay \$2 per hour for parking, a parking attendant called a “Gateway Greeter” is there to help with the machine and provide information to those visiting one of the most high-trafficked areas on the Cape.

Image Source: <https://capecodwave.com/parking-happy-in-hyannis/>



# Considerations for Structured Parking

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Structured parking is a useful approach to consolidate surface parking lots. However, it is expensive, and it is often challenging to charge users enough to cover the cost. As Rochester grows, considerations associated with structured parking include:

- Structured parking is expensive: **\$22,000**
  - Very basic amenities
- In a downtown: **\$30,000/space** :
  - Wrapped in active uses
  - Priced to fit into larger system
  - Integrated with public parking supply
  - Lighting
- Smaller sites (i.e. City Hall or Union St Lot) only accommodate ~150 per deck; max supply ~500
  - **Cost: \$15,000,000**
- Completely shared/open to public to maximize use
- Multiple developers could support one central facility



Dover, NH Orchard Street Parking Garage: \$11 million (\$35,000/space)



Sample mixed-use parking garage (Beverly, MA)

Source for parking costs: <https://wginc.com/wp-content/uploads/2020/07/Parking-Construction-Cost-Outlook.pdf>

Source for Dover NH estimate: <https://www.fosters.com/article/20151125/NEWS/151129606/0/fosnews151202>



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# Fold Parking Into Mobility Improvements

In many locations downtown – parking feels disconnected due to the perception of a hostile pedestrian environment. **The most significant barrier today is Columbus Street** – this road features lane widths which regularly exceed 14 feet, missing sidewalks, and infrequent crossing opportunities. The 59-space lot accessible from Wallace Street, as well as most parking east of Columbus Street, can feel inaccessible to Downtown.

**Transportation improvements that improve walkability will expand the reach of the parking system.** In addition, investments should consider access to public parking to support overall downtown mobility. Potential ideas include:

- Crossings near the Wakefield Street and Union Street intersection at the northern segment of the Downtown one-way loop.
- Implement the Greening America's Communities plan for the Union Street lot
- Improve crossings on Columbus Avenue for pedestrians, such as high-visibility crosswalks, bumpouts, or crossing islands.



**Bike Lane Along Wakefield St.**



**Columbus Avenue: wide right of way, high speed travel**

# Thank You!

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# Appendix

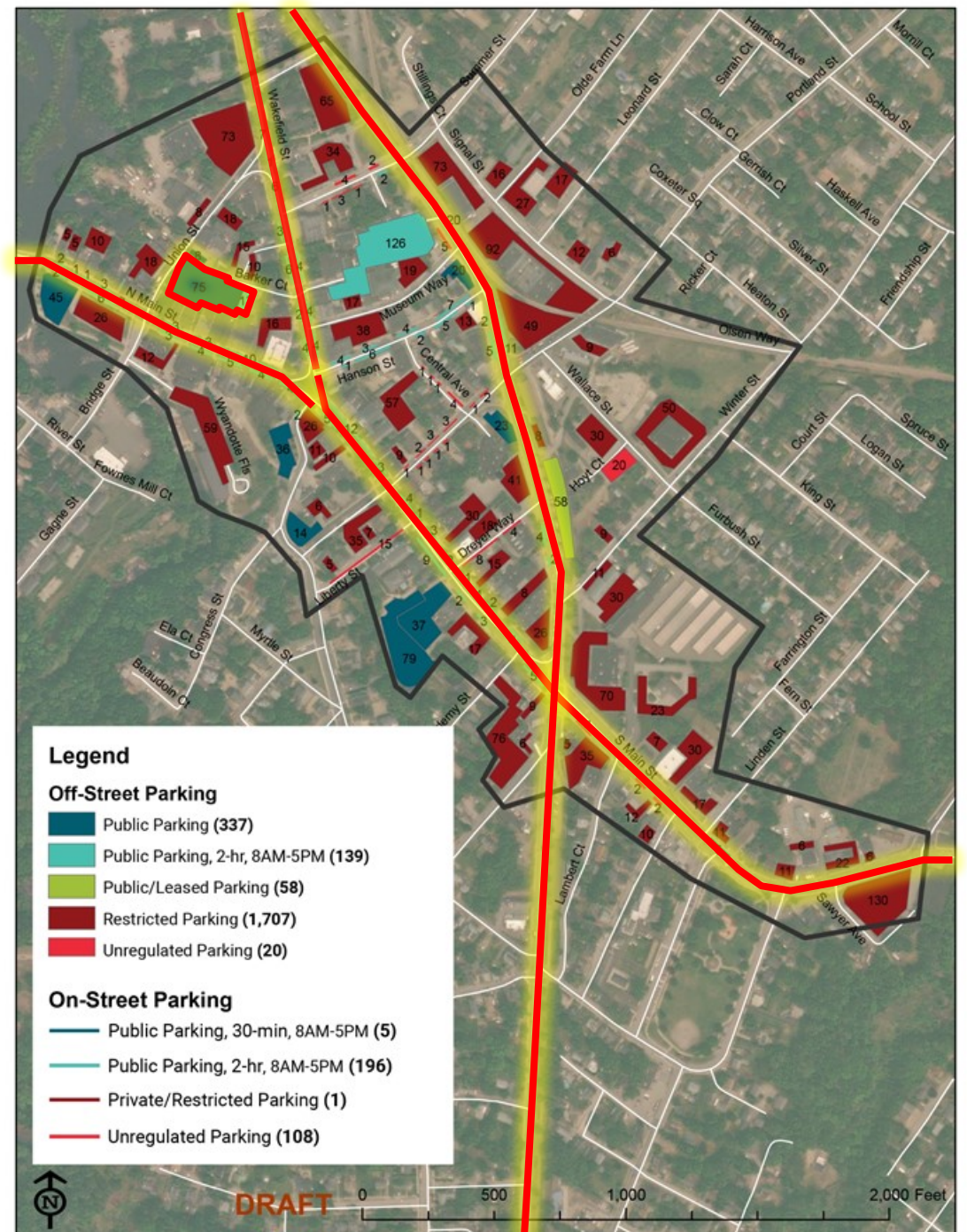


# Violations by location

Street	Parking Tickets
Wakefield St.	64
South Main St.	44
North Main St.	41
Union St. Parking Lot	23
Columbus Ave.	19

All data from 2019

Data reflects citywide violations





# Vacancy Rates

Vacancy Rate	2016	2019
Retail	6.6% → 10% for model	1.9%
Office	2.8% → 10% for model	0.7%
Residential	2.8%	1.5%
Model		