

Parking Policy Study – Task Force Meeting

Somerville, MA

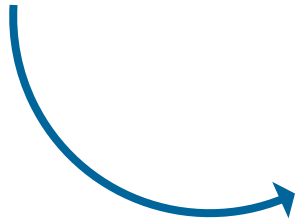
Presented by: Jason Novsam
Brynn Leopold
Tom Brown

September 2021



Developing transportation systems to promote broader community goals of mobility, equity, sustainability, health, and economic development

We Put People First



Transit



Transit Corridors



Active Transportation and Safety



Cities and Streets



Parking and Demand Management



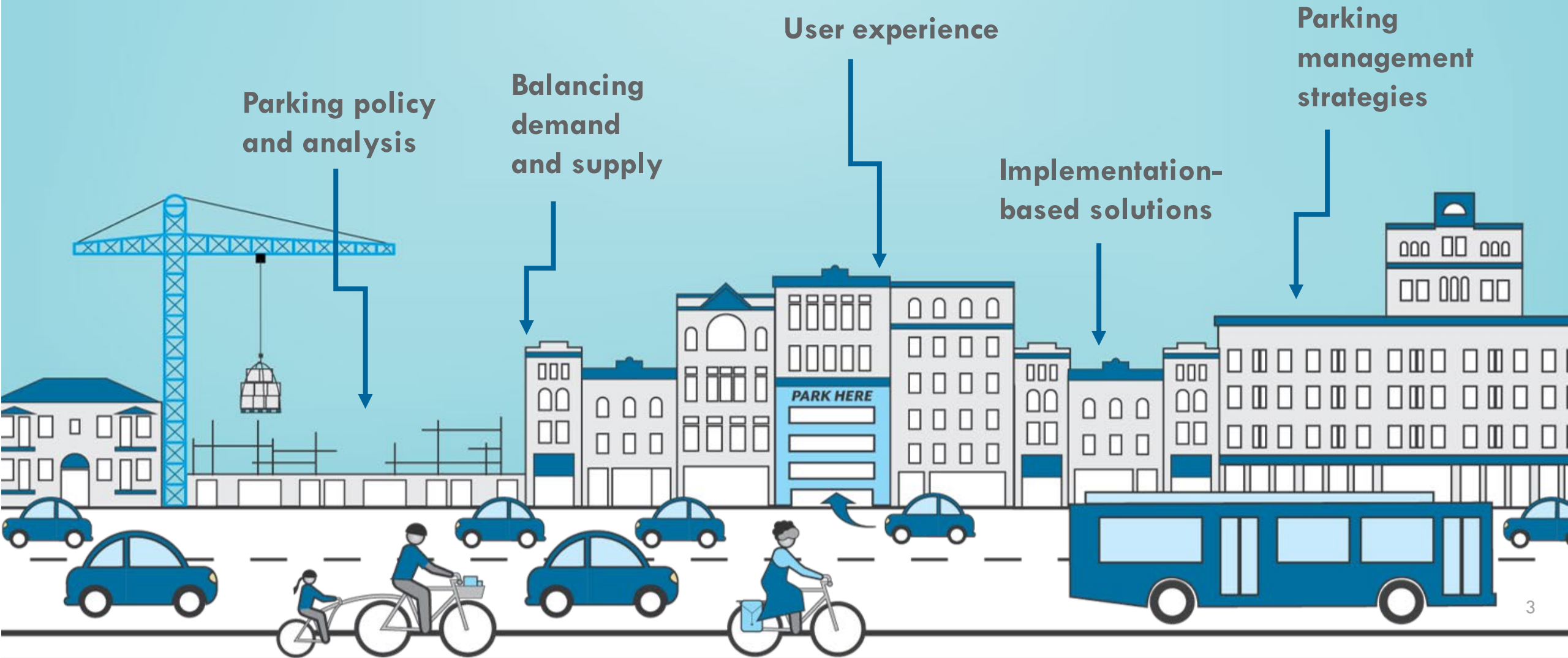
Engineering and Design



Mobility Management, Access, and Policy



PARKING AND DEMAND MANAGEMENT EXPERTISE



PROJECT MANAGEMENT AND TEAM LEADERSHIP



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Agenda

- 1 Project Process Overview
- 2 Phase 1 Results / Highlights
- 3 Phase 2 – Approach / Timeline
- 4 Discussion
- 5 Next Steps





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Project Process Overview

Why is a parking study important?

HELP SOMERVILLE PLAN FOR THE NEXT TEN YEARS

- Digital inventory of curbside regulations (Phase 1); Map & analyze utilization (Phase 2)
- Develop management strategies to get ahead of ongoing/anticipated changes
- Leverage policy innovation and digital tools enable management flexibility as mobility needs/opportunities evolve

UNDERSTAND THE CHANGING NATURE OF PARKING IN SOMERVILLE

- Shifts in residential and commuting preferences, amplified by COVID, are changing how people move and park
- Diverse stakeholders need parking policies that accommodate their needs
- Technology and service-model innovations expected to continue apace
- Plan for future technologies, while understanding and meeting today's needs

WHAT DOES PARKING HAVE TO DO WITH DOWNTOWN VITALITY?

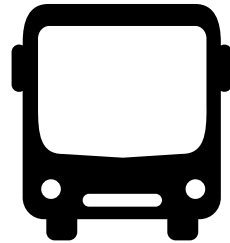


In which downtown would you like to live, work, meet up with friends and colleagues?

Parking is tied to...



Local Business Health



Transit Reliability



Development Potential



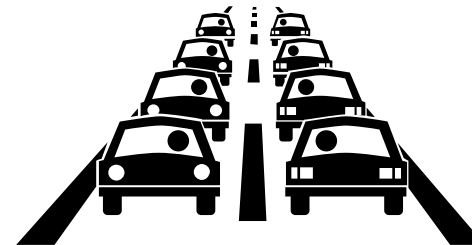
Pedestrian Environment



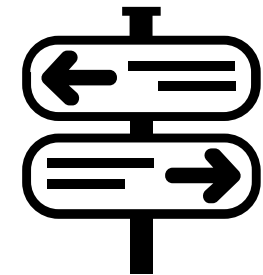
**Efficient Use of
Municipal Resources**



Bicycling Accommodations



Traffic Patterns



Signage and Wayfinding

Improving and accommodating non-driving modes can help less parking go farther.



Strategic Parking Management

Encourage multimodal mobility
with right-sized supplies and
demand-based management

Mobility Improvements

Reduce pressure on limited parking
by providing high-quality driving
alternatives



This can make Somerville's housing less expensive, its jobs more accessible, its mobility more equitable.



Study Process

PHASE 1

Gather Data and Public Input

- **Parking inventory and utilization field work**
- **Review previous plans**
- **Review existing management, rate, and enforcement structures**

Identify Key Issues and Potential Strategies

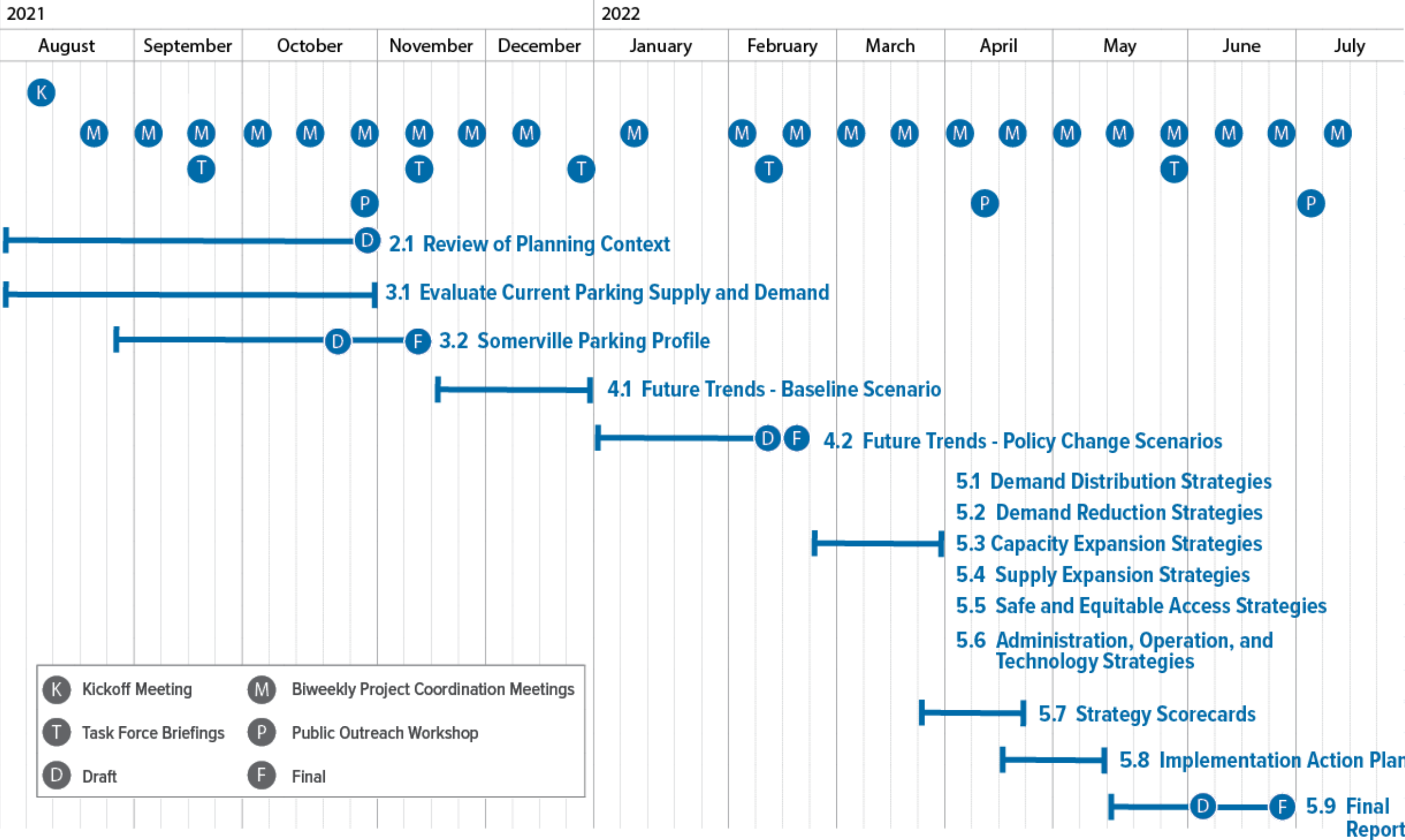
- **Analyze supply and demand by user group and by district**
- **Identify challenges in management**
- **Evaluate enforcement and payment technologies**

Develop Recommendations

- **Choose best strategies based on local context**
- **Evaluate feasibility**
- **Vet strategies with the public and stakeholders**

Create Implementation Plan

- **Create short term and long term action items**
- **Identify leadership roles**
- **Link actions to specific departments and funding sources**
- **Create performance monitoring plan**

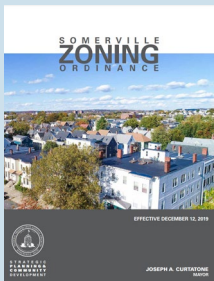


- K** Kickoff Meeting **M** Biweekly Project Coordination Meetings
- T** Task Force Briefings **P** Public Outreach Workshop
- D** Draft **F** Final

Review of Past Plans

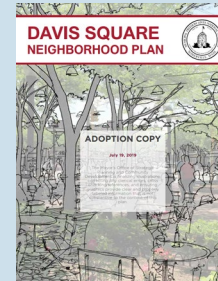
Citywide Plans

- SomerVision
- Climate Forward Action Plan
- Zoning Ordinance Update
- Vision Zero Action Plan
- Public Electric Vehicle Charging in Somerville – Status, Options, and Considerations



Neighborhood Plans

- Union Square Master Plan
- Davis Square Master Plan
- Boynton Yards Public Realm Implementation Plan
- Winter Hill In Motion
- Ball and Magoun Square MP
- Holland St & College Ave Mobility Improvements



Major Development Projects

- SomerNova
- Boynton Yards
- Union Square

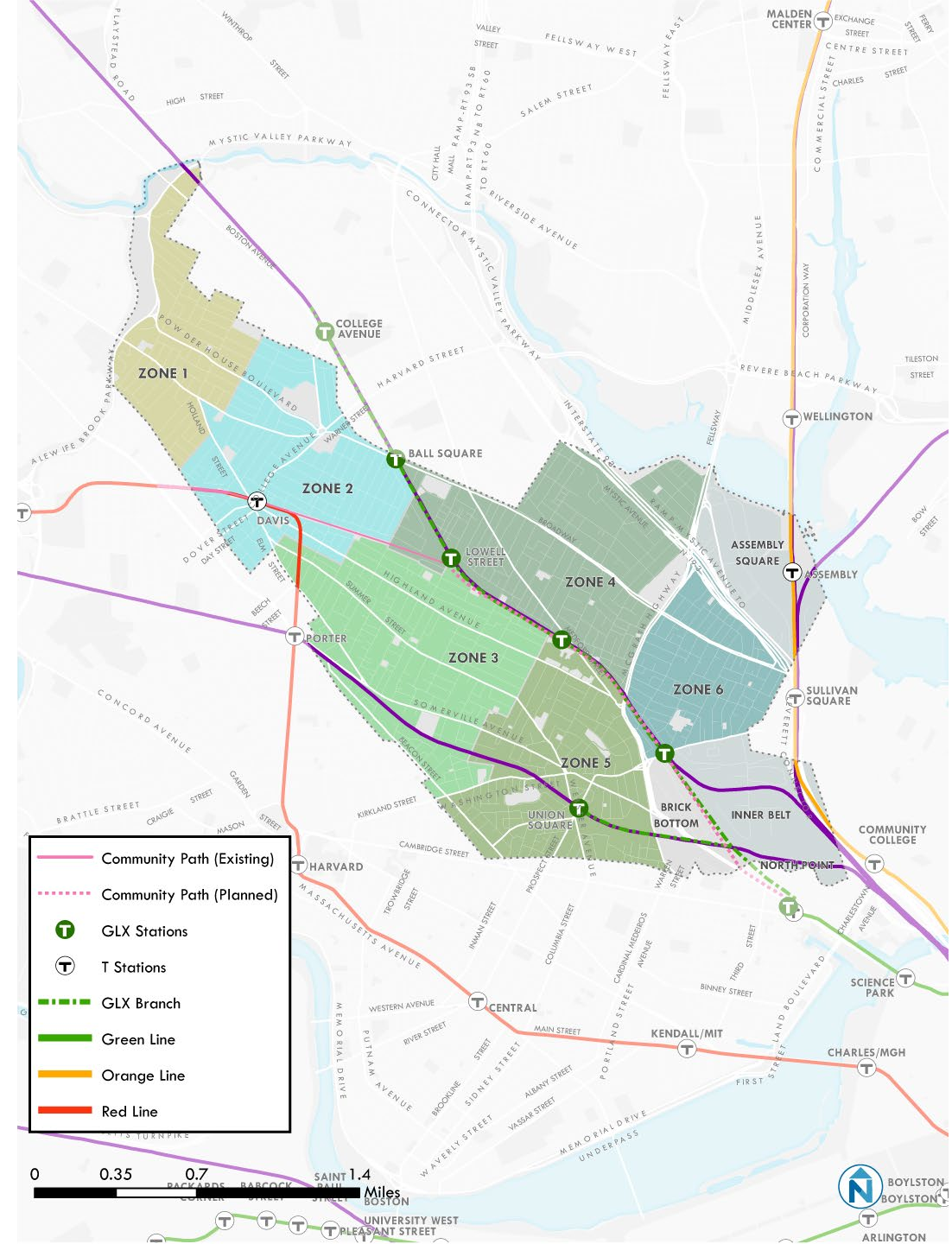
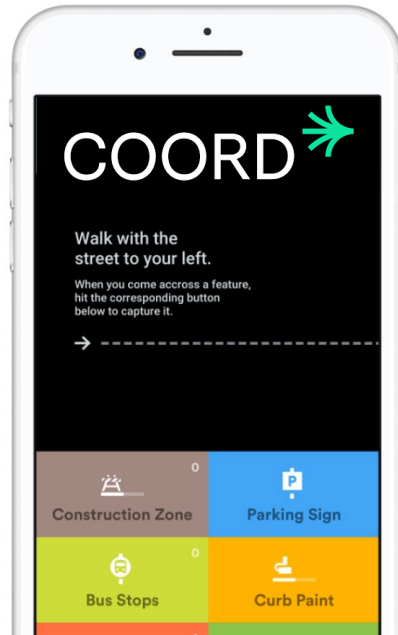


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Phase 1 Results / Highlights

Citywide Public Parking Inventory Data Collection

- April 2021 through October 2021
- Data was collected in the field using the Coord curb data collection platform
- Features collected:
 - Parking Signs
 - Curb Cuts
 - Crosswalks
 - Bus Stops
 - Hydrants
 - Construction Zones
 - Bulbouts
 - Obsolete Curb Cuts



Neighborhood Zones

- **Zone 1**

- Hillside
- Teele Square

- **Zone 2**

- Davis Square
- Powder House Square
- Ball Square

- **Zone 3**

- Porter Square
- Spring Hill
- Duck Village

- **Zone 4**

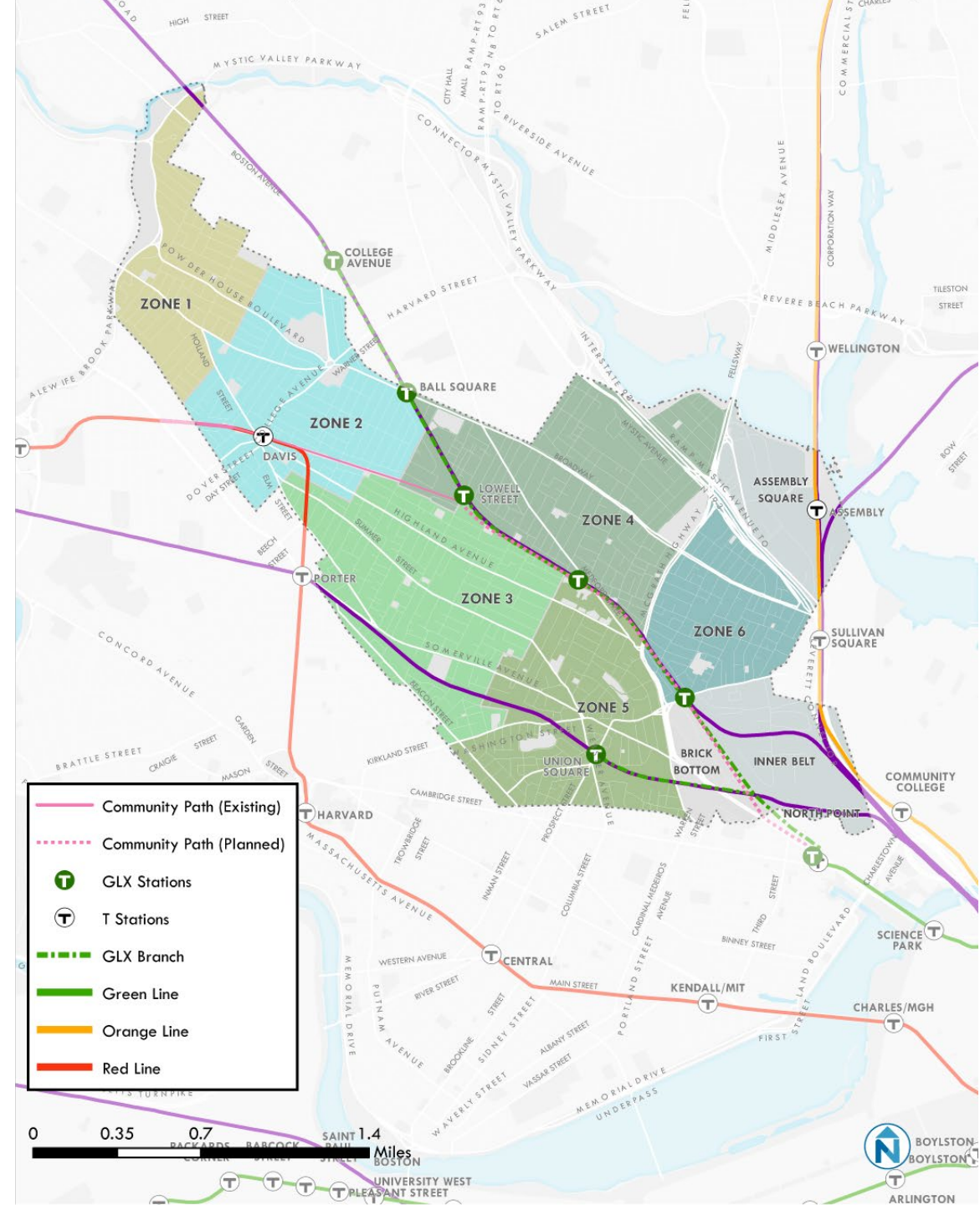
- Magoun Square
- Winter Hill
- Ten Hills

- **Zone 5**

- Union Square
- Boynton Yards

- **Zone 6**

- East Somerville
- Assembly
- Inner Belt



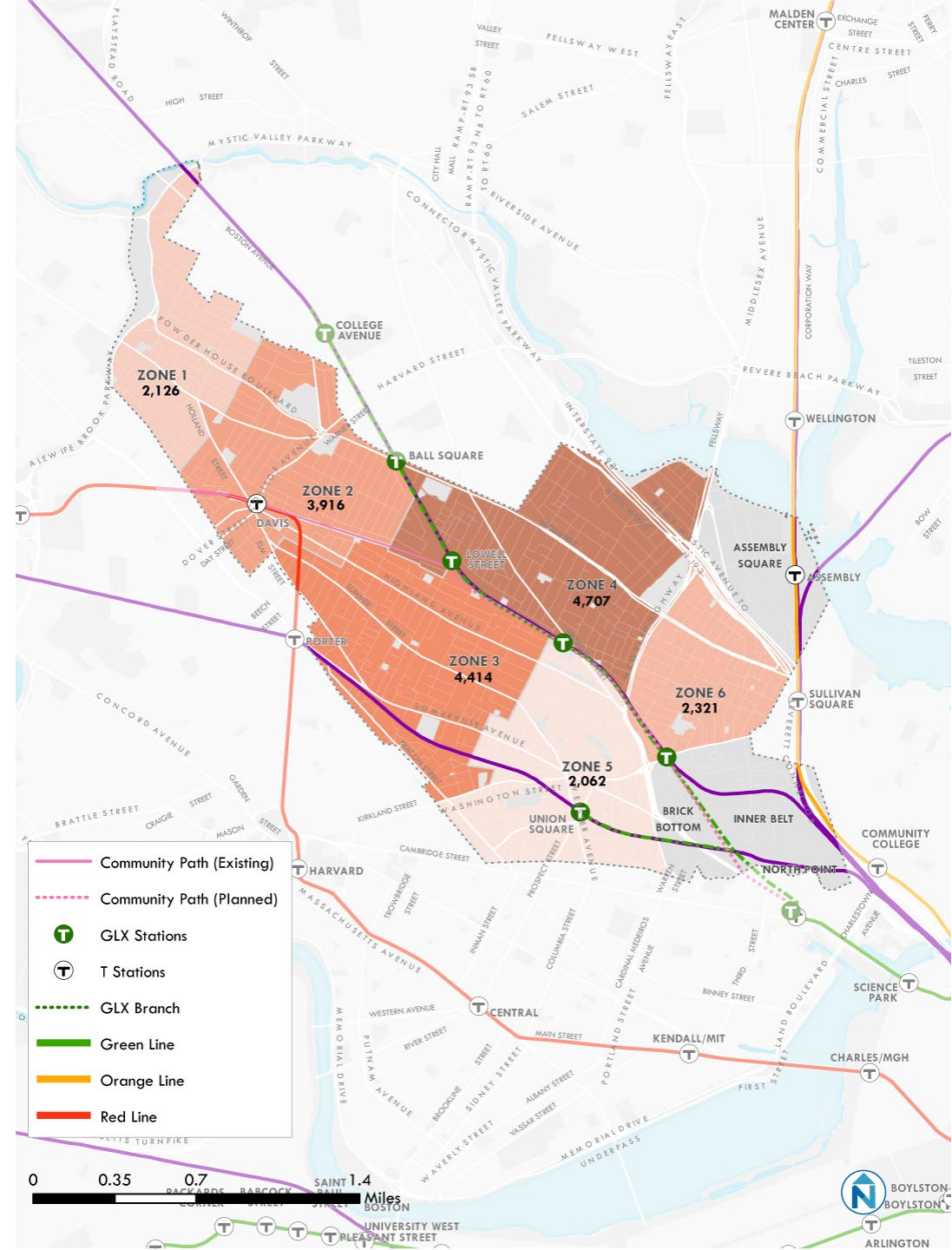
On-Street Parking Inventory

20,439 ON-STREET SPACES

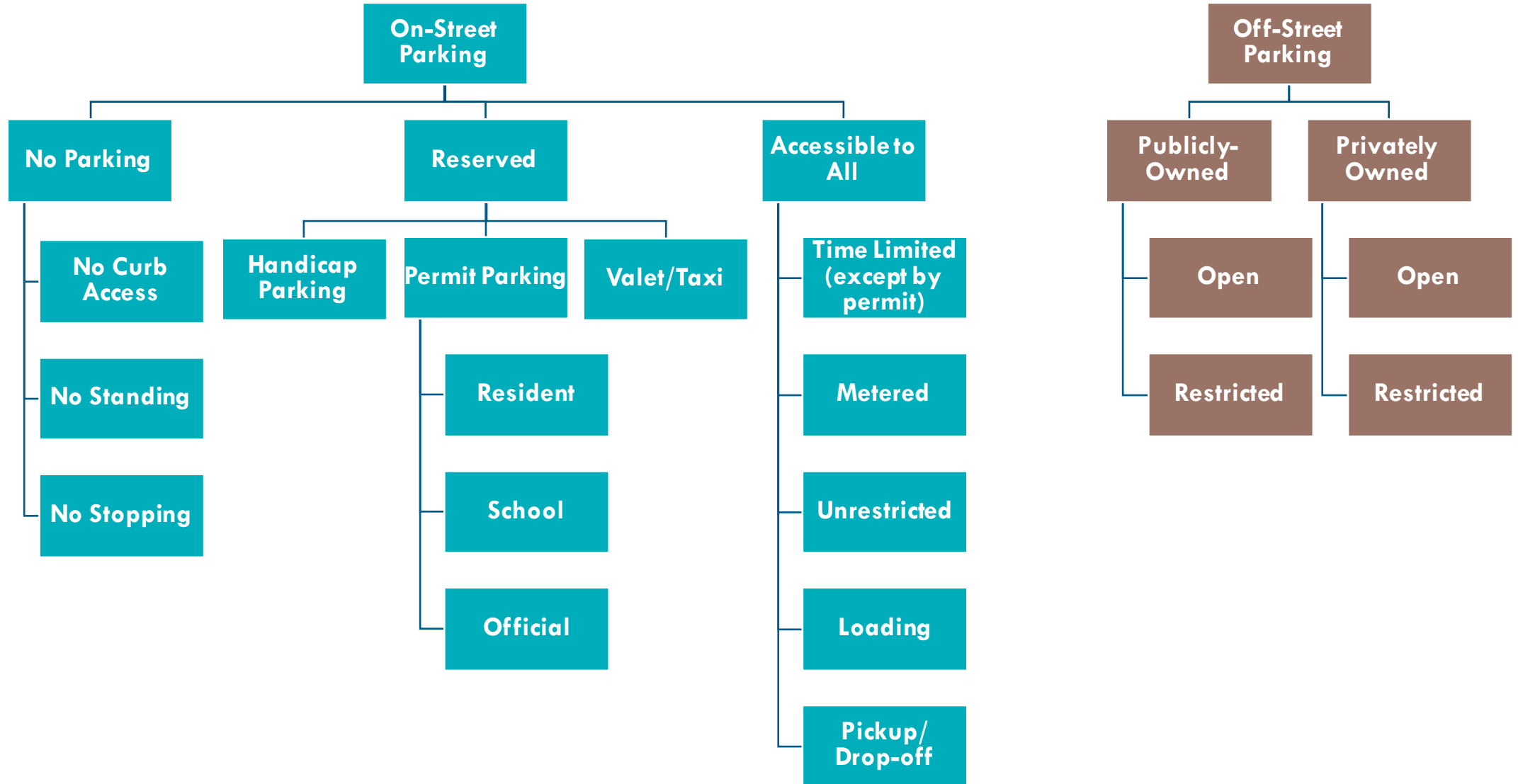
0.25 SPACES PER CAPITA

* Not including no parking, no standing, and no stopping locations

Zone	Neighborhood District	On-Street Parking	% of Curbs Dedicated to Parking
1	Hillside & Teele	2,126	51%
2	Davis & Powder House & Ball	3,916	59%
3	Porter & Spring Hill & Duck Village	4,414	53%
4	Magoun & Winter Hill & Ten Hills	4,707	55%
5	Union Square & Boynton Yards	2,062	47%
6	East Somerville	2,321	52%
	<i>Assembly, Inner Belt, Brickbottom</i>	878	29%
	CITYWIDE	20,439	52%



Universe of Parking Regulations



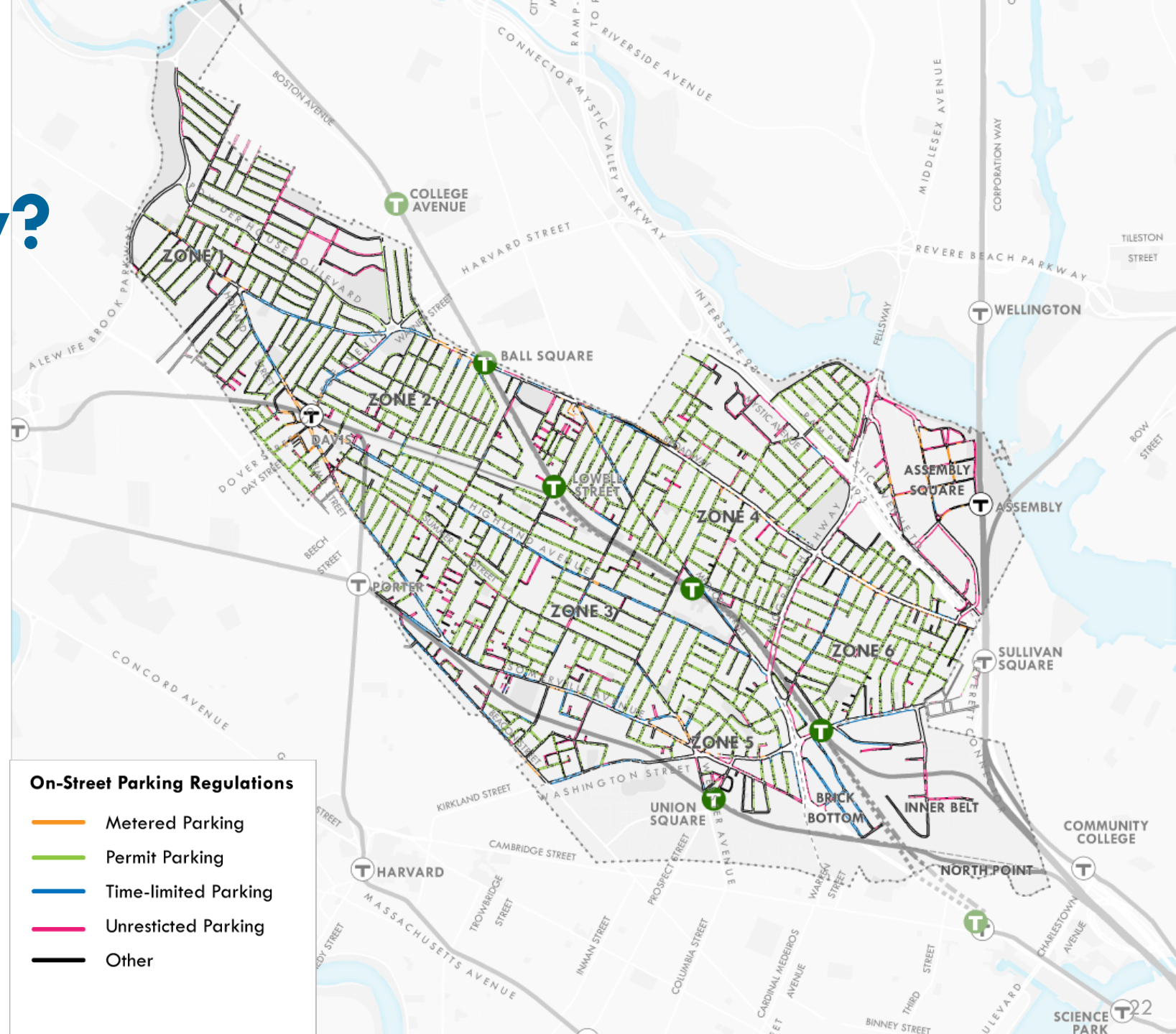
Parking Permit Program

Permit Type	Cost	Duration	Notes
Annual Resident Permit	\$40	Year	Free for seniors or handicap placard holders
Temporary Resident Permit	Free	30 Days	
Visitor Permit	\$20-\$40	2-4 Days	Two pass max
Business Permit (On-Street and Magoun Square)	\$150	Year	
Business Permit (Davis Square)	\$100	Month	
Business Visitor Pass	\$200	Year	
Other Permits	Varies	Varies	Contractor, healthcare, landlord, moving van, etc.



How is Parking Regulated Today?

- Assembly Square has many unrestricted parking spaces
- Most residential blocks are permit-only
- Metered parking concentrated in Squares, but not in Porter or Gilman Squares
- Time-limited parking on commercial corridors



How is Parking Regulated Today?

- Most curbs are regulated with permit parking (13,956 spaces), followed by time-limited parking (2,386 spaces)
- 80% of parking is available to permit holders throughout the day
- 4% of parking is metered and available to any members of the public at any time of day
- An additional 12% of parking is available to any members of the public during specific hours

District	Resident Permit	Time-Limited Except by Permit	Metered and Timed	Unrestricted*	Loading Zone and Bus Stop	Accessible Parking	Pickup/Drop-off	Other	Total
Hillside & Teele	1,724	53	28	281	28	7	0	5	2,126
Davis & Powder House & Ball	2,728	393	234	238	130	152	10	31	3,916
Porter & Spring Hill & Duck Village	3,056	603	80	476	154	32	7	6	4,414
Magoun & Winter Hill & Ten Hills	3,376	513	99	351	117	82	8	161	4,707
Union Square & Boynton Yards	1,235	321	63	253	152	14	4	20	2,062
East Somerville	1,778	180	62	125	119	17	11	29	2,321
<i>Assembly, Inner Belt, Brickbottom</i>	0	365	174	246	27	47	10	9	878
Citywide	13,956	2,386	740	1,972	723	351	50	261	20,439

*Unrestricted parking numbers are subject to change and will decrease by the time of dataset finalization.

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District	Resident Permit	Time-Limited Except by Permit	Metered and Timed	Unrestricted*	Loading Zone and Bus Stop	Accessible Parking	Pickup/Drop-off	Other	Total
Hillside & Teele	81%	2%	1%	13%	1%	0%	0%	0%	100%
Davis & Powder House & Ball	70%	10%	6%	6%	3%	4%	0%	1%	100%
Porter & Spring Hill & Duck Village	69%	14%	2%	11%	3%	1%	0%	0%	100%
Magoun & Winter Hill & Ten Hills	72%	11%	2%	7%	2%	2%	0%	3%	100%
Union Square & Boynton Yards	60%	16%	3%	12%	7%	1%	0%	1%	100%
East Somerville	77%	8%	3%	5%	5%	1%	0%	1%	100%
<i>Assembly, Inner Belt, Brickbottom</i>	0%	42%	20%	28%	3%	5%	1%	1%	100%
Citywide	68%	12%	4%	10%	4%	2%	0%	1%	100%

*Unrestricted parking numbers are subject to change and will decrease by the time of dataset finalization.

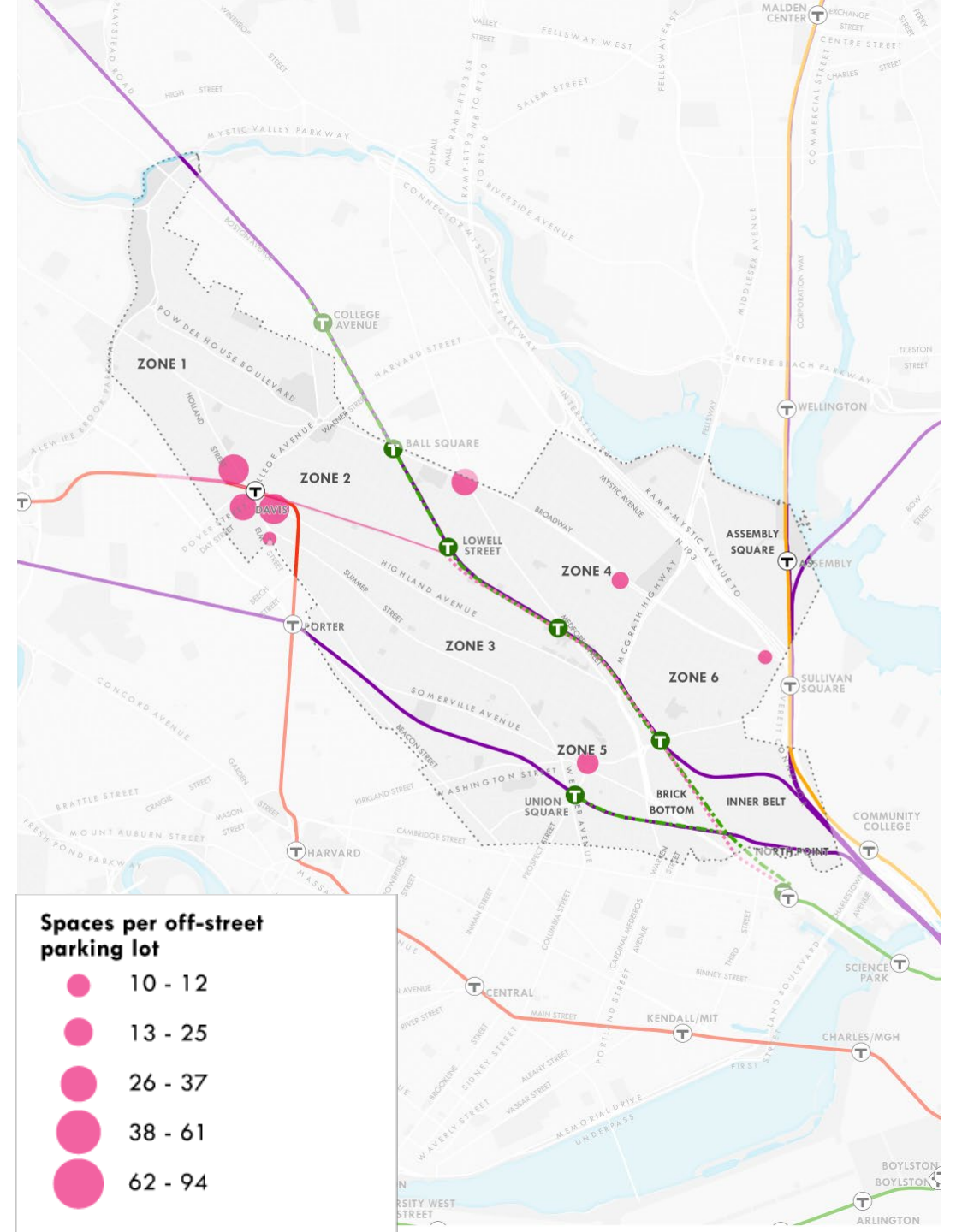
Off-Street Public Parking Inventory

- Off-street parking supplements on-street public parking in key locations
- Off street lots are concentrated in commercial squares:
 - Davis Square
 - Union Square
 - Magoun Square

Lot	Parking Type	# of Spaces
Buena Vista Lot	Kiosk	94
Cutter Square Lot	Kiosk	12
Day Street Lot	Kiosk	61
Grove Street Lot A	Kiosk	61
Grove Street Lot B	Kiosk	20
Magoun Square Lot	Kiosk	50
Mount Vernon Street Lot	Kiosk	10
Union Square Lot	Kiosk	37
Winter Hill Lot	Metered	25
Grand Total		370

Off-Street Public Parking Inventory

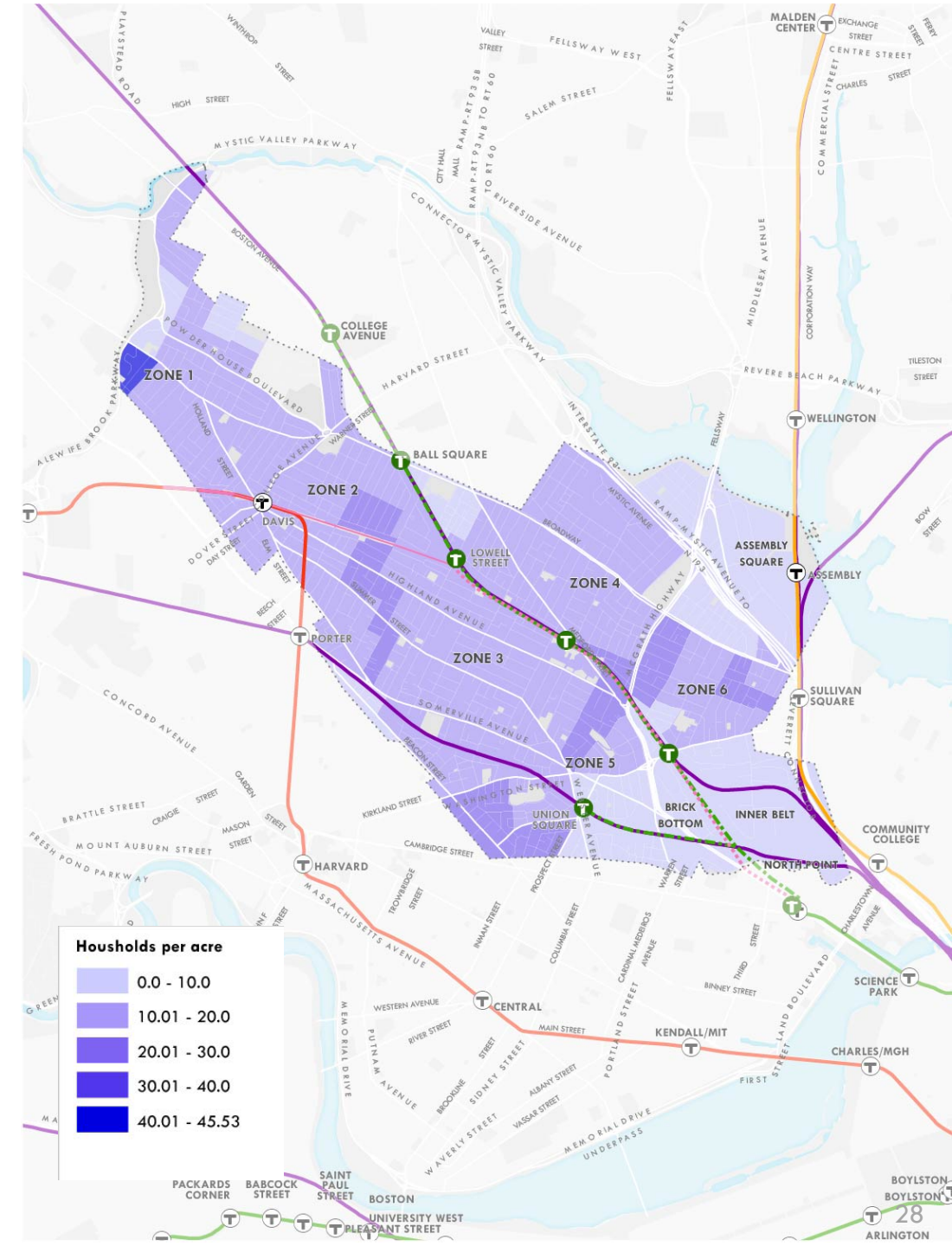
Zone	Lot	Parking Type	# of Spaces
2	Buena Vista Lot	Kiosk	94
2	Cutter Square Lot	Kiosk	12
2	Day Street Lot	Kiosk	61
2	Grove Street Lot A	Kiosk	61
2	Grove Street Lot B	Kiosk	20
4	Winter Hill Lot	Metered	25
4	Magoun Square Lot	Kiosk	50
5	Union Square Lot	Kiosk	37
6	Mount Vernon Street Lot	Kiosk	10
Grand Total			370



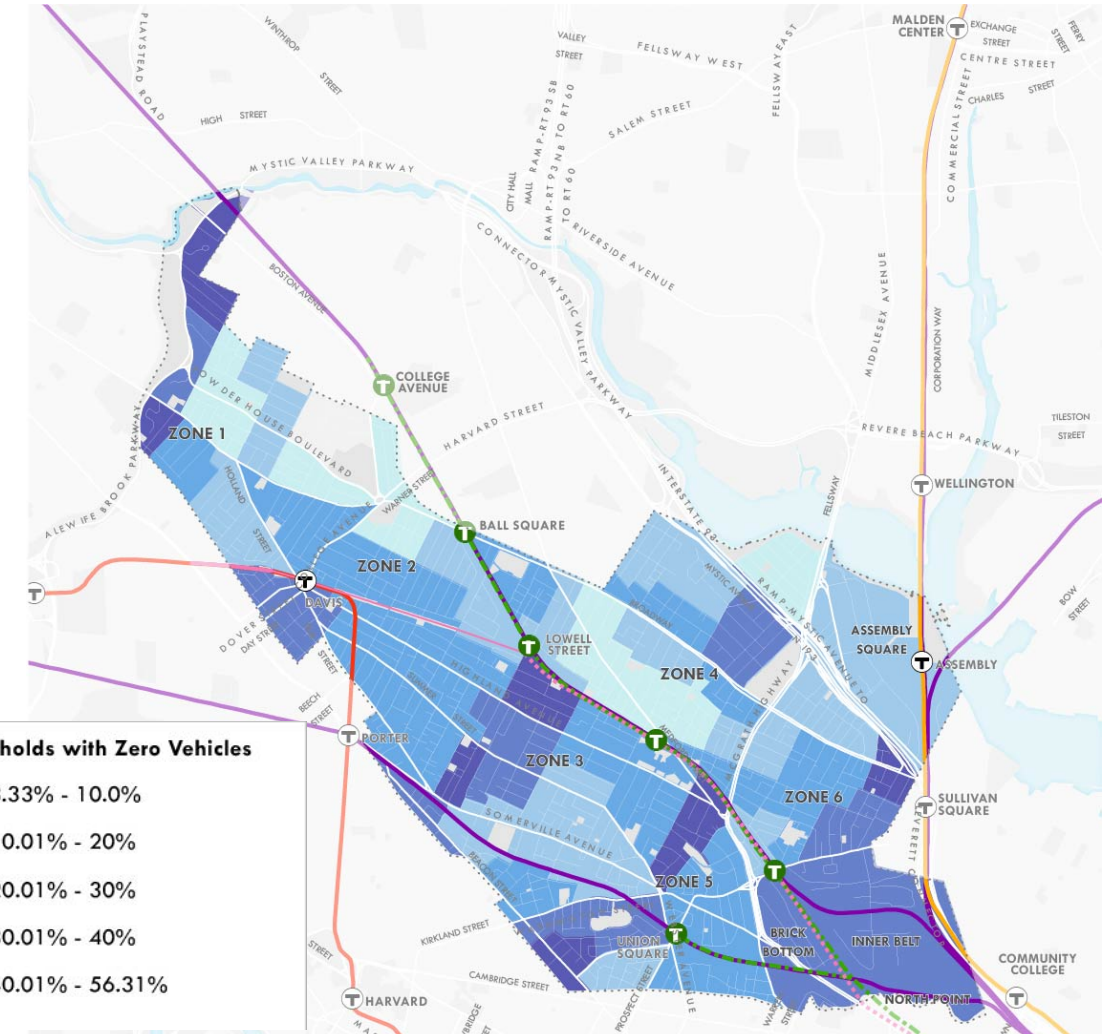
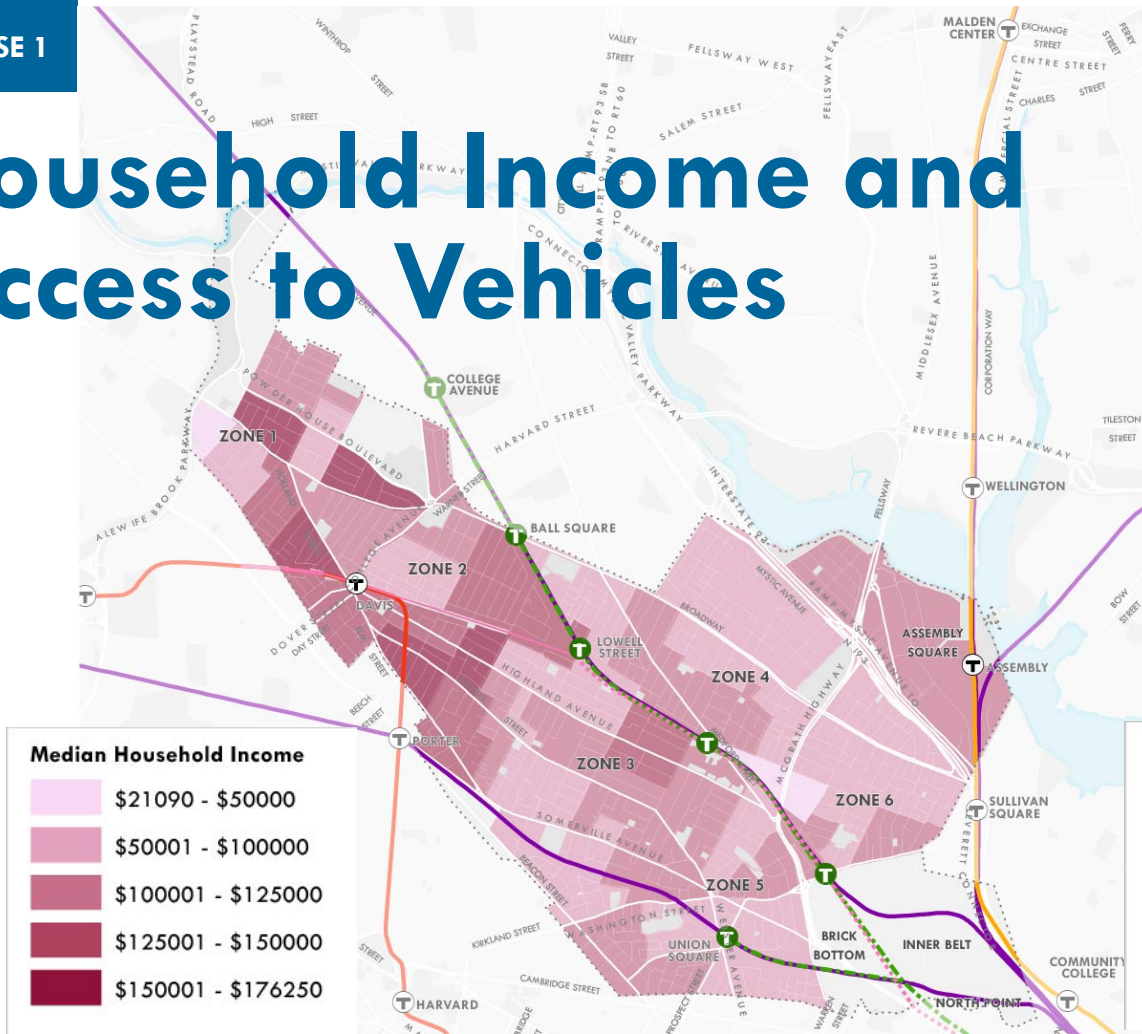
Housing Density

- East Somerville is the densest neighborhood in the City
- Average household size citywide is 2.4

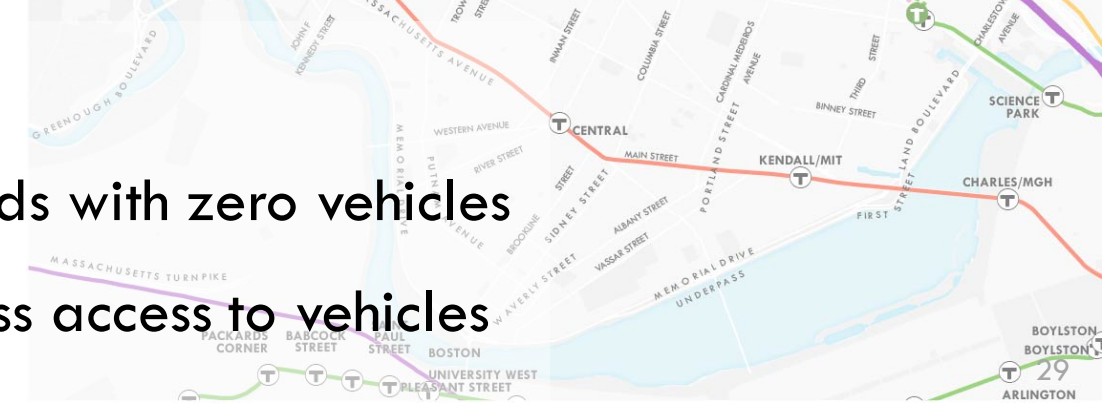
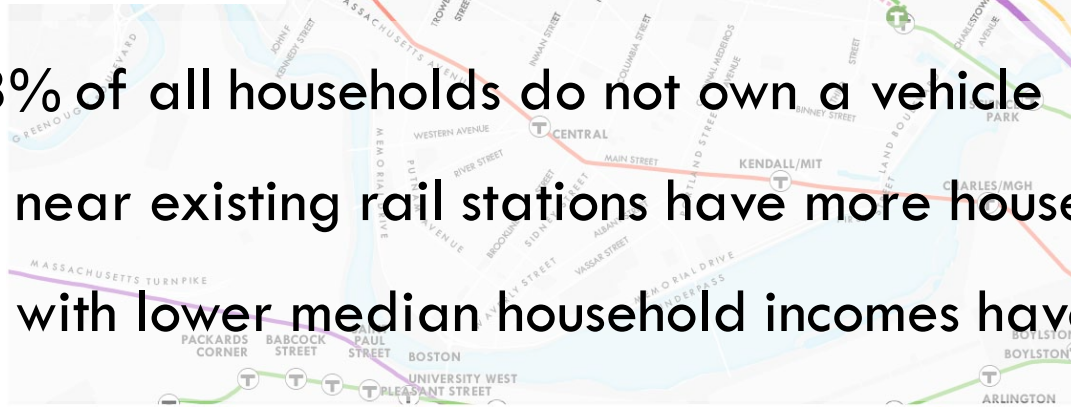
Zone	Neighborhood District	Housing Units per Acre
1	Hillside & Teele	13.66
2	Davis & Powder House & Ball	13.62
3	Porter & Spring Hill & Duck Village	15.73
4	Magoun & Winter Hill & Ten Hills	14.03
5	Union Square & Boynton Yards	14.59
6	East Somerville	16.98
	<i>Assembly, Inner Belt, Brickbottom</i>	1.92
	CITYWIDE	12.41



Household Income and Access to Vehicles

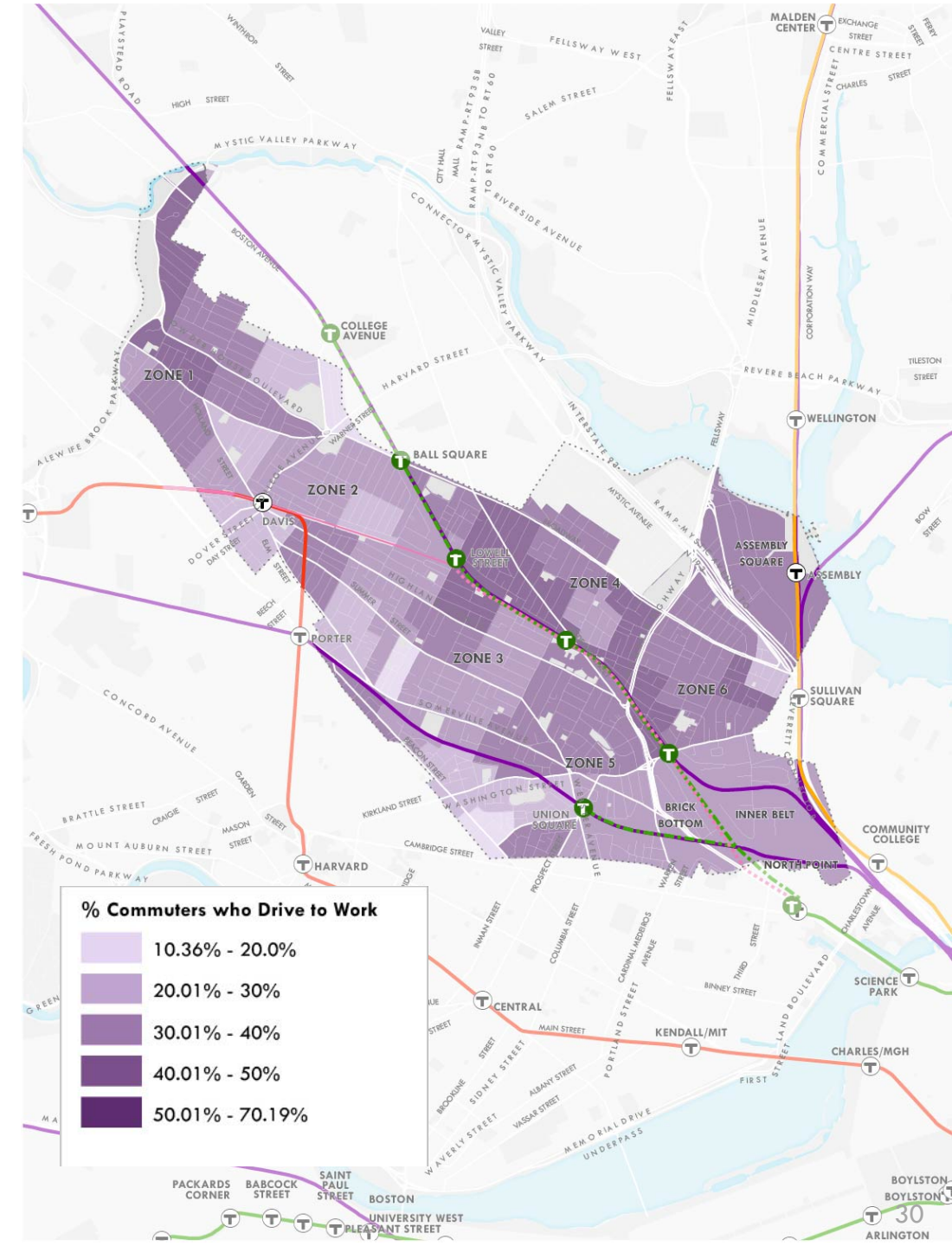


- 23.88% of all households do not own a vehicle
- Areas near existing rail stations have more households with zero vehicles
- Areas with lower median household incomes have less access to vehicles



Driving Mode Share

- Areas further from existing transit lines have higher rates of commuters who drive to work
- Both low income and high income workers may drive to work depending on access to transit and the nature of their employment

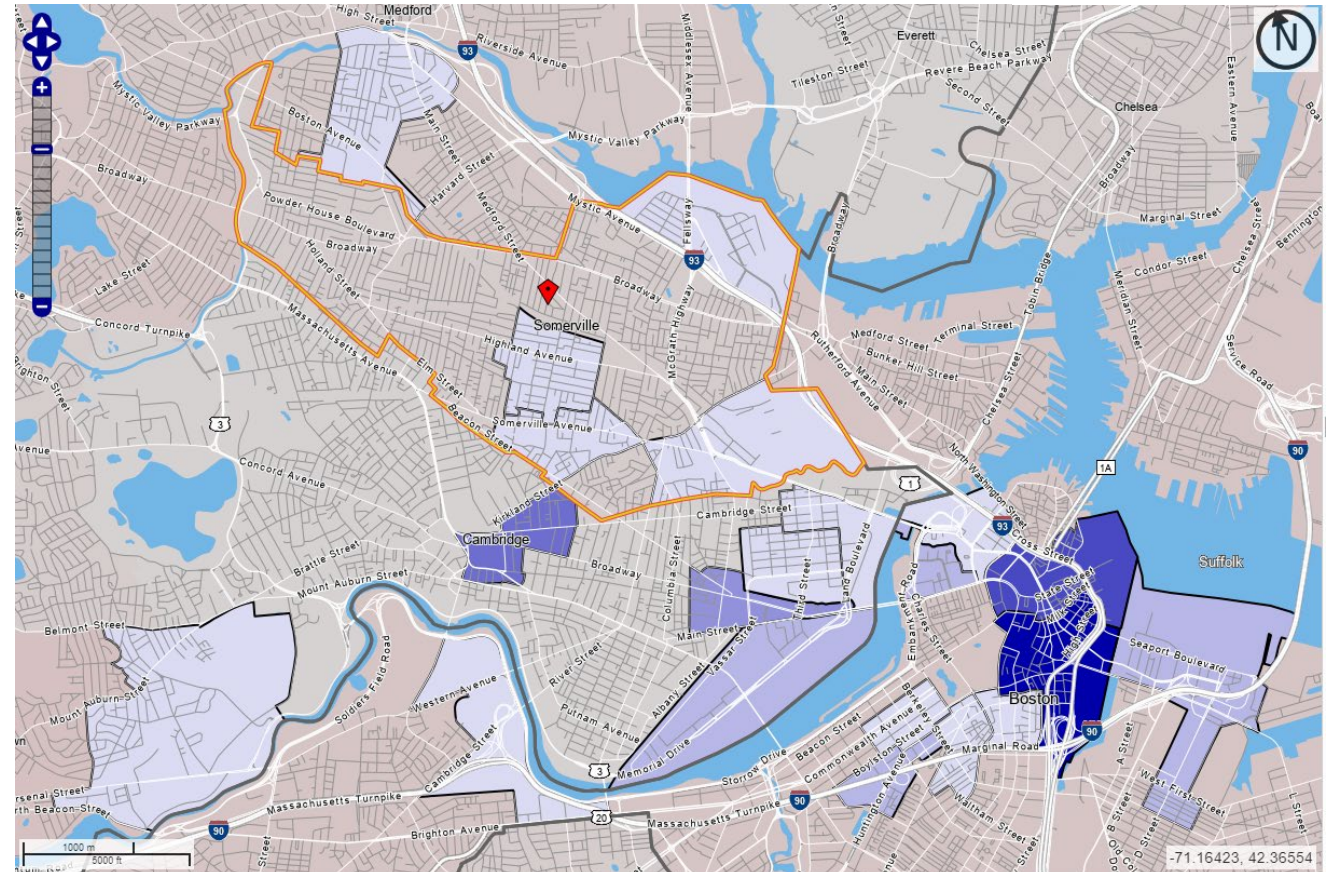
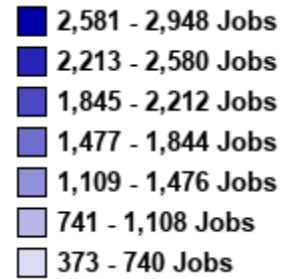


Job Destination

Three out of every five employed Somerville residents work in Boston, Cambridge, or Somerville itself.

- Transit and bike access to these jobs can reduce demand for parking

Destination	% of Resident Commuters
Boston	35.3% (16,403)
Cambridge	18.7% (8,675)
Somerville	7.3% (3,391)
Waltham	2.7% (1,260)
Medford	2.3% (1,062)
All Others	33.7% (15,643)

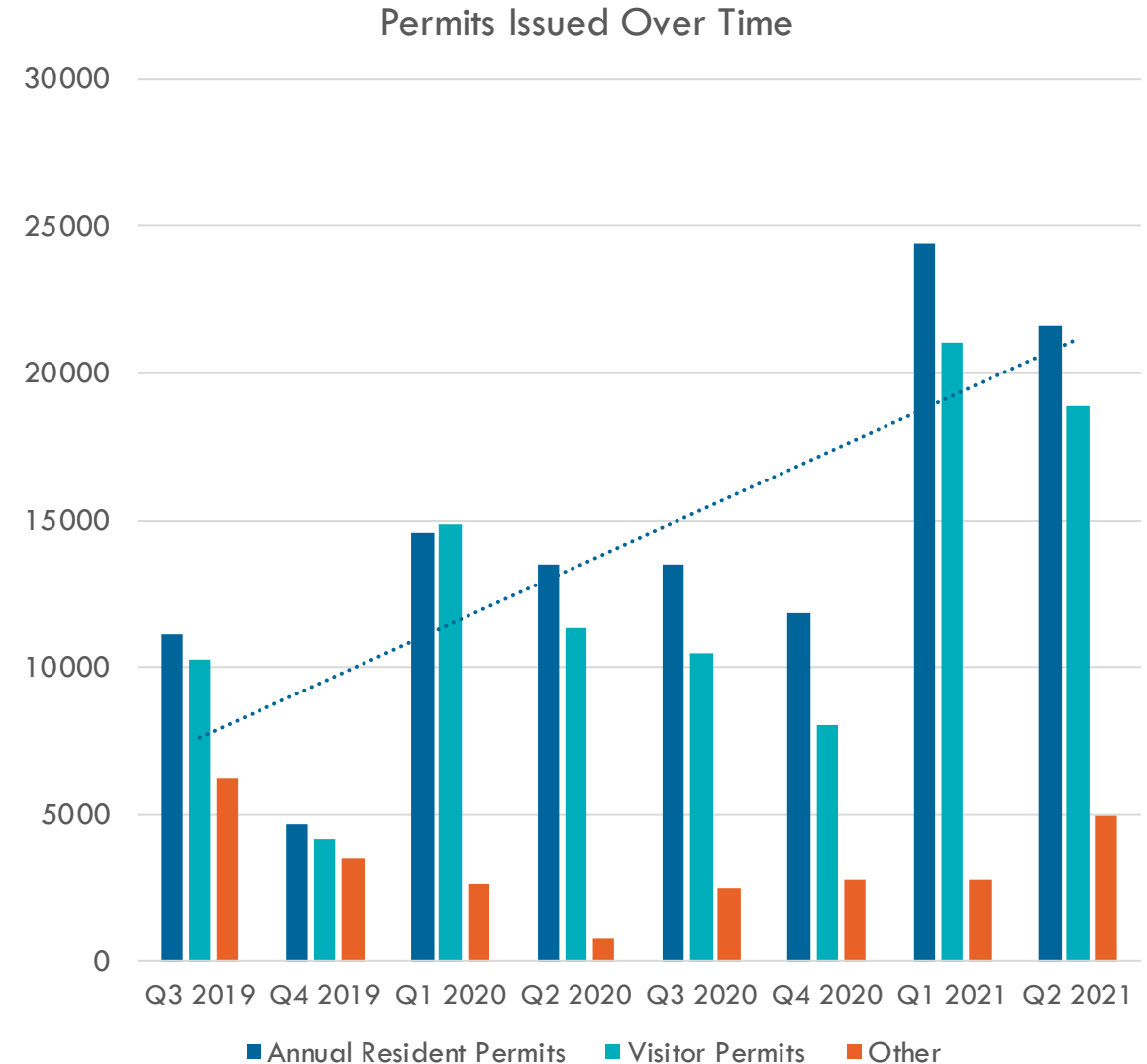


Permit Data

- Permits issued per quarter have increased over the last three years
- **0.6 active annual permits per person in Somerville**
- **~ 49,000 active annual permits vs. only 16,500 permit parking spaces in the city**

Permit Type	Number of Active Permits
Annual Permits	48,709
Visitor Permits	42,596
Other	4,680
Grand Total	95,985

* Data represents July 2021 conditions

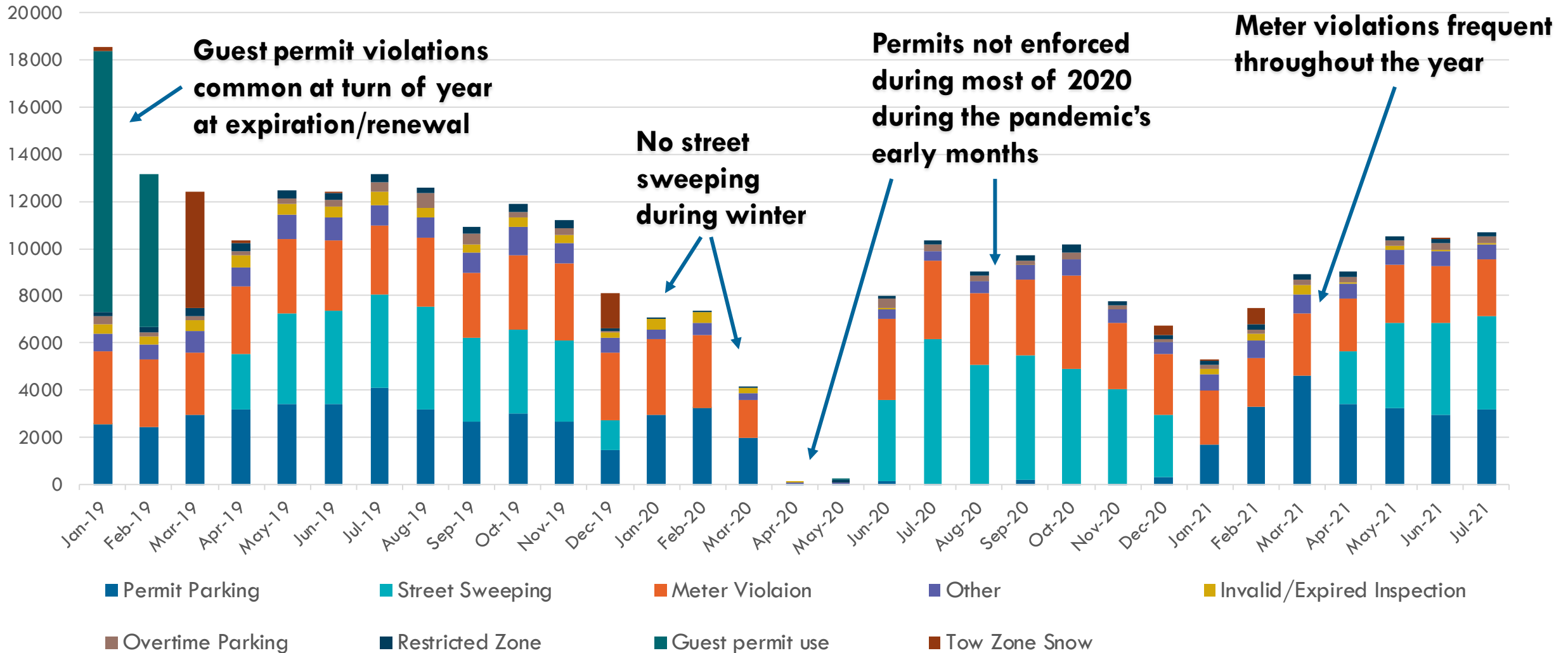


Violations

9,400 VIOLATIONS PER MONTH

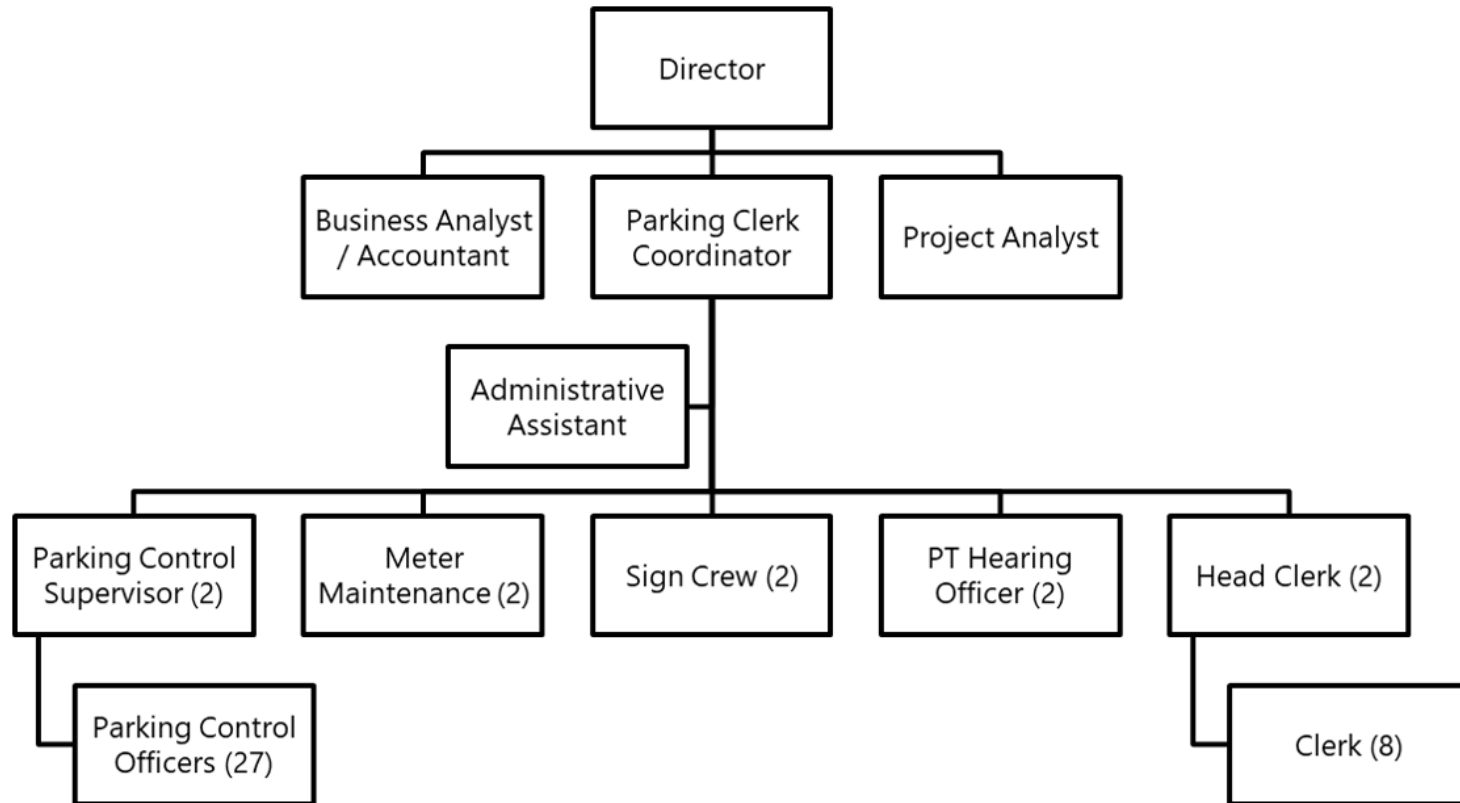
0.46 MONTHLY VIOLATIONS PER SPACE

Violations Issued by Type Over Time



Parking Management Organizational Structure

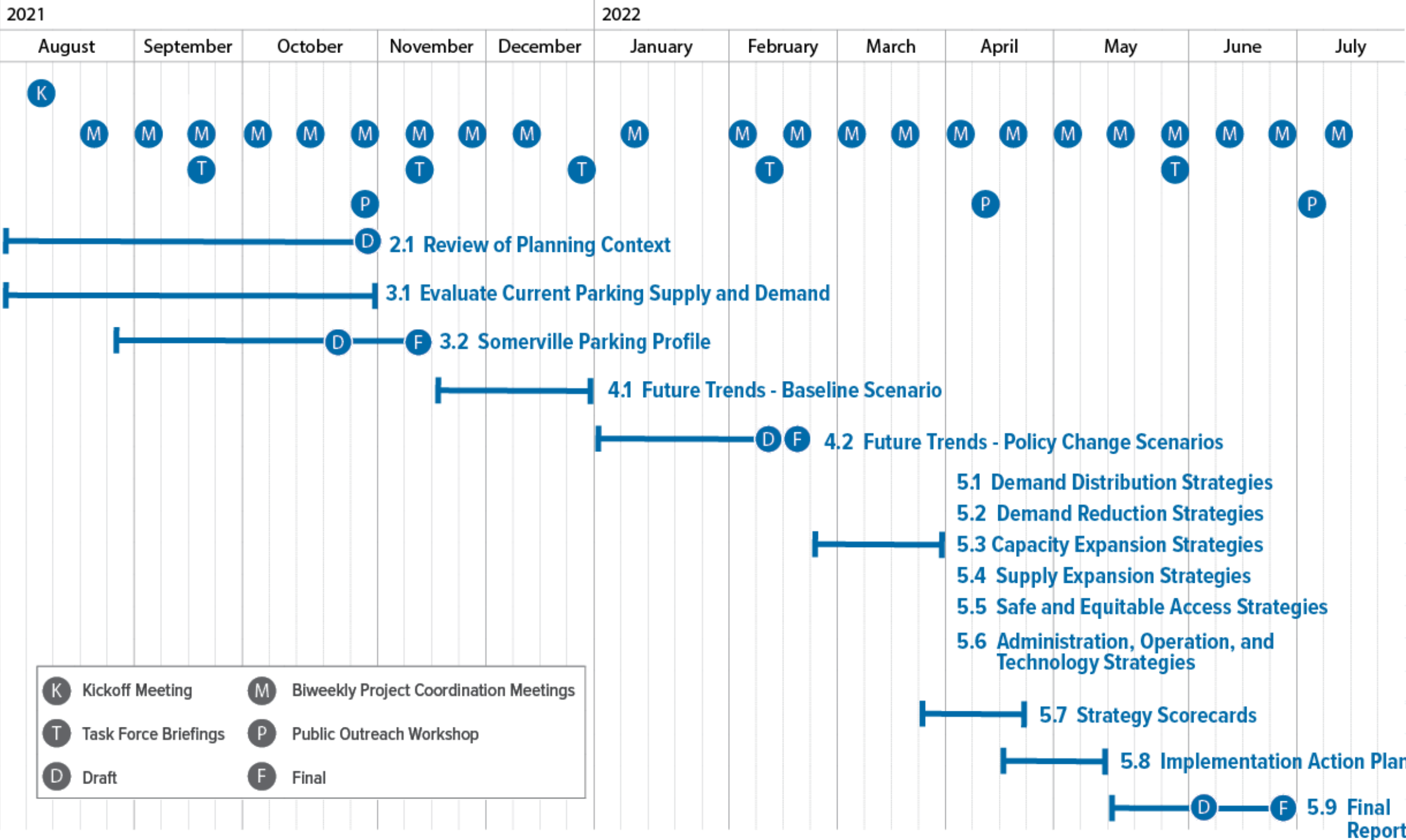
- Somerville's Parking Department manages the city's parking through three divisions:
 - Administration
 - Enforcement
 - Maintenance
- Advises the Traffic Commission in developing rules and regulations
- Coordinates with other City departments as needed





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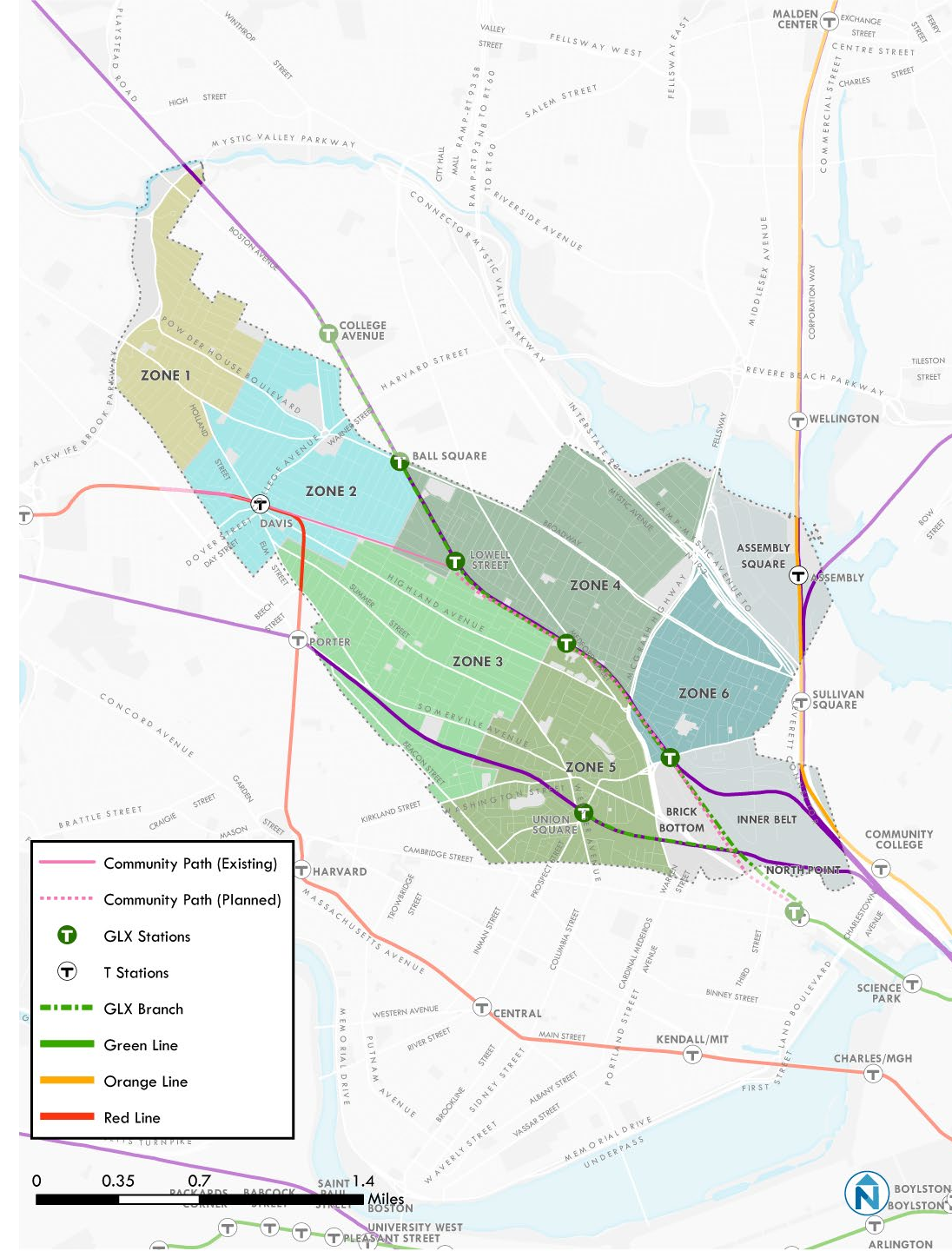
Phase 2 – Approach / Timeline



- K** Kickoff Meeting **M** Biweekly Project Coordination Meetings
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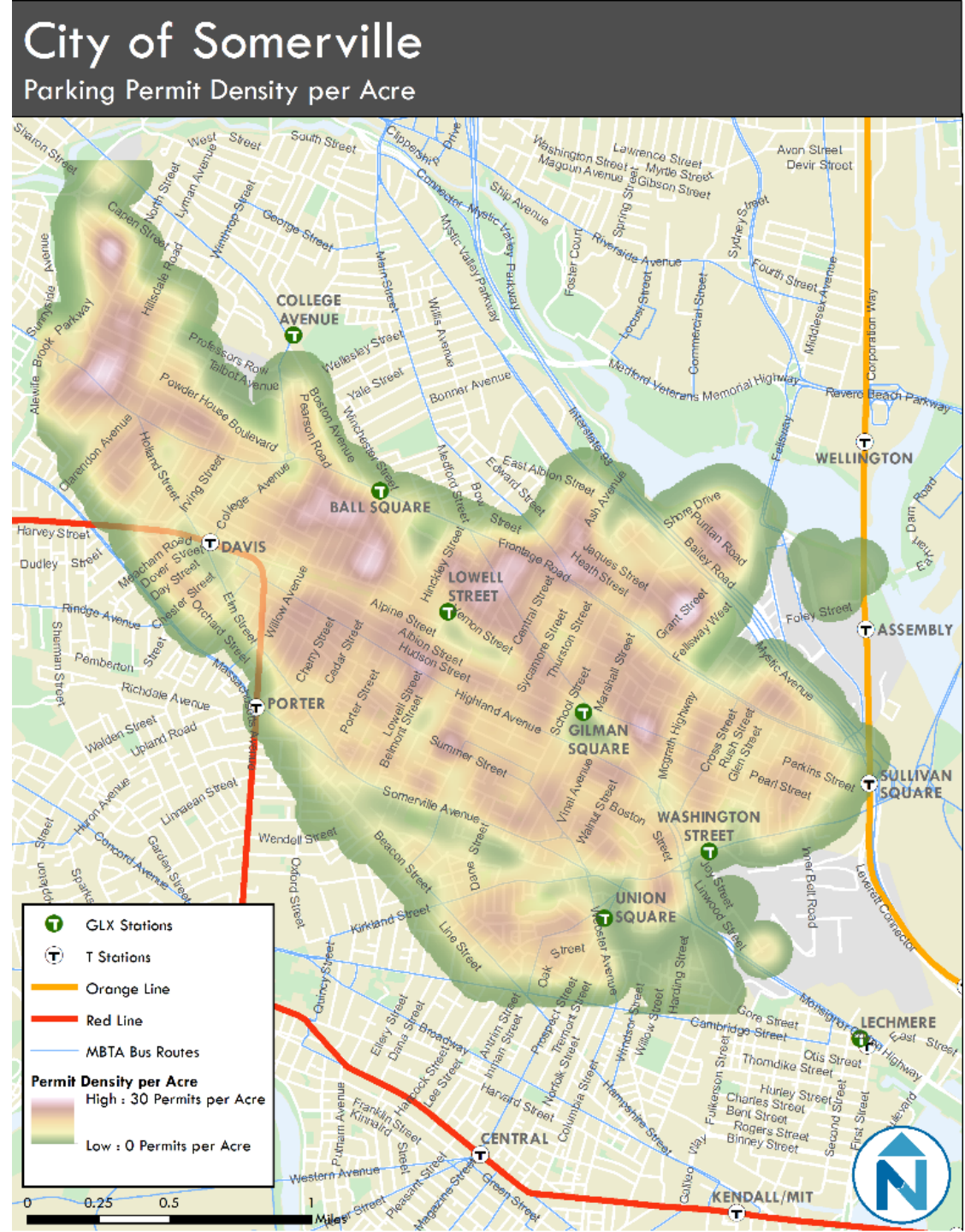
Occupancy Data Collection

- Collect occupancy data in each zone
- Residential areas
 - Begin with peak counts (5 AM)
 - Target extended counts where specific questions arise (typically 12 PM – 8 PM)
 - Time-limited permit parking areas
- Commercial areas
 - Collect data for eight hours during active periods (typically 12 PM – 8 PM)
- Time-limited except by permit areas (Highland Ave)
 - Collect peak residential counts
 - Collect daytime / evening counts to assess balance between residential and commercial parking activity



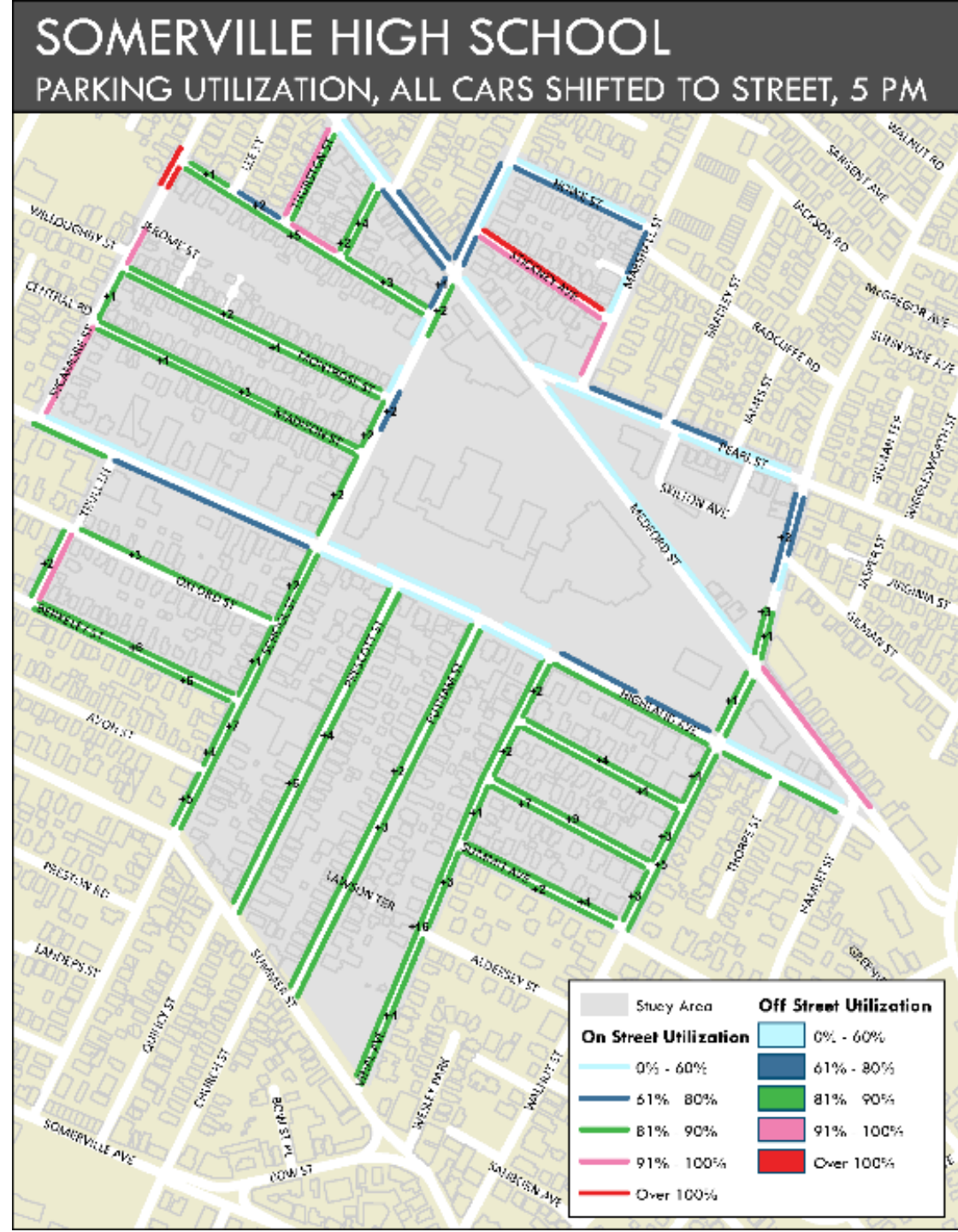
Permit Parking Analysis

- Map the registered addresses of all permits
- Analyze growth/change in permits and permit types over time
- Join permits to occupancy data
 - Determine where permits are being used to travel within the City (across zones)
 - Determine areas where permit parking is improperly used
 - Identify addresses with a large number of permits



Utilization Analysis

- Identify differences in on-street residential parking demand by zone
- Assess the performance of two-hour except by permit zones
- Determine available capacity and stay length in commercial zones
- Identify areas of constrained capacity as well as underutilized capacity
- Identify areas of competing demands, conflicting uses, where variable regulations and other innovations might achieve better balance and more access



Somerville Parking Profile

- Evaluate current parking supply and demand
 - Convey citywide and district-specific peak and off-peak demands
 - User-specific needs (resident, employees, visitors)
 - Demands by regulation type
- Integrate non-parking curb demand data
 - Freight loading data
 - Non-parking curb uses
- Parking Profile
 - Visual factbook
 - Subareas
 - Parking Personas



Recommendations and Final Report

**Demand
Distribution**

**Demand
Reduction**

**Capacity
Expansion**

**Supply
Expansion**

**Safe and
Equitable Access**

**Administration
and Operations**

Technology

**Adaptation and
Iteration**

4

Discussion

Discussion Questions

- What are the greatest challenges currently faced when managing Somerville's parking and curbs?
- What questions and concerns are most often voiced by stakeholders?
- What parking problem spots exist in the city? Which areas need the most attention?
- Is technology a barrier to implementing new parking policies?



Next Steps

Next Steps

- Finalize inventory data
- Gather parking occupancy data
- Link occupancy data with permit data
- Develop Parking Profiles for each Zone
- Schedule first public meeting for late October