

# BOSTON STREET MULTI-MODAL CORRIDOR STUDY

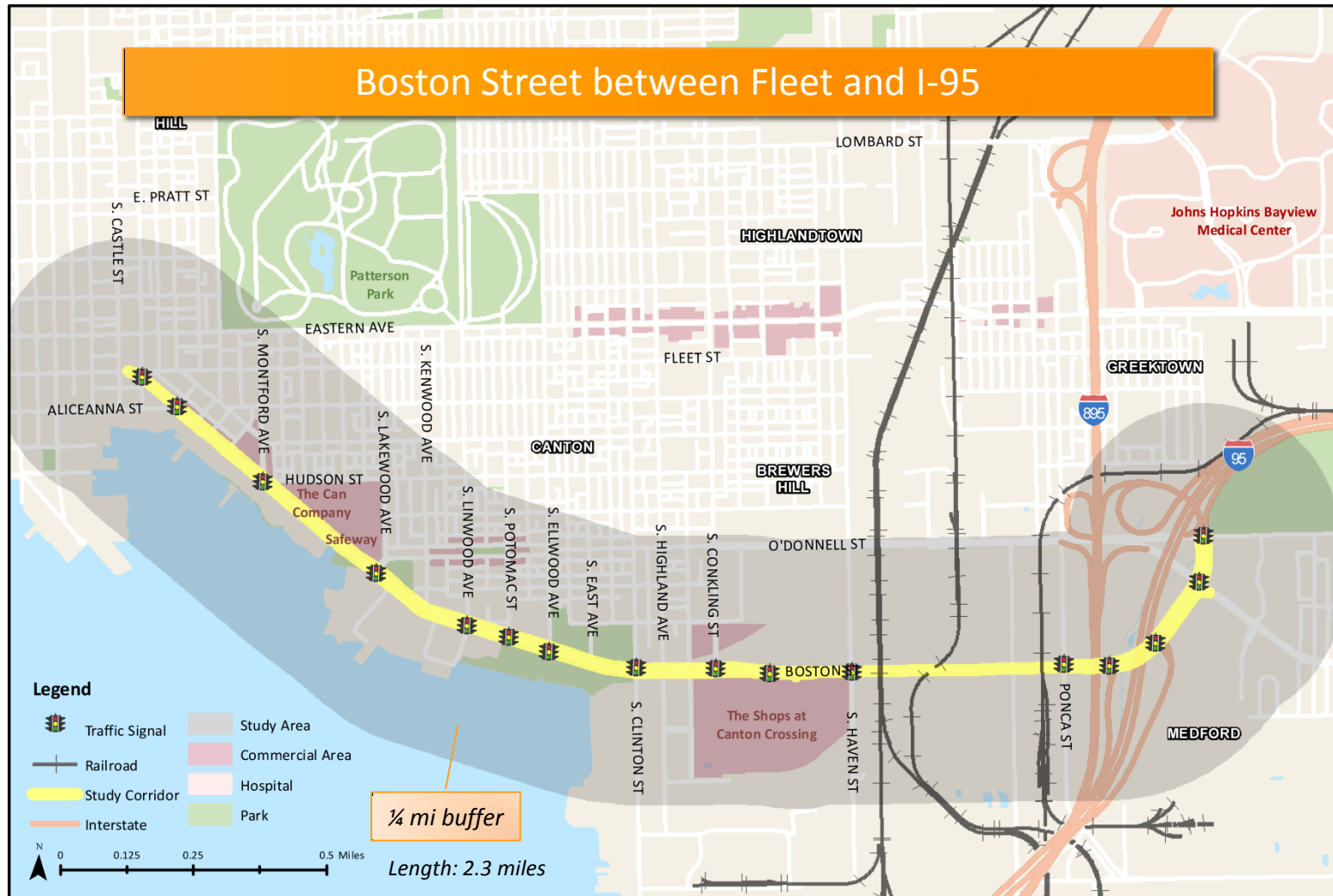
Community Advisory Panel Meeting #2  
February 27<sup>th</sup>, 2017



# Agenda

- Study Area, Purpose & Objectives
- Existing Conditions
  - Roadway Design
  - Bicycle & Pedestrian Facilities
  - Traffic Operations & Safety
  - Curbside Parking Management & Operations
  - Transit Service Operations
  - Travel Market Evaluation
  - Freight Operations
- Study Schedule
- Next Steps

# Study Corridor



# Project Purpose

This project will identify **multi-modal transportation options**, alignment, traffic and safety issues on Boston Street from I-95 to Fleet Street in order to close the transportation gap resulting from the proposed MTA rail transit project not moving forward.

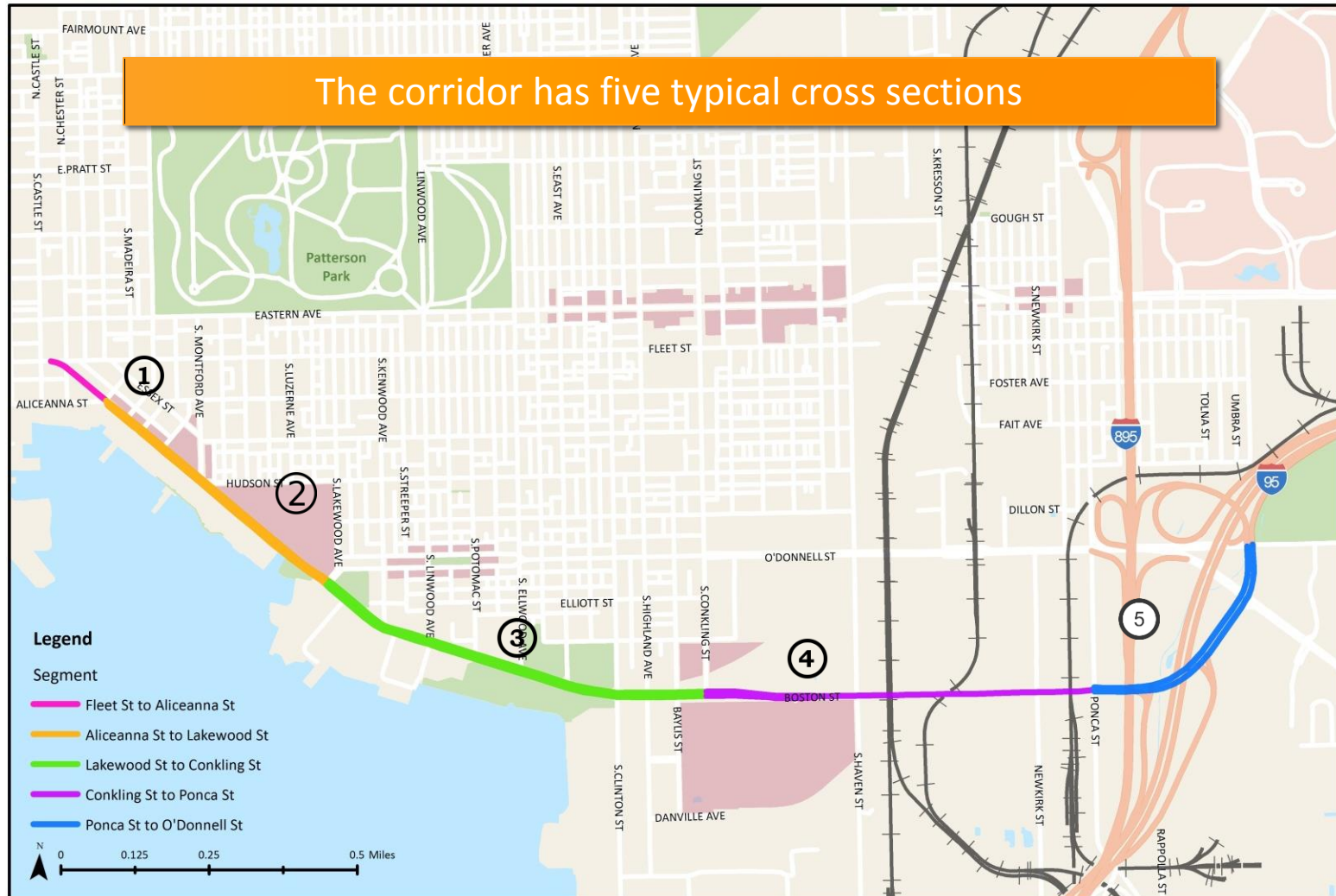
- Provide alternative recommendations & design for
  - improved safety
  - pedestrian and bicycle accommodation
  - residential and commuter travel
  - improved truck access



# Objectives

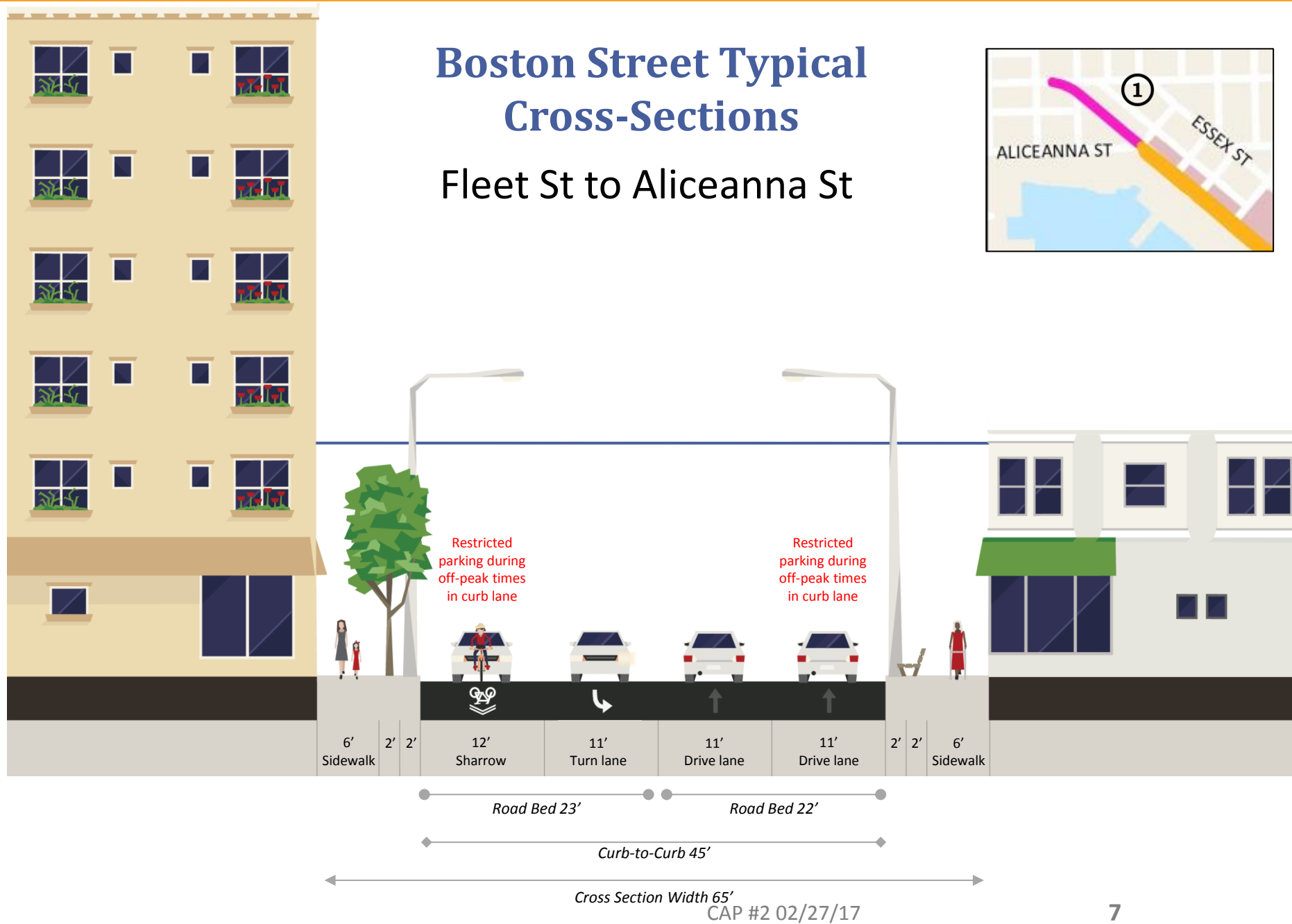
1. Review current planning and engineering documents for Boston Street (last 10 years) including parking lot planning documents created during the Red Line planning process
2. Collect and analyze current traffic (vehicle, pedestrian, and bicycle) volume on Boston Street and collect the number of single-occupant vehicles during periods of peak volume.
3. Analyze current pedestrian, bicycle, commuter shuttle, and transit access including parking opportunities to transfer to multi-modal transit.
4. Analyze current truck routes.
5. Collect and analyze crash data along Boston Street within the study limits.
6. Make recommendations for multi-modal transportation improvements, pedestrian/bicycle accommodation, opportunities for commuter shuttles, parking lots, and other traffic and pedestrian safety measures for the corridor.

# Typical Cross Sections - Boston



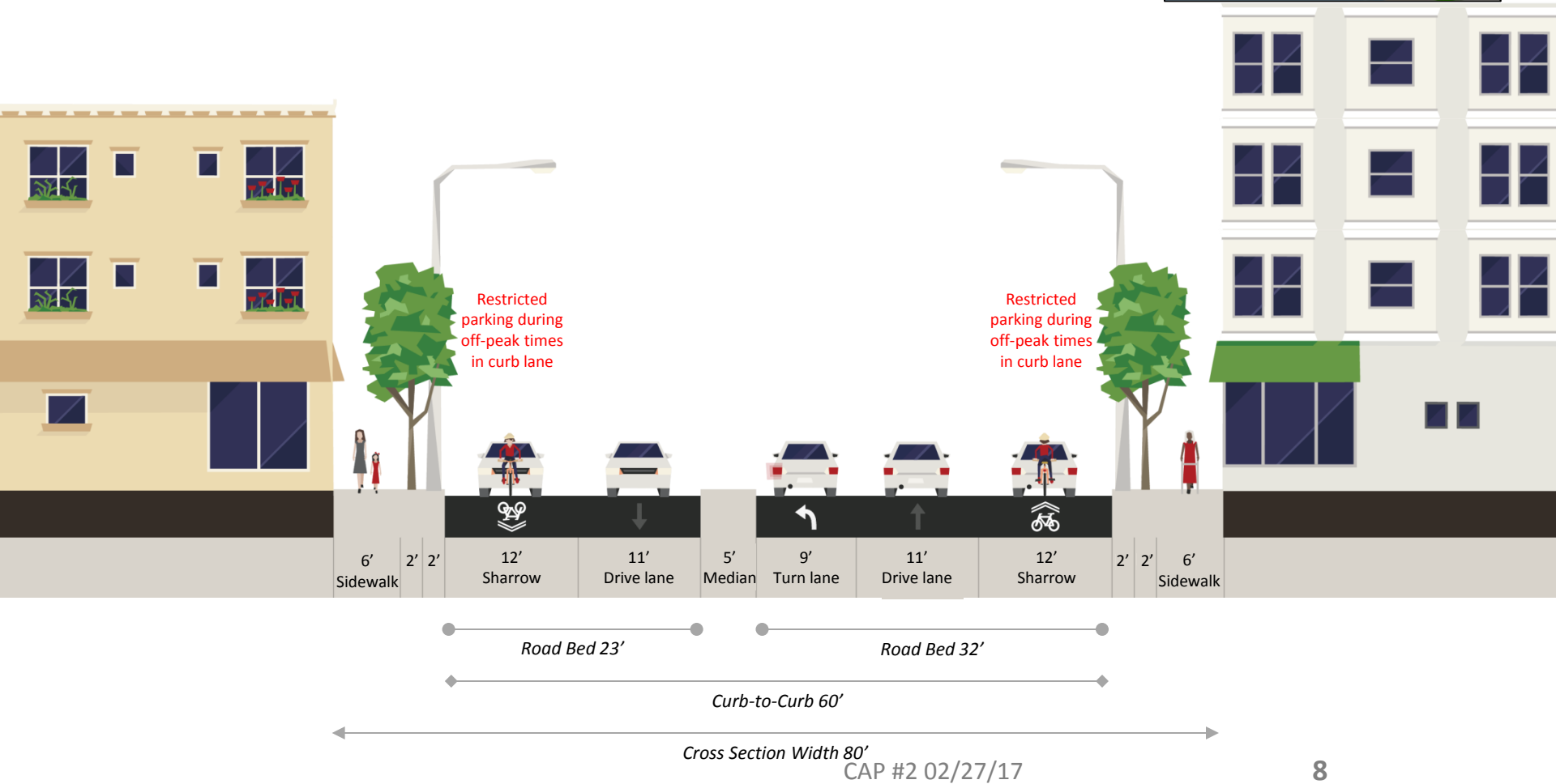
# Boston Street Typical Cross-Sections

Fleet St to Aliceanna St



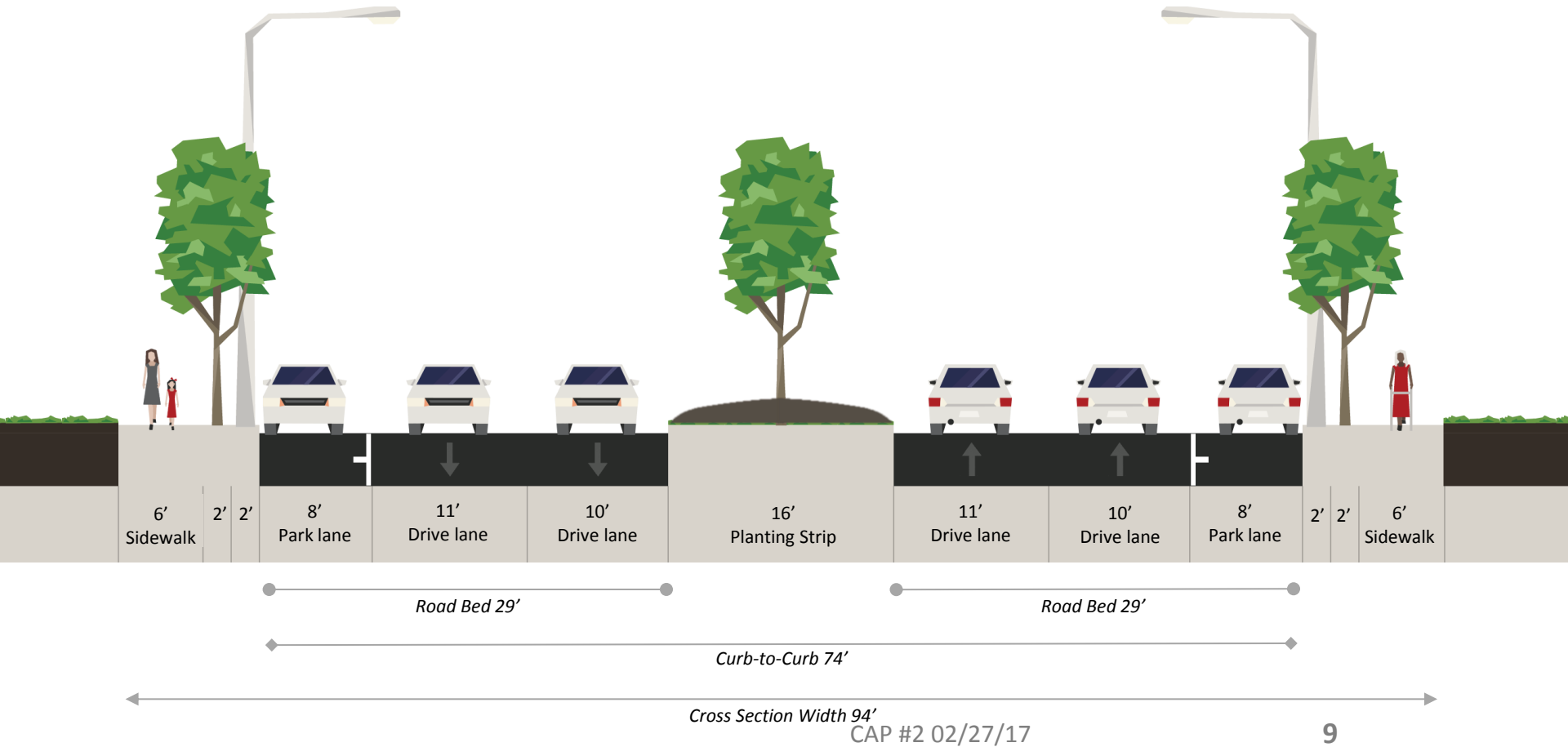
# Boston Street Typical Cross-Sections

Aliceanna St to Lakewood Ave



# Boston Street Typical Cross-Sections

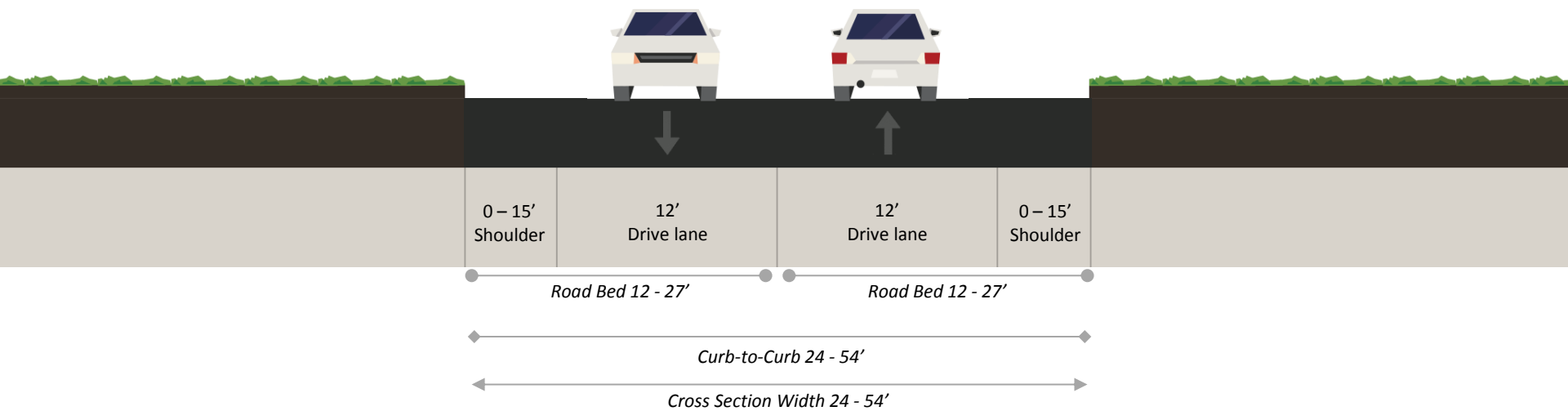
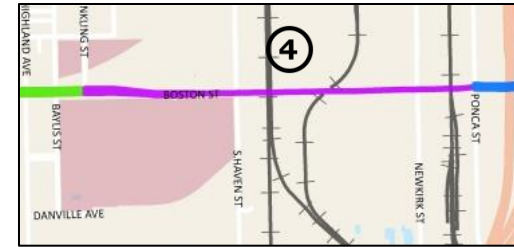
Lakewood Ave to Conkling St





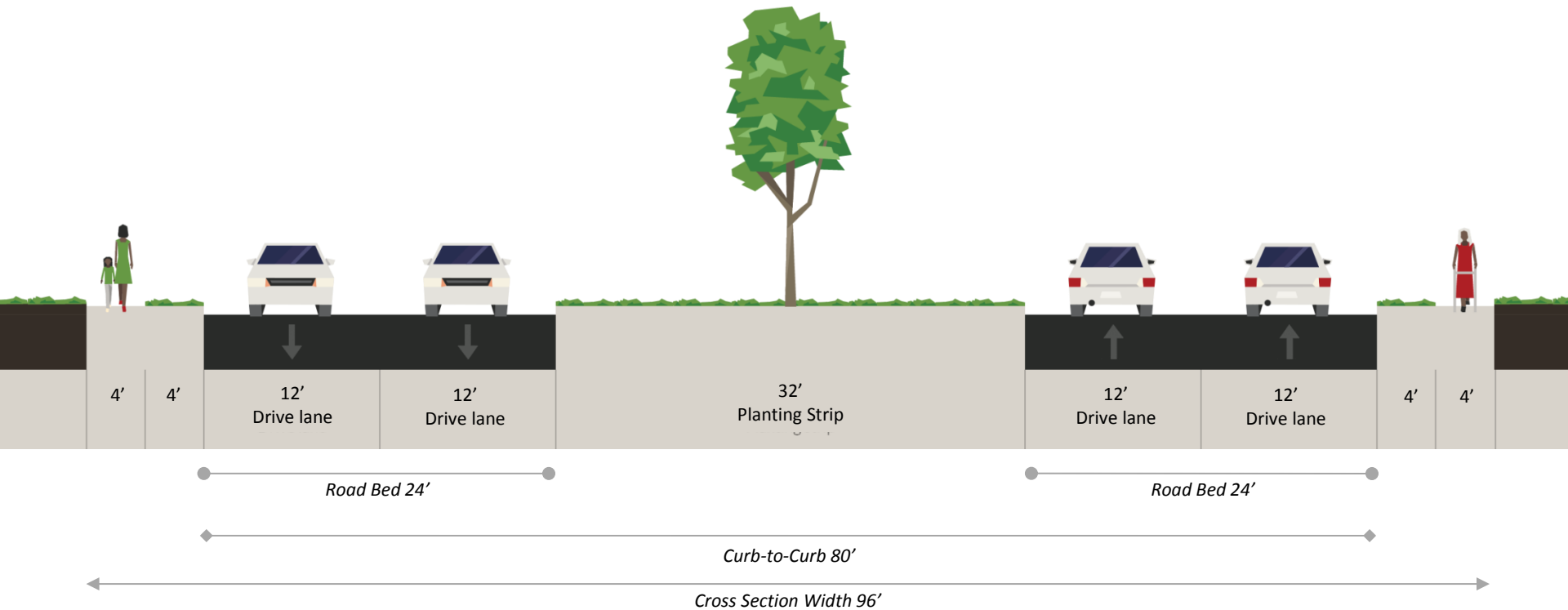
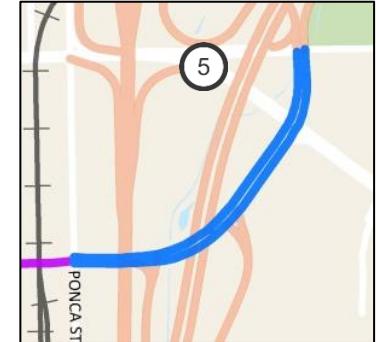
# Boston Street Typical Cross-Sections

## Conkling St to Ponca St

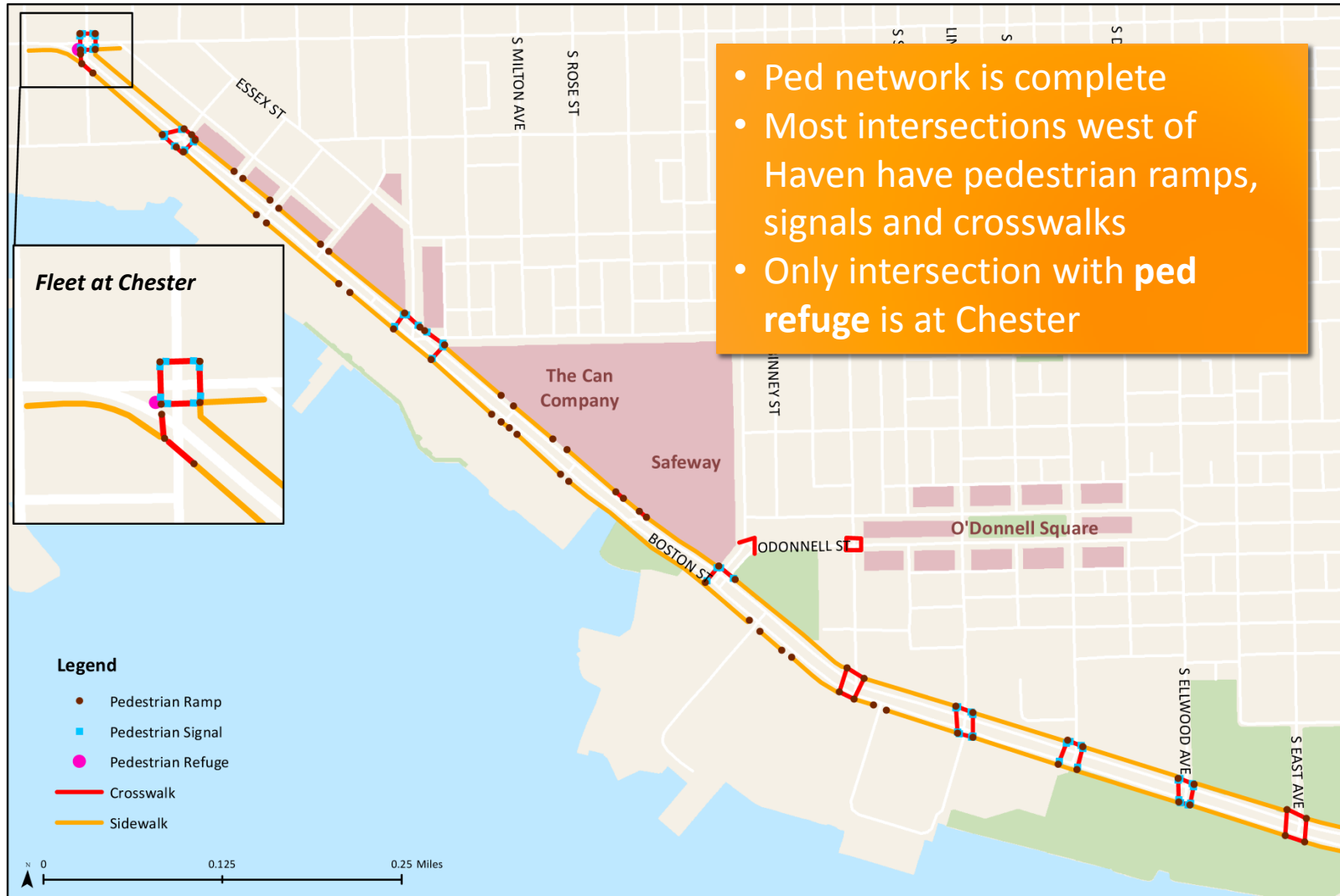


# Boston Street Typical Cross-Sections

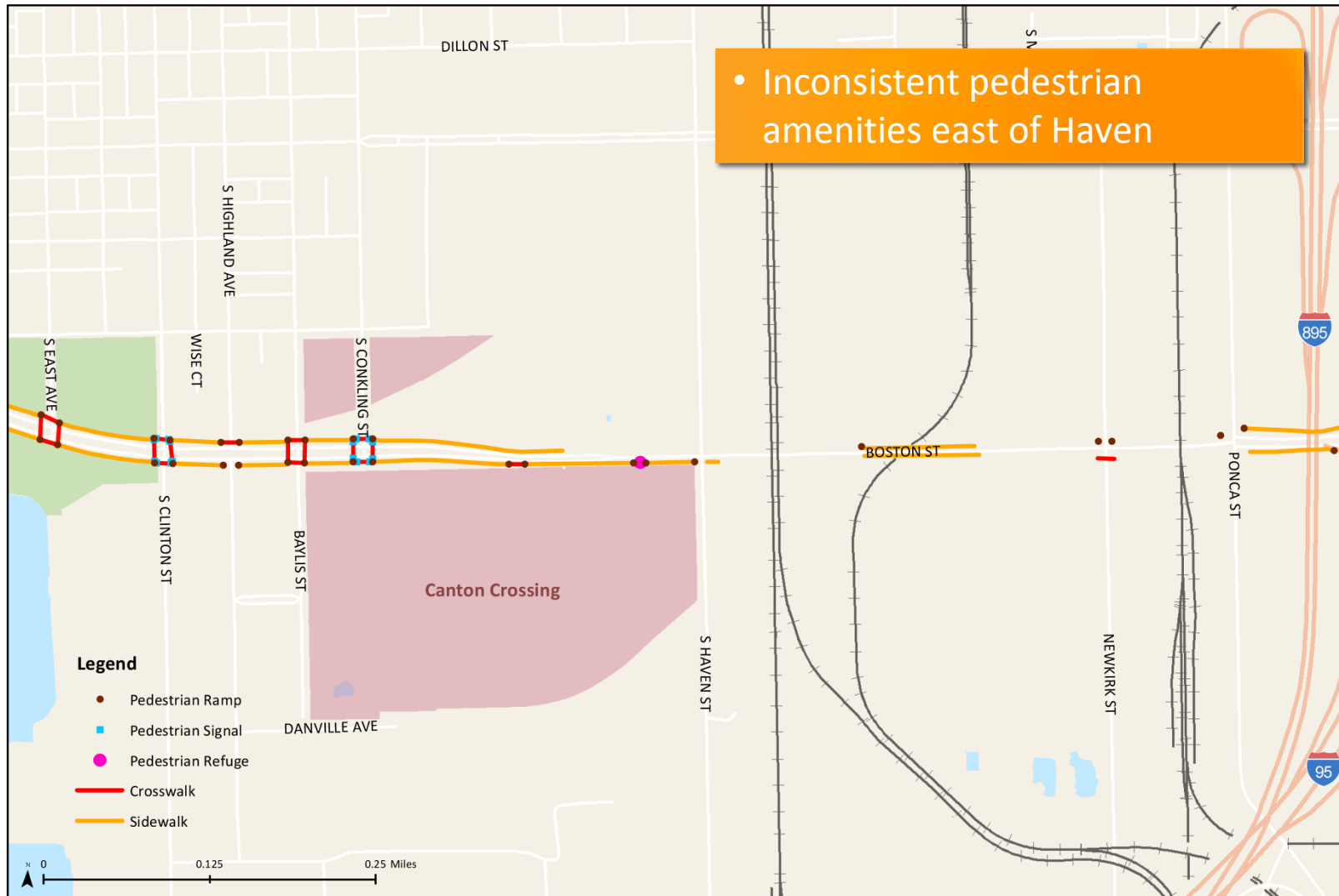
Ponca St to O'Donnell St



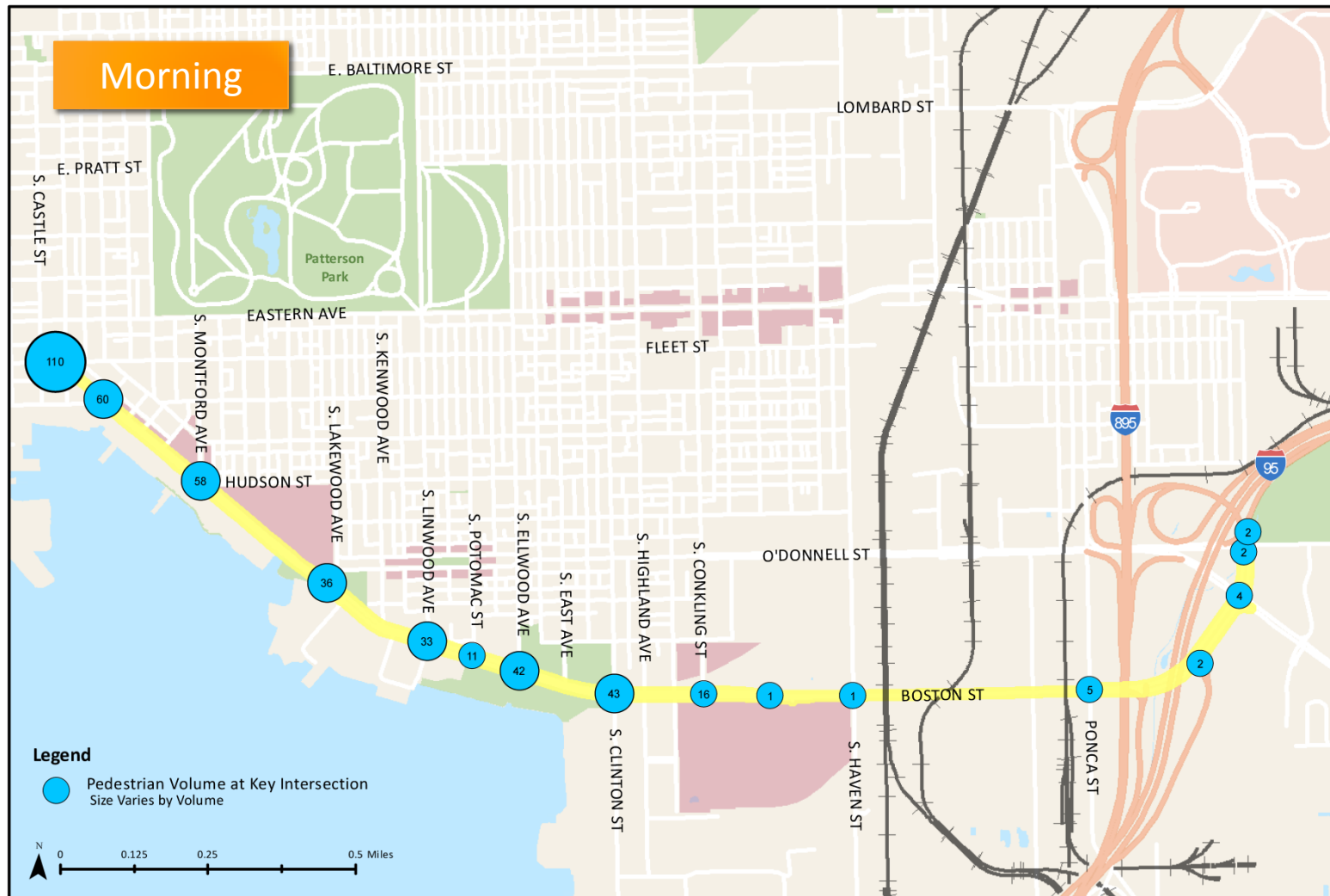
# Pedestrian Amenities



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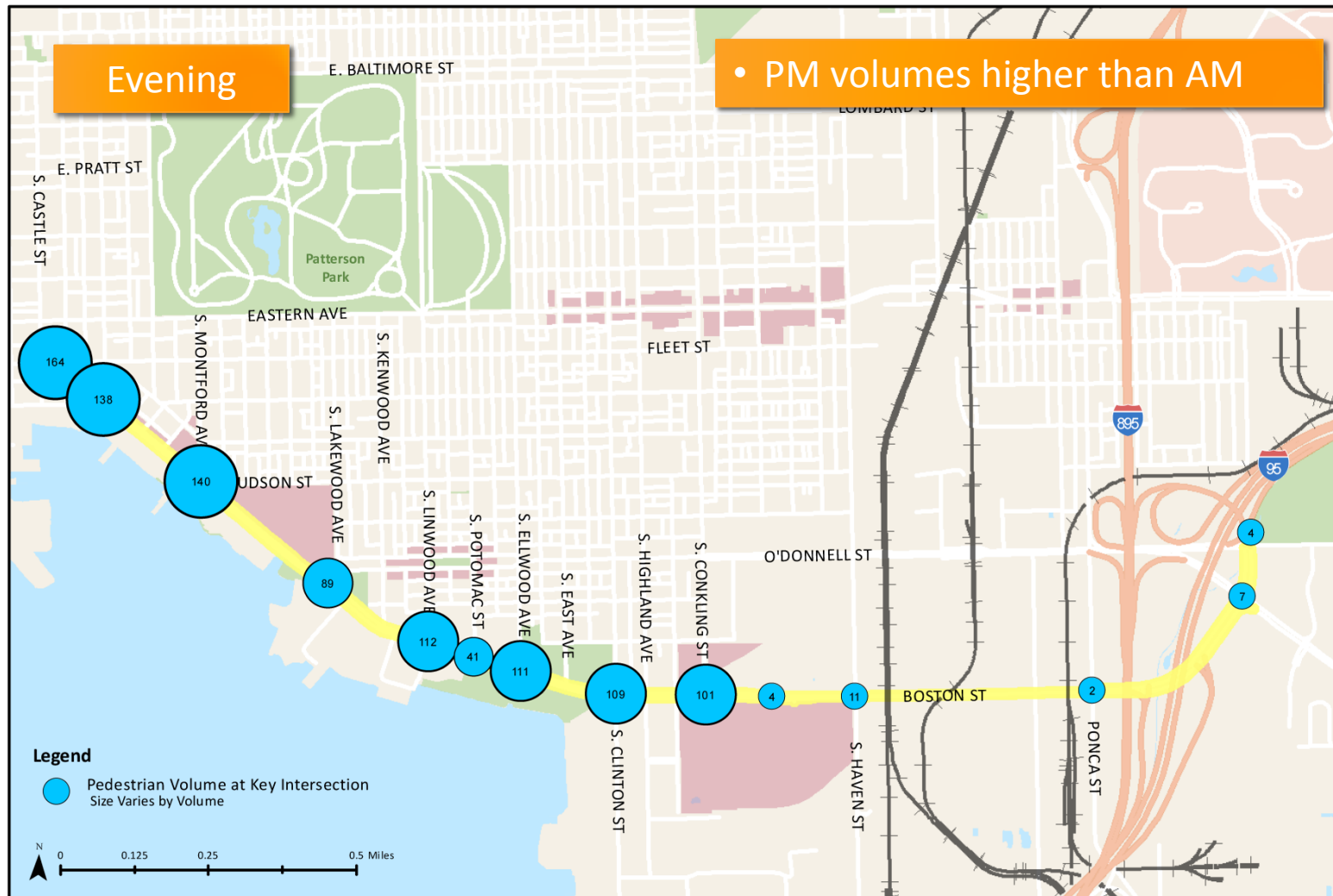
# Pedestrian Intersection Volumes



\*Data collected on a typical Tuesday, Wednesday, or Thursday between 7:00 AM and 9:00 AM in the fall of 2016

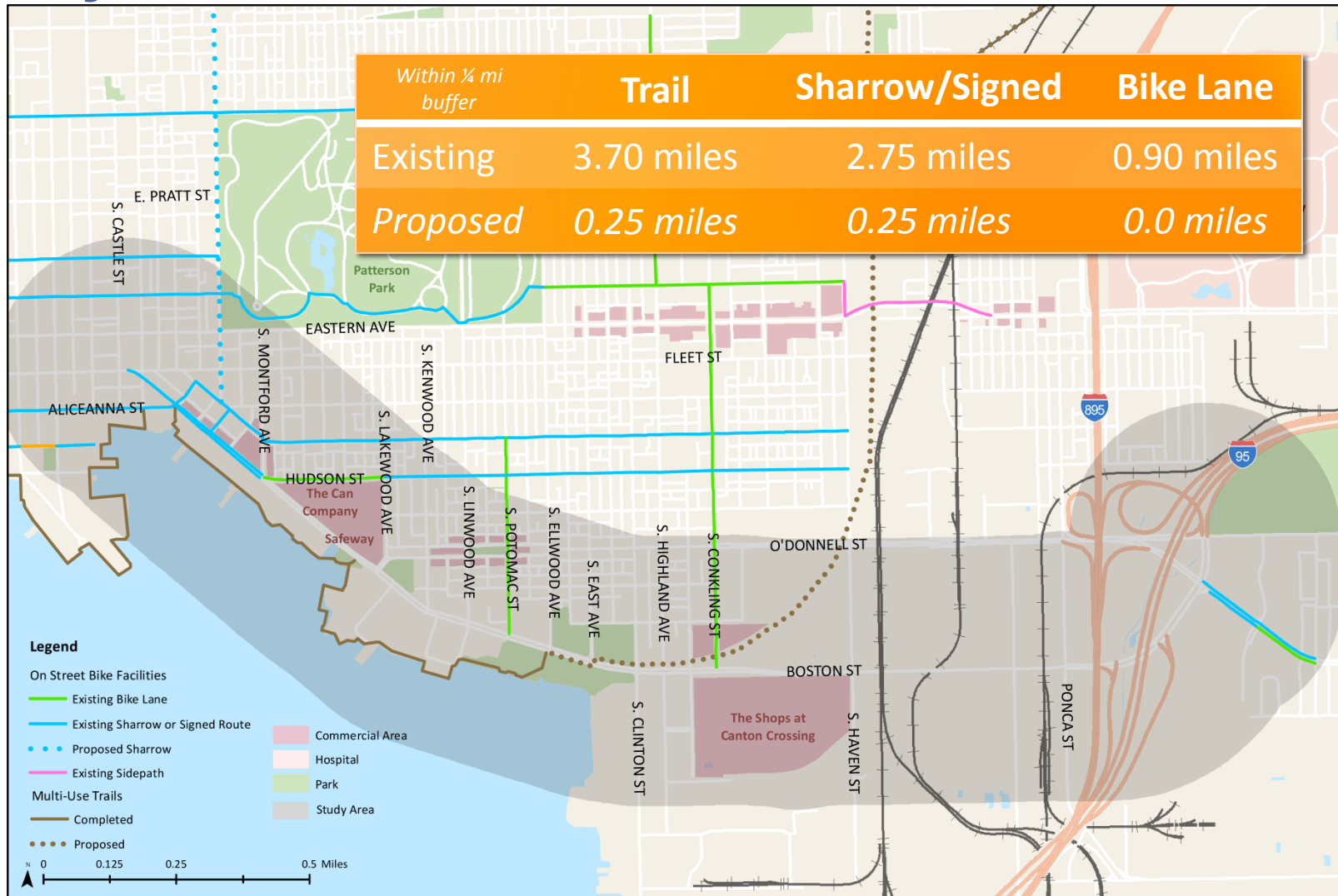


# Pedestrian Intersection Volumes



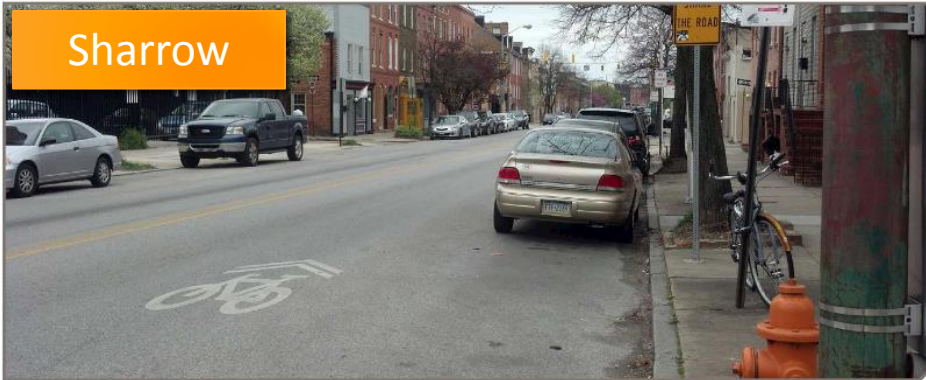
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# Bicycle Network



# Bicycle Network

Sharrow



Aliceanna Street Sharrow

Trail

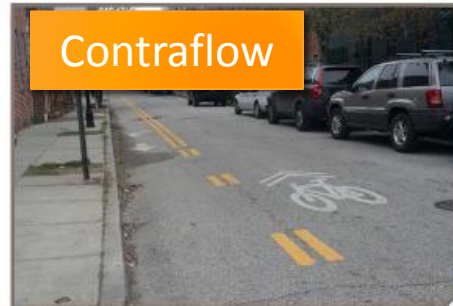


Lane



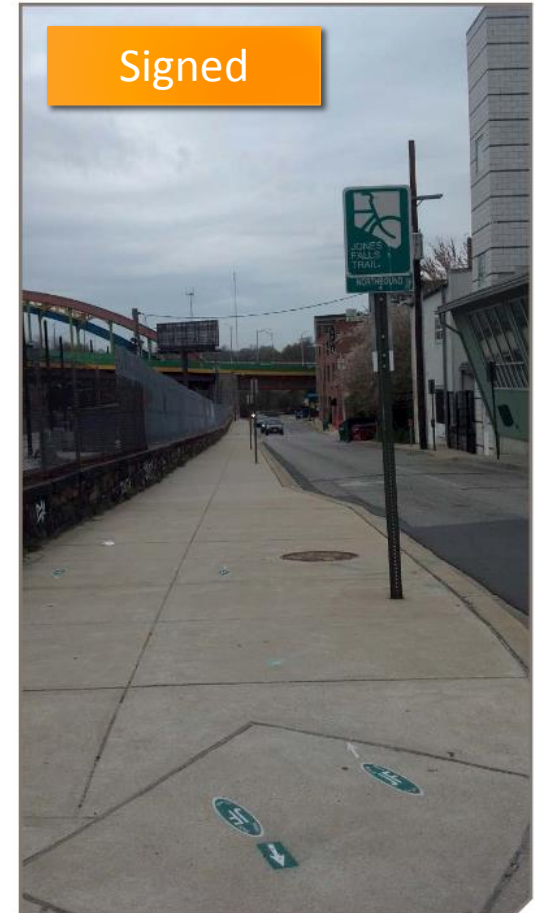
Bike Lane on Roland Avenue

Contraflow



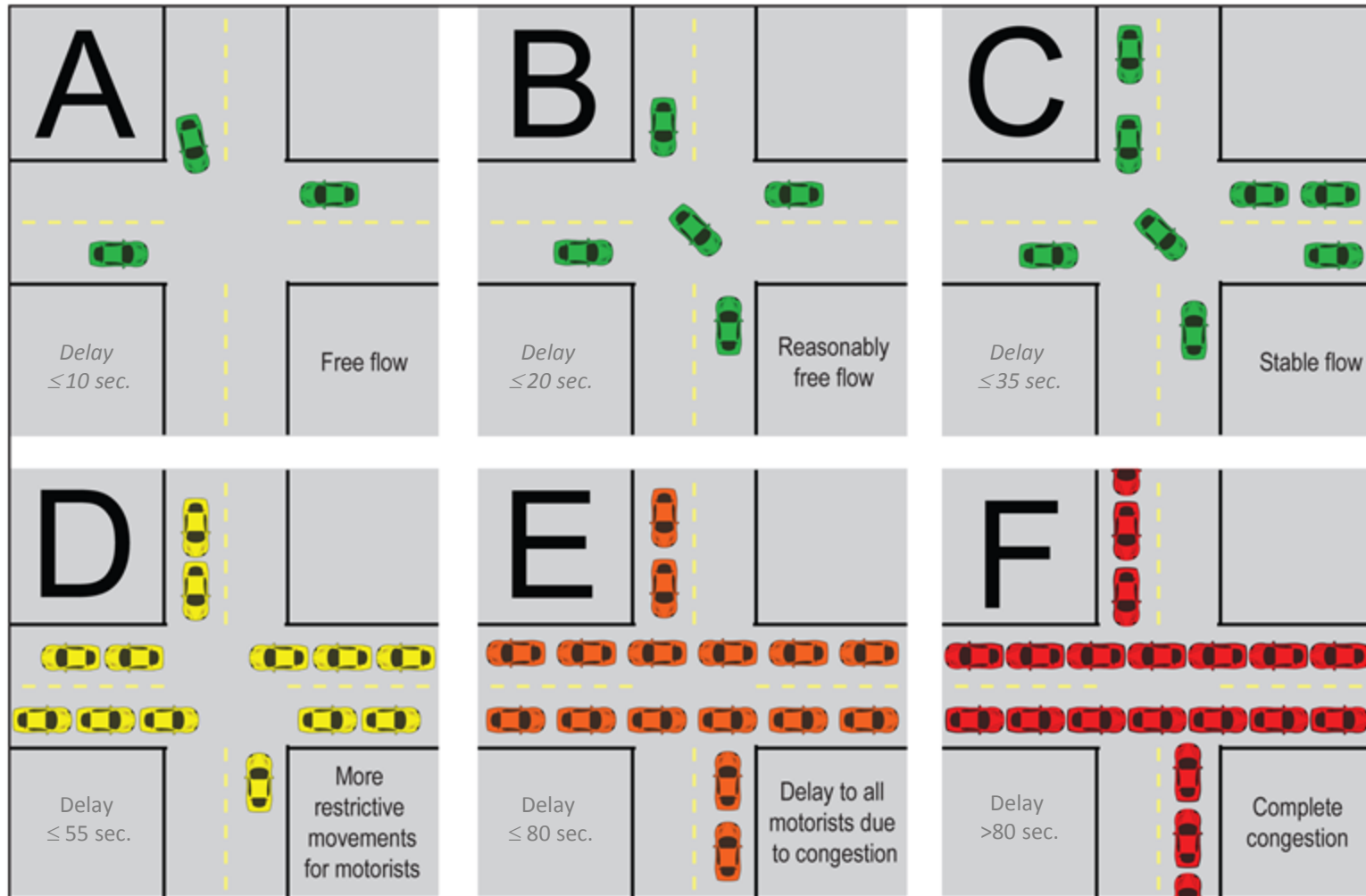
Contraflow Bike Lanes on Lancaster Street (top)

Signed

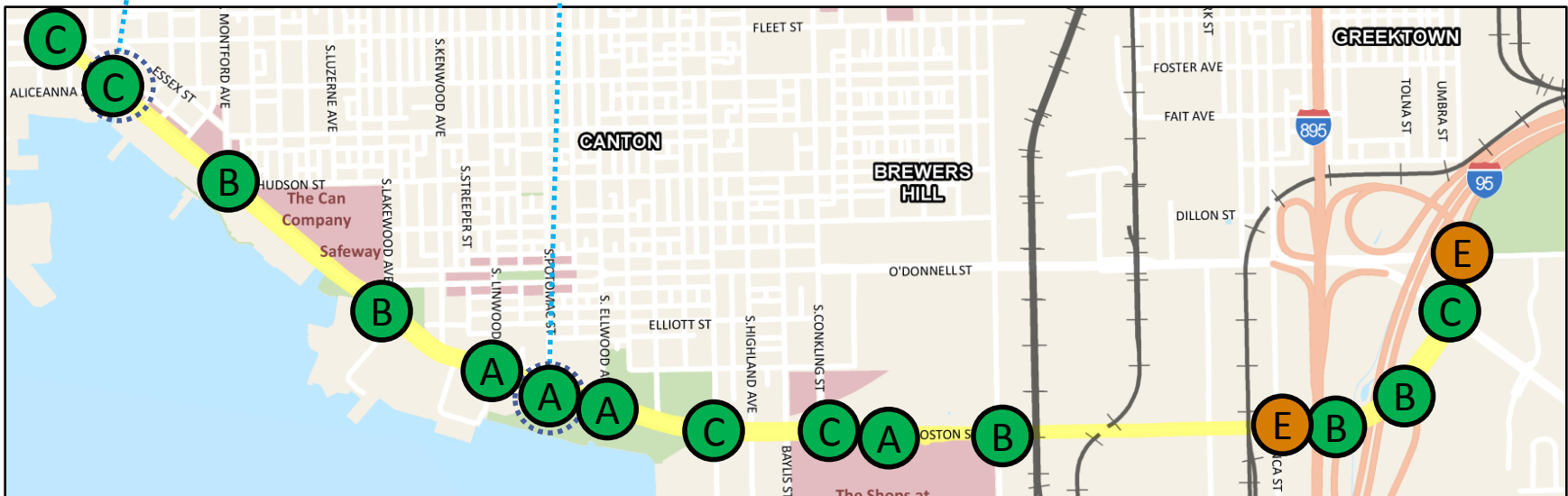
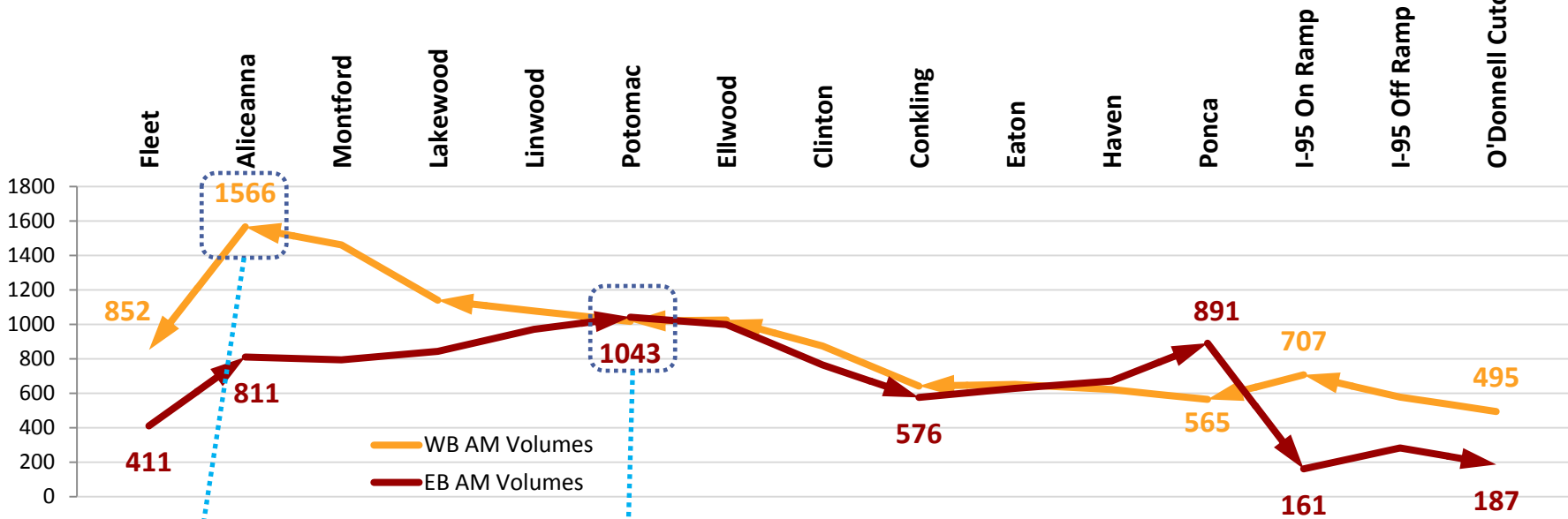


Jones Falls Bike Trail along Falls Road

# Traffic Operations – Level of Service

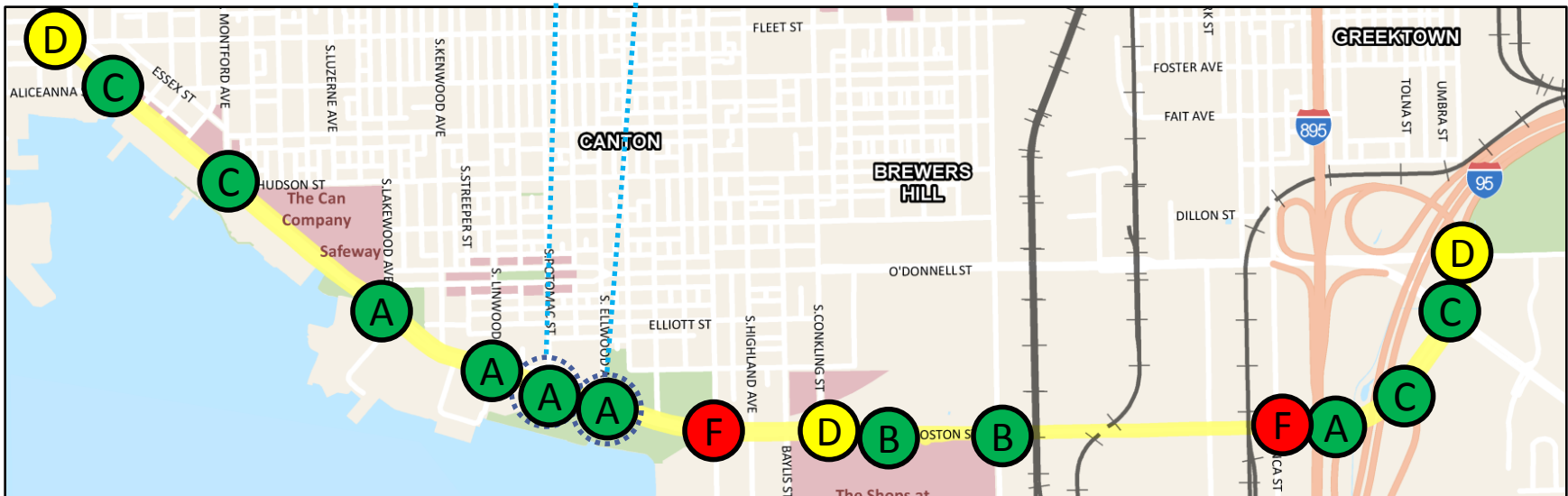
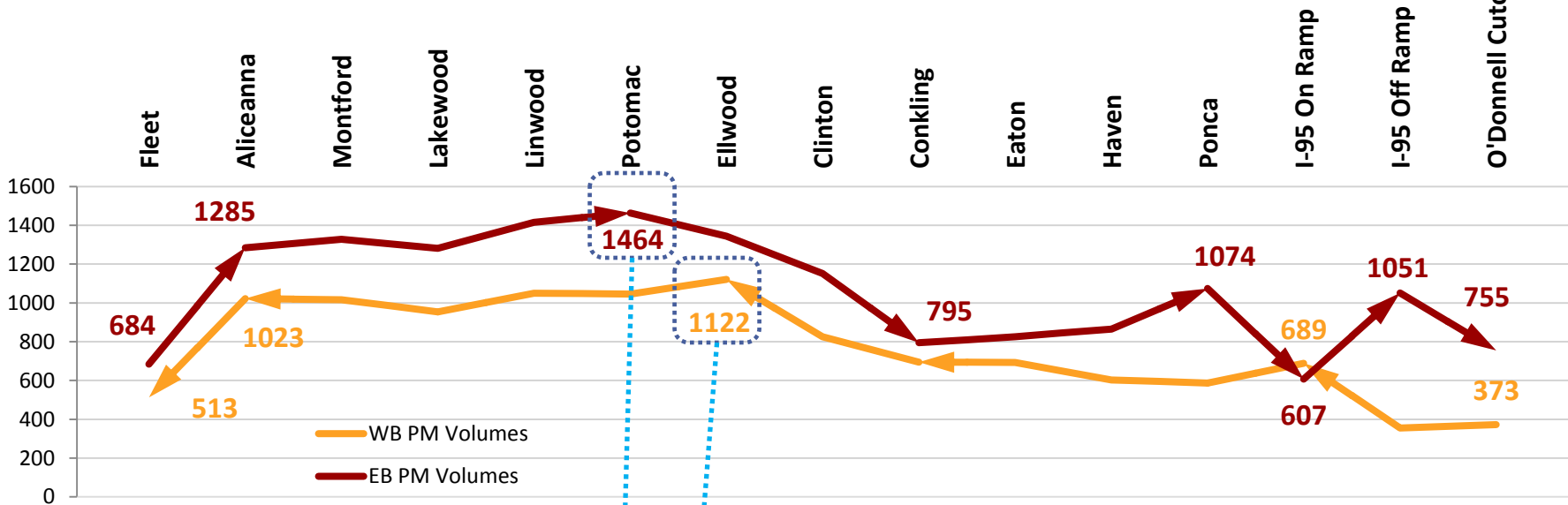


# AM Peak Hour Traffic Volumes





# PM Peak Hour Traffic Volumes



# Field Observations

## Morning

- Heavy westbound flow
- Eastbound left-turn difficulty at unprotected locations
- Poor operations at Boston & Fleet, and Boston & Aliceanna creates multi-block queuing and cycle failures
- *Shown: Westbound Fleet extending from Boston to past Washington*
- Bus system was not observed to cause significant traffic back-ups
- Pedestrian traffic is light
- Extended wait times at signalized crossings
- Many mid-block ped crosses



Boston - Westbound



Fleet - Westbound

# Field Observations

## Evening

- Heavy eastbound flow
- Queuing
  - Lakewood extending five blocks upstream to Linwood,
  - Eight blocks from Haven upstream to Ellwood
- Westbound queues from Haven, to Ponca and beyond conflict with railroad crossing
- Heavy delays leaving from the Canton Crossing shopping center
- Higher numbers of peds and bikes observed
- Peds not crossing at the designated crosswalks/waiting for walk signal
- Friction and conflicts between bicyclists and traveling /parked vehicles in the eastbound direction



Boston - Eastbound



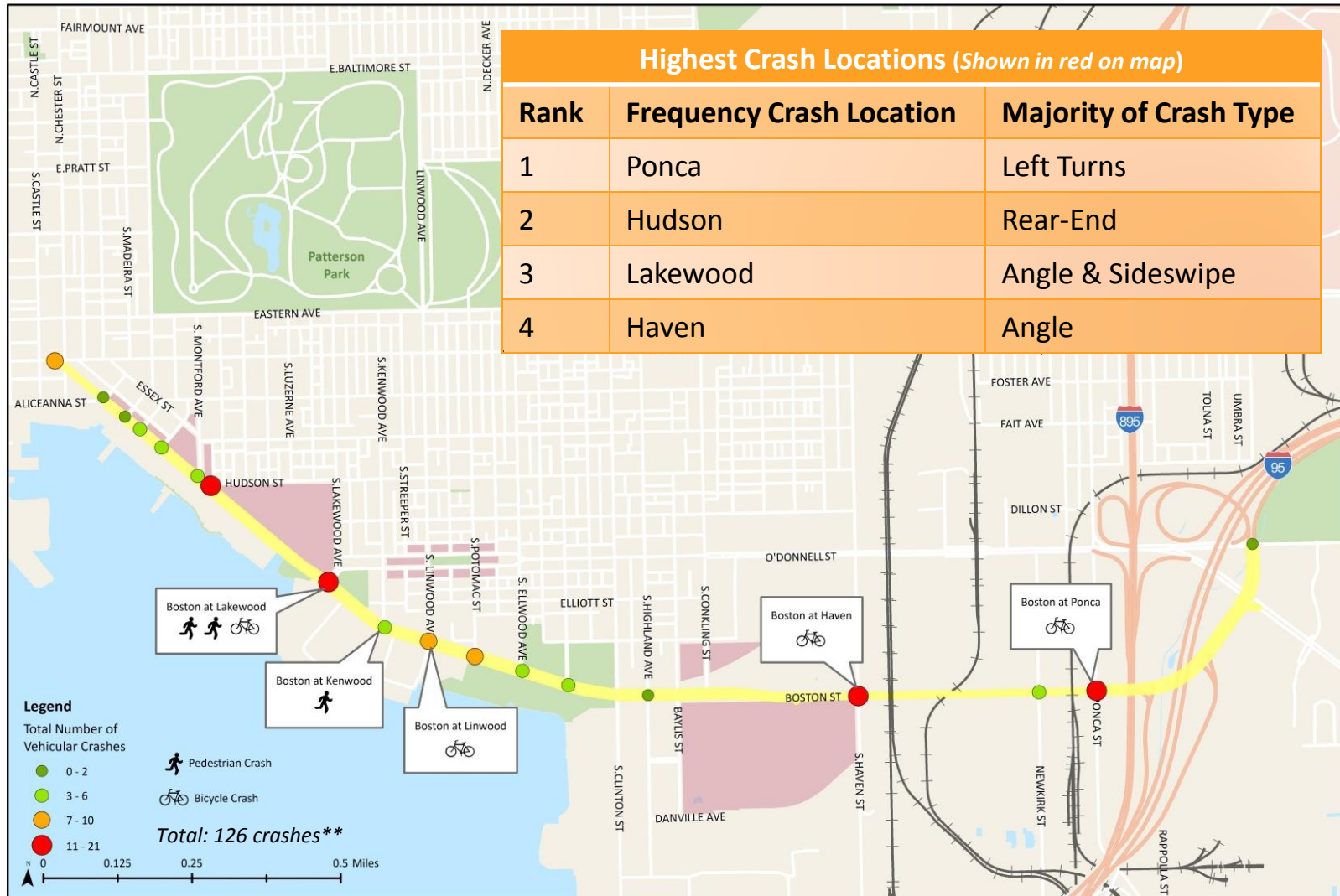
Boston - Westbound



CAP #2 02/27/17



# Traffic Safety



\*Data from 2012-2014

\*\*Pedestrian and Bicycle related crashes are included in overall totals

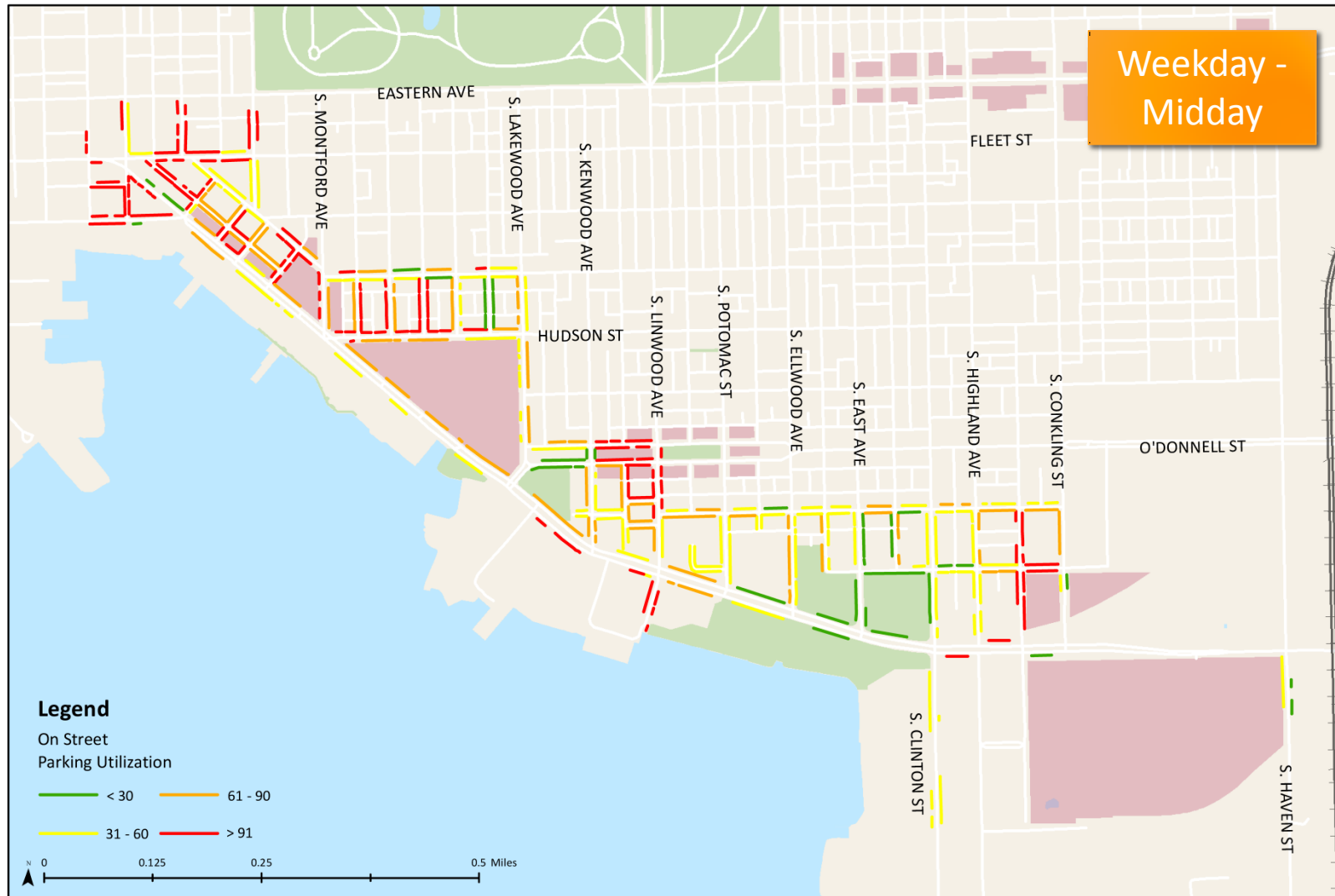
# On-Street Parking Inventory



\*Data collected in the fall of 2016



# On-Street Parking Utilization



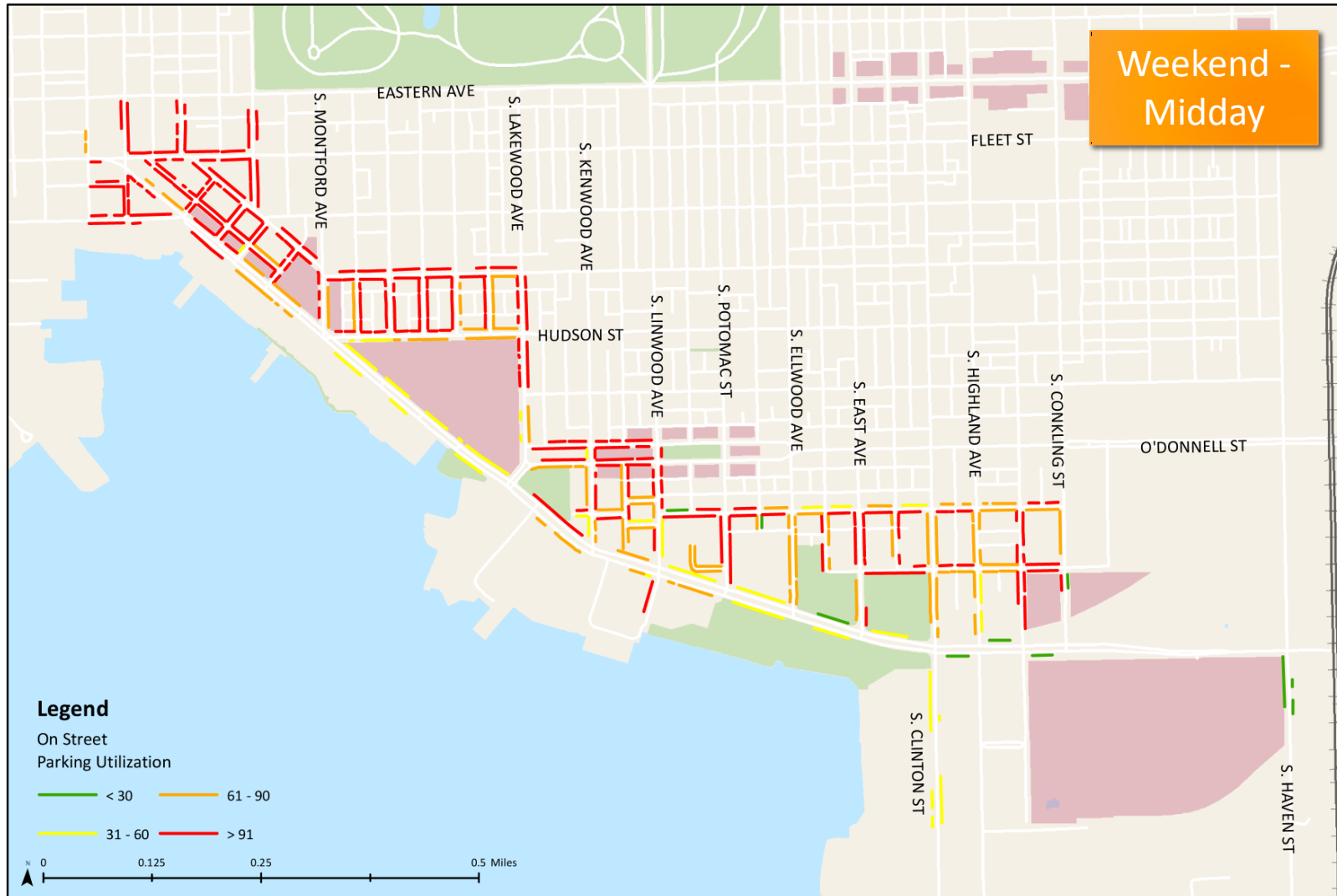
*\*Data collected in the fall of 2016 on typical Tuesday, Wednesday, or Thursday between 11:00 AM and 1:00 PM*

# On-Street Parking Utilization



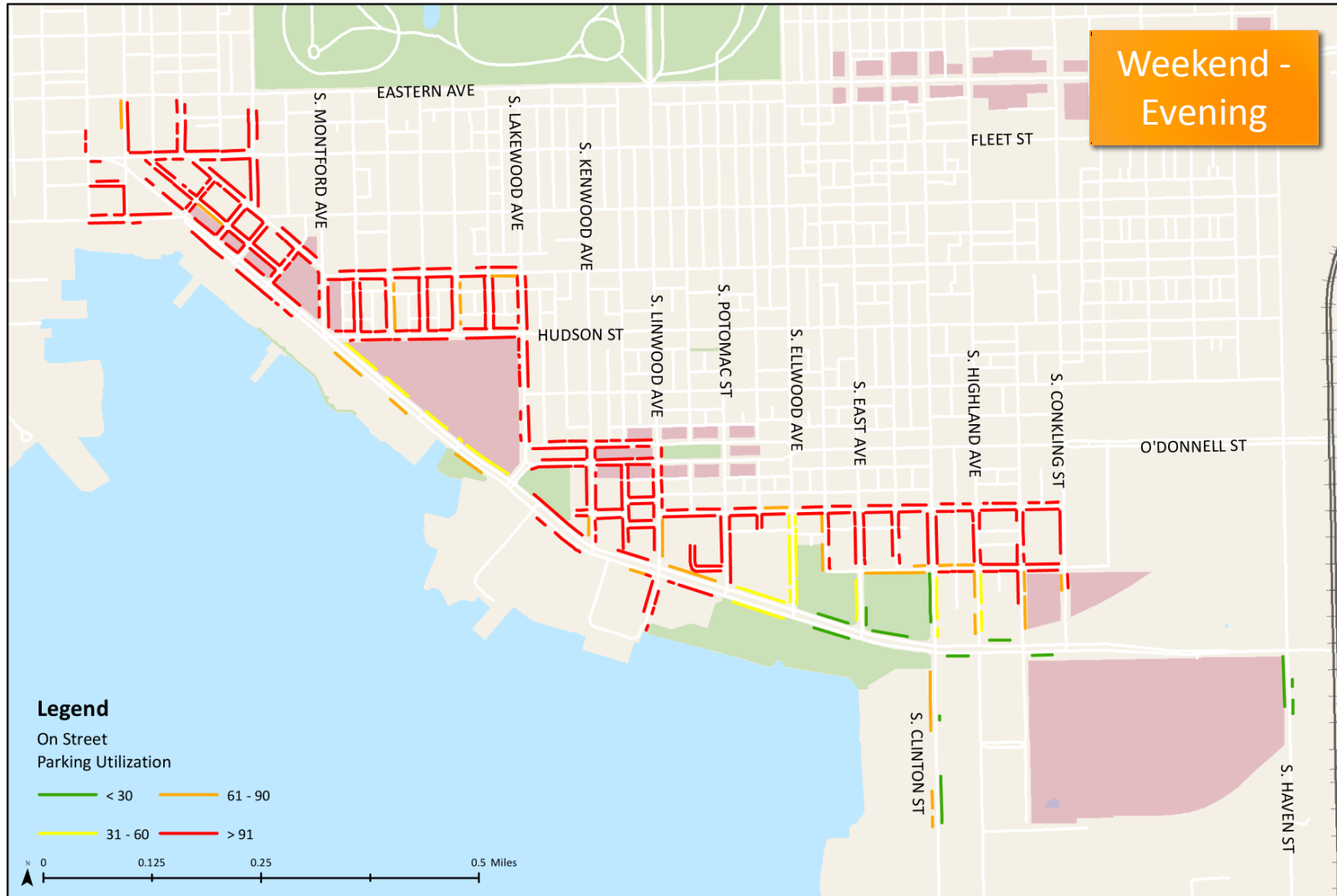
\*Data collected in the fall of 2016 on typical Tuesday, Wednesday, or Thursday between 7:00 PM and 9:00 PM

# On-Street Parking Utilization



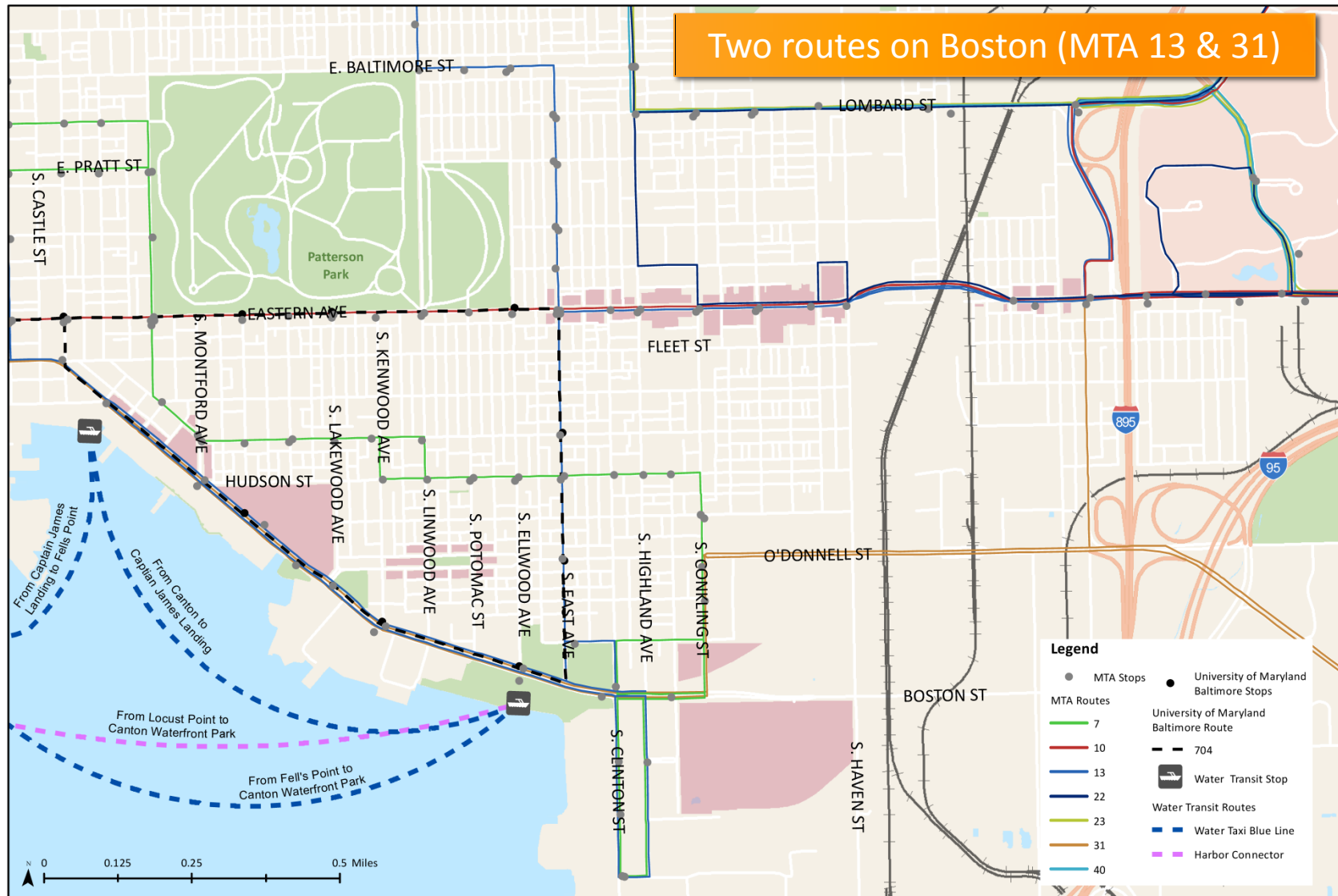
\*Data collected in the fall of 2016 on typical Saturday between 11:00 AM and 1:00 PM

# On-Street Parking Utilization

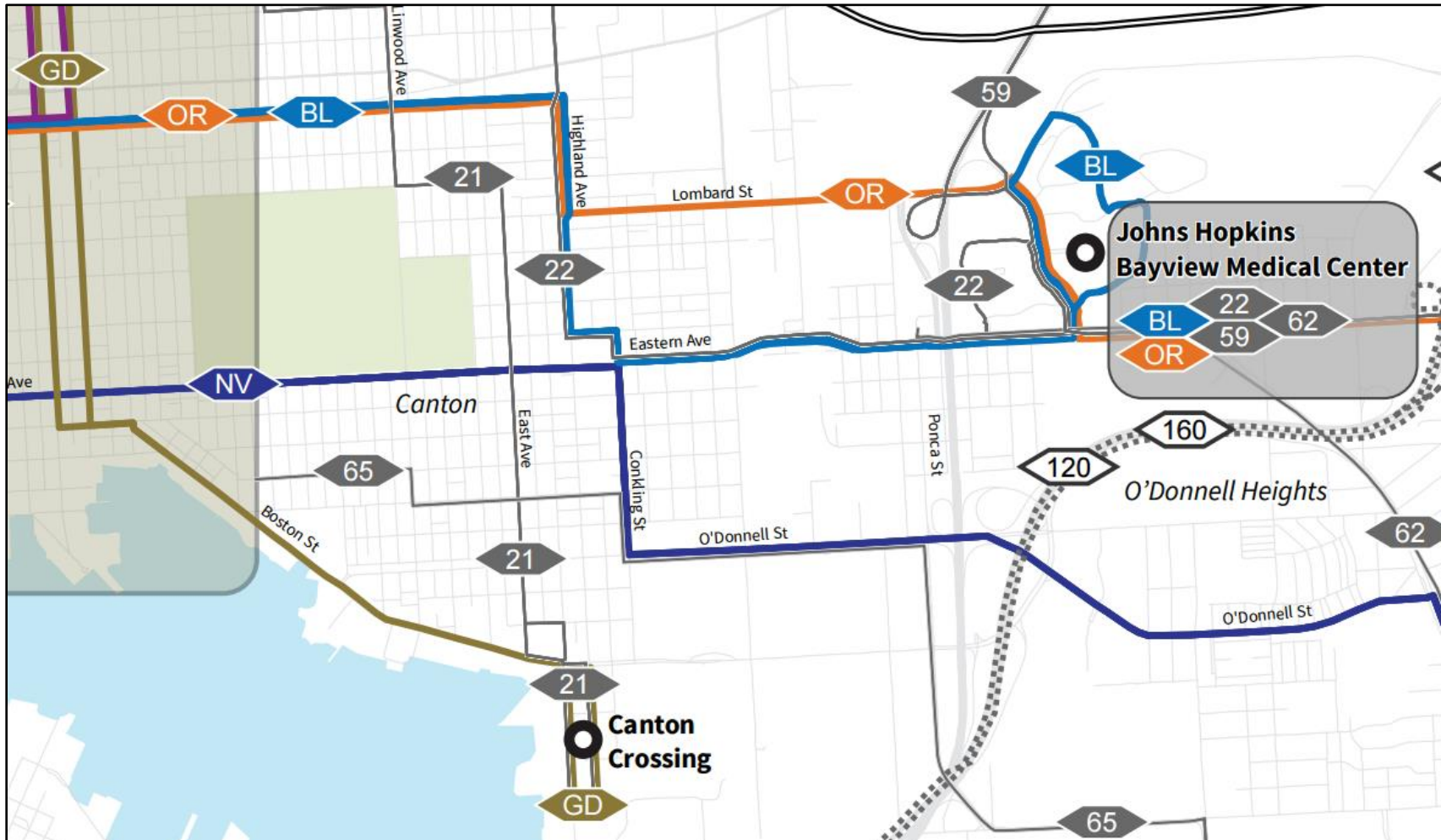


\*Data collected in the fall of 2016 on typical Saturday between 7:00 PM and 9:00 PM

# Existing Transit Network

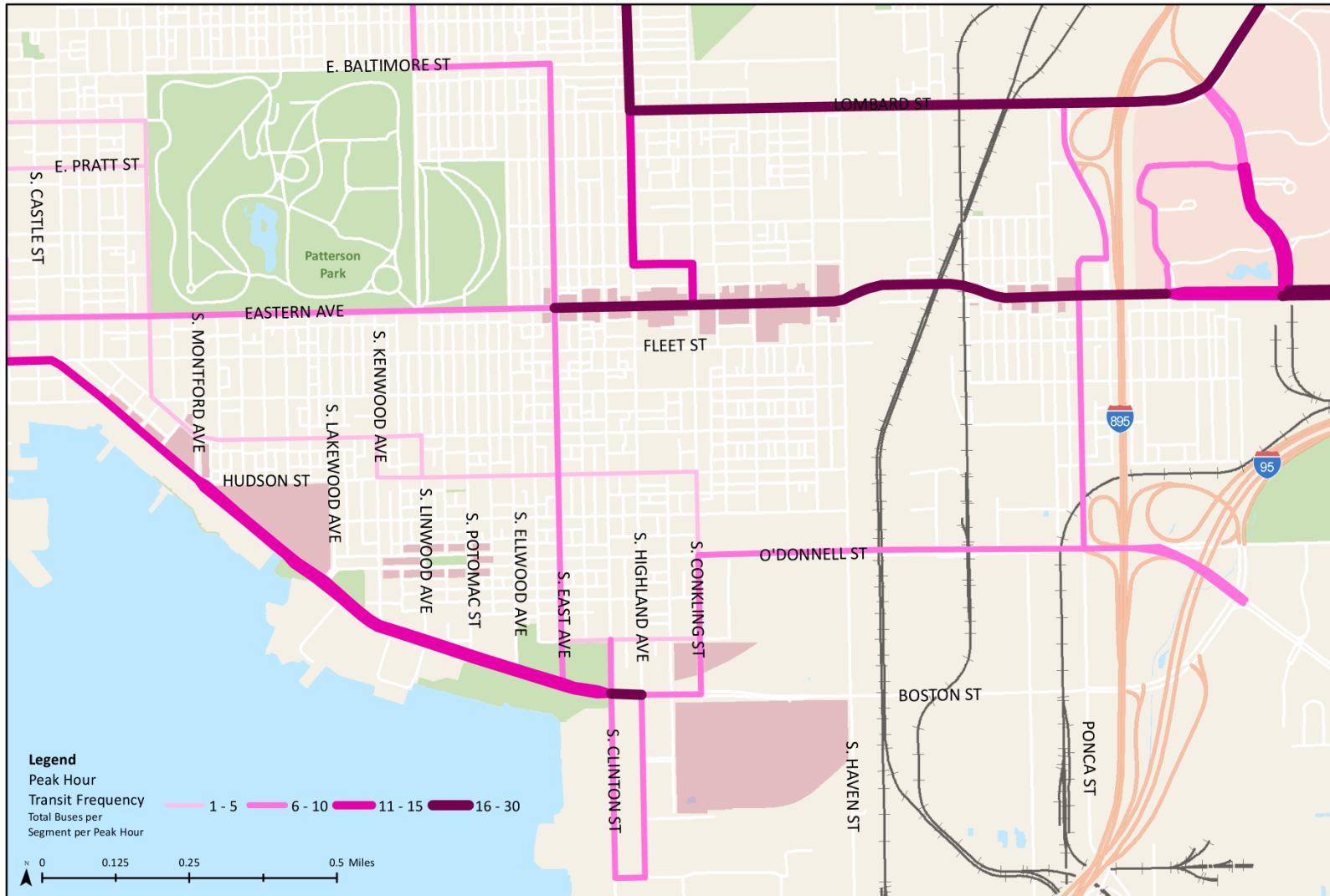


# Planned Transit Network

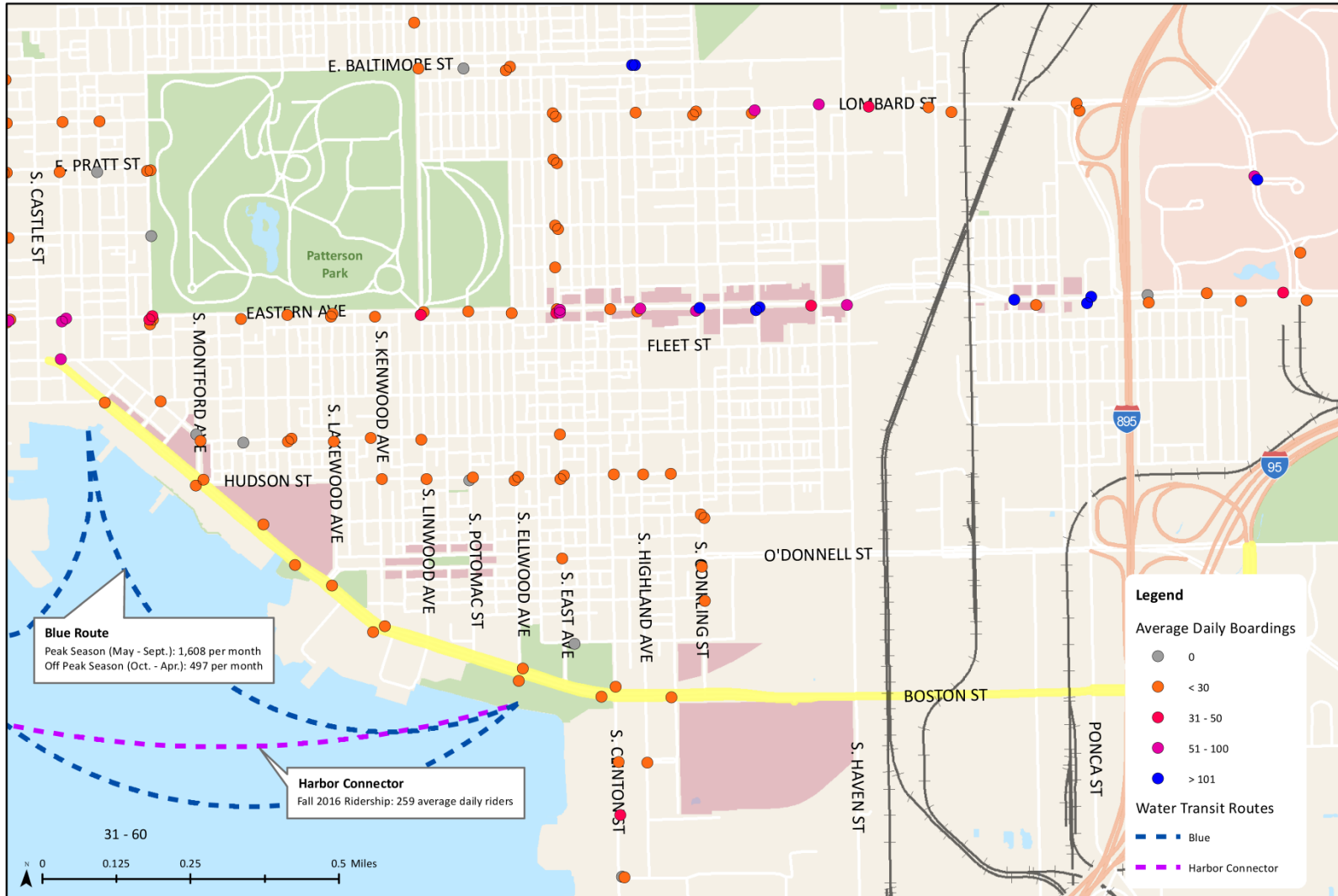




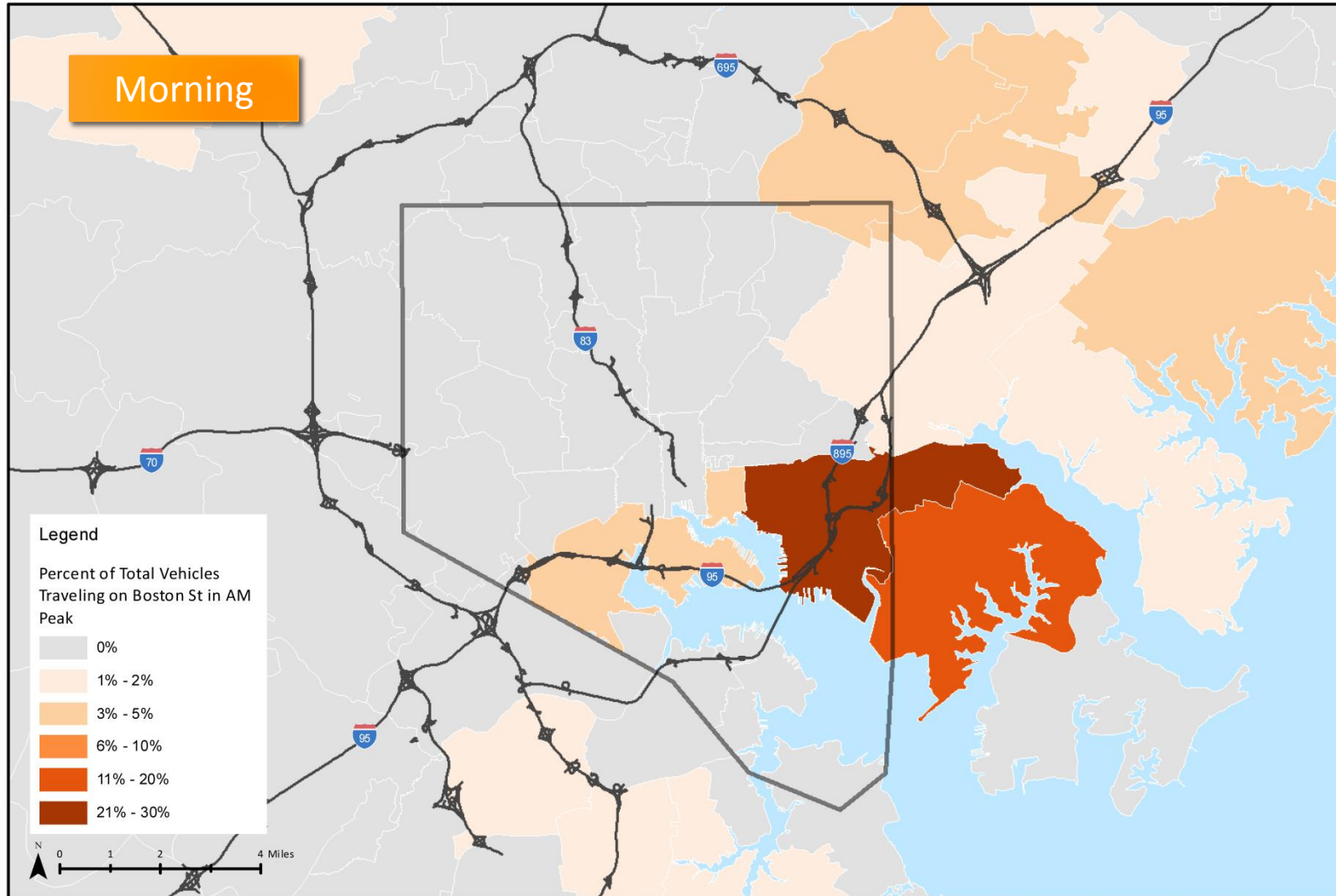
# Transit Service Frequency



# Transit Ridership

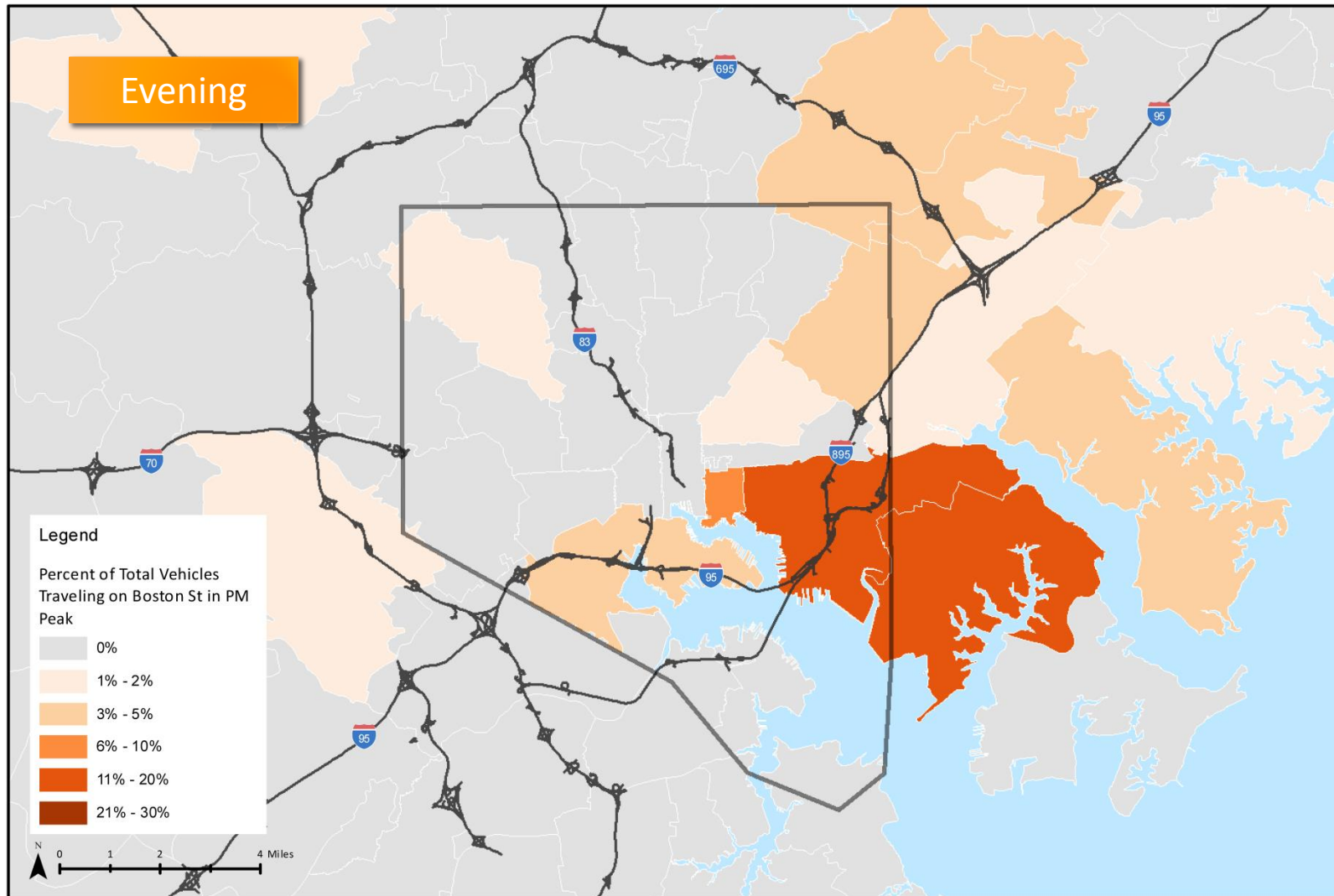


# Commuter Shed



*\*Data collected on a typical Tuesday, Wednesday, or Thursday between 7:00 AM and 9:00 AM in the fall of 2016. License plates recorded as vehicles pass Linwood while traveling westbound on Boston*

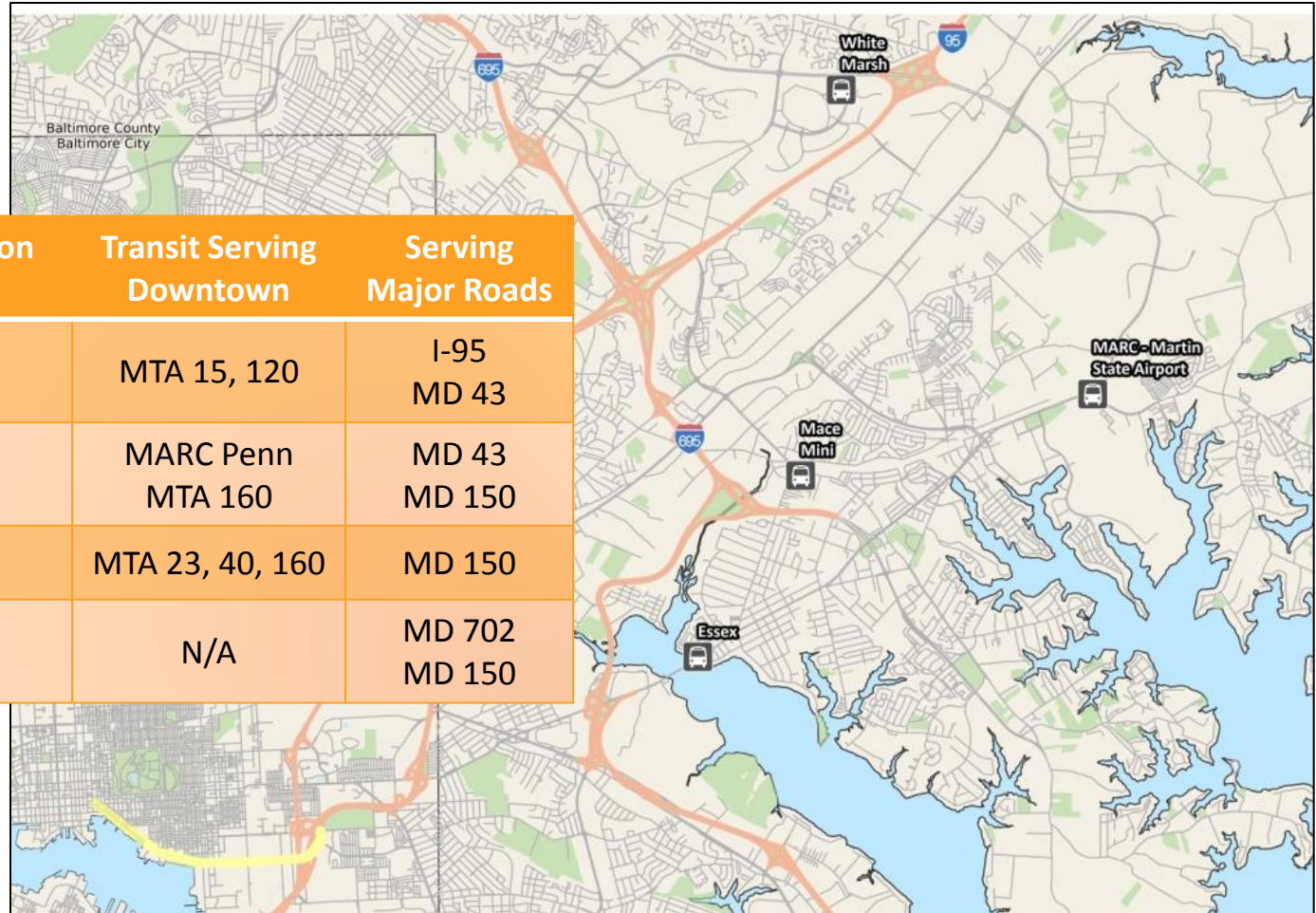
# Commuter Shed



*\*Data collected on a typical Tuesday, Wednesday, or Thursday between 4:00 PM and 6:00 PM in the fall of 2016. License plates recorded as vehicles pass Linwood while traveling eastbound on Boston*



# Regional Park and Rides

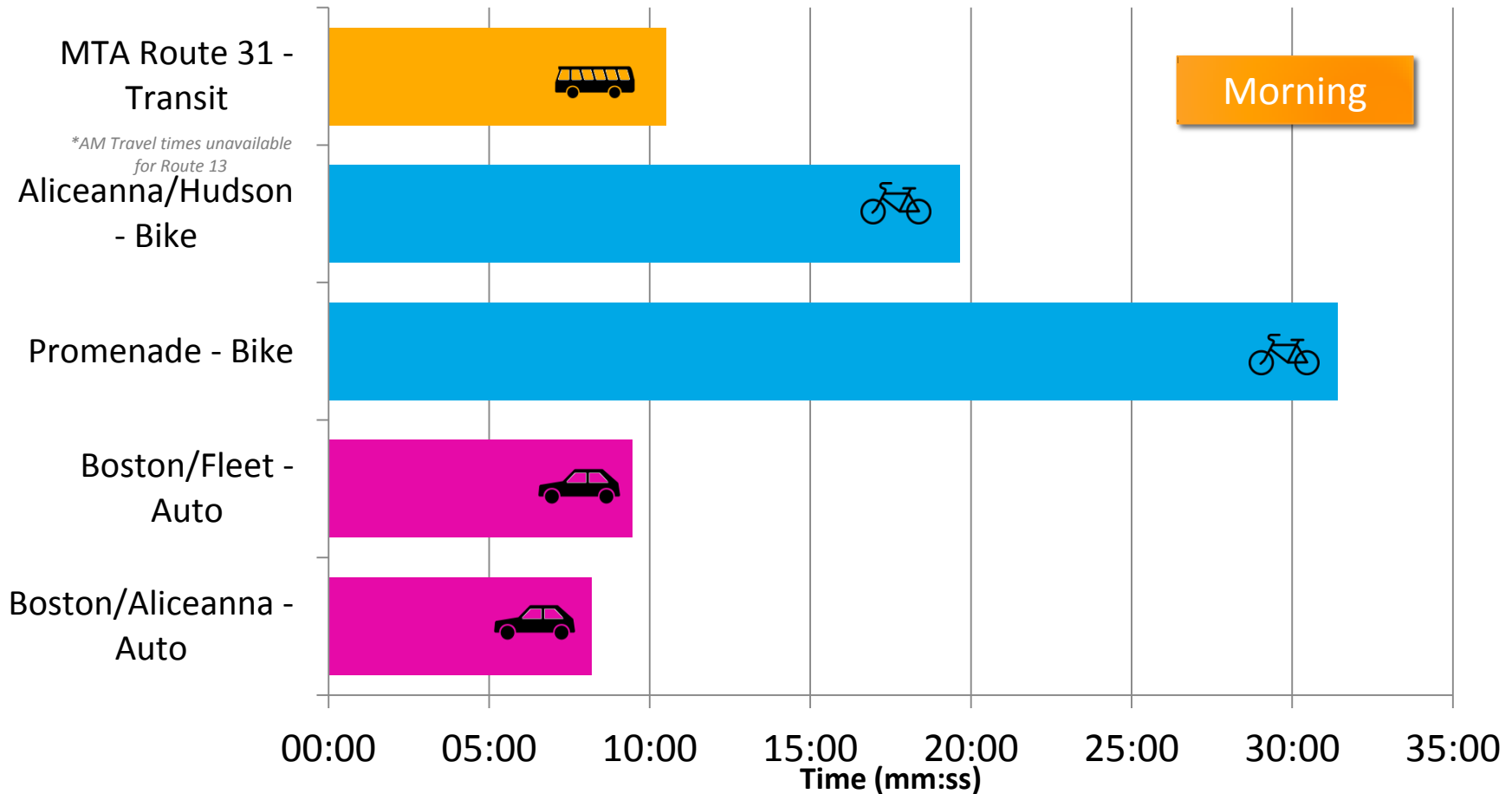


Lot	Utilization	Transit Serving Downtown	Serving Major Roads
White Marsh	62%	MTA 15, 120	I-95 MD 43
MARC Martin State Airport	78%	MARC Penn MTA 160	MD 43 MD 150
Essex	28%	MTA 23, 40, 160	MD 150
Mace Mini	0%	N/A	MD 702 MD 150

*\*Data collected on a typical Tuesday, Wednesday, or Thursday between 11:00 AM and 1:00 PM*

# Travel Times Comparison - Boston

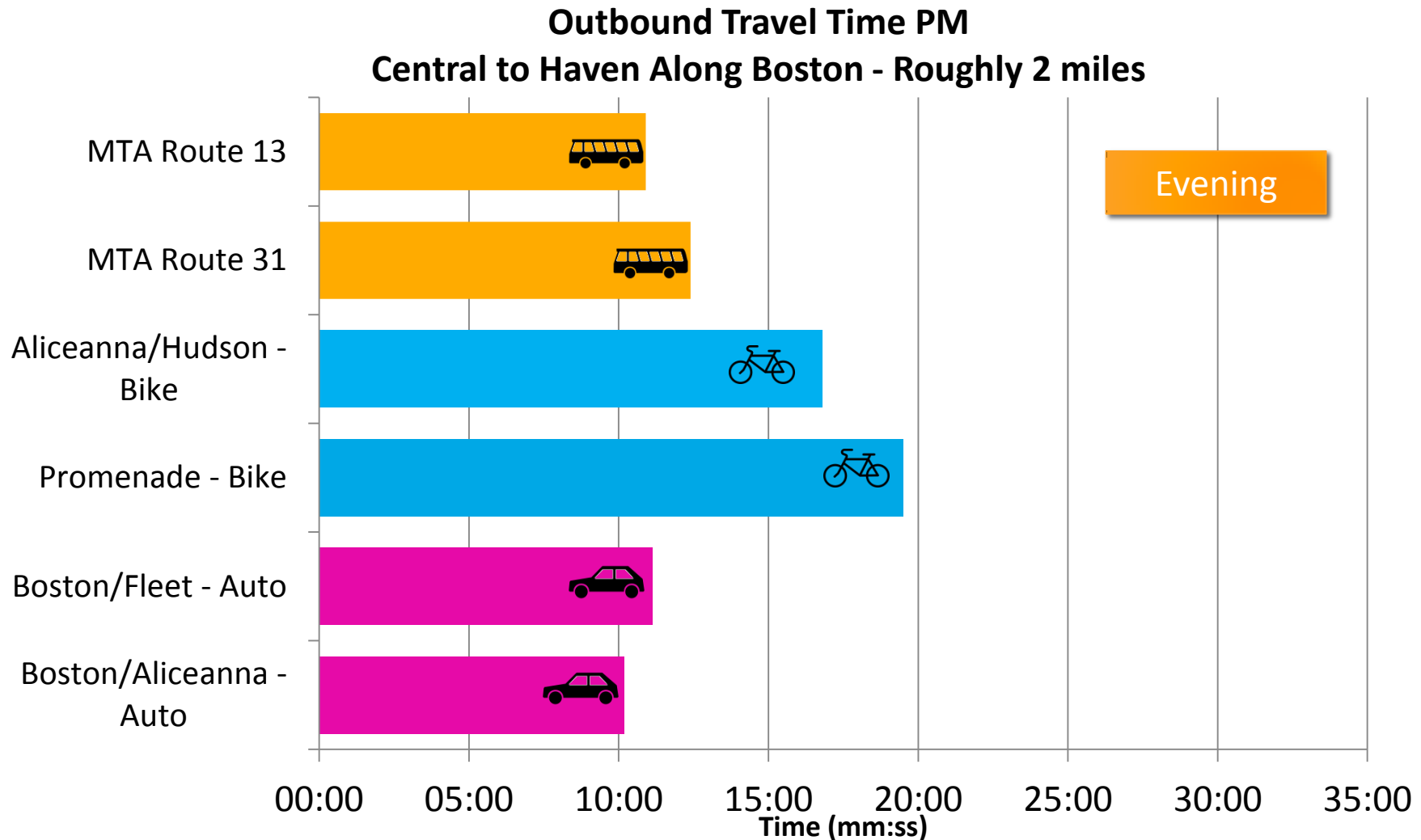
## Inbound Travel Time AM Haven to Central Along Boston - Roughly 2 miles



\*Vehicle & Bike data collected in the fall of 2016 on typical Tuesday, Wednesday, or Thursday between 7:00 AM and 9:00 AM / Transit data received from MTA



# Travel Times Comparison - Boston



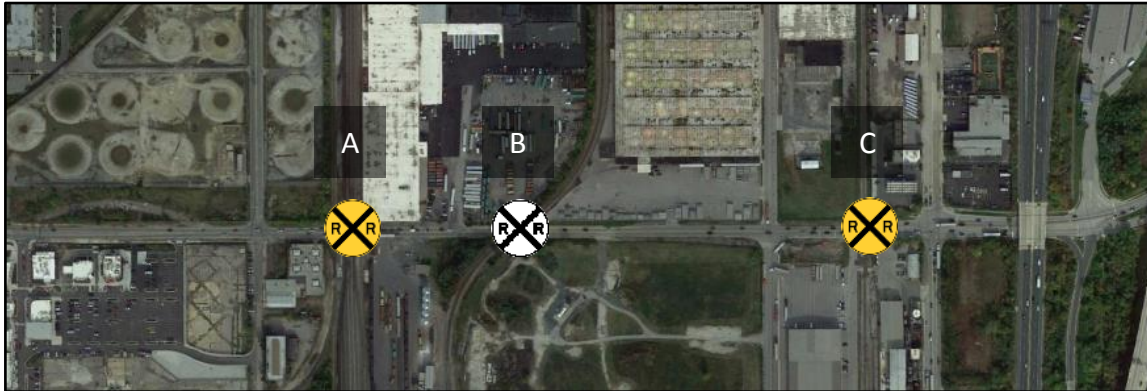
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**Legend:**

- Interstate Highways
- Through Truck Route
- Local Truck Route
- Restricted Route- 7pm to 7am
- Restricted - Local

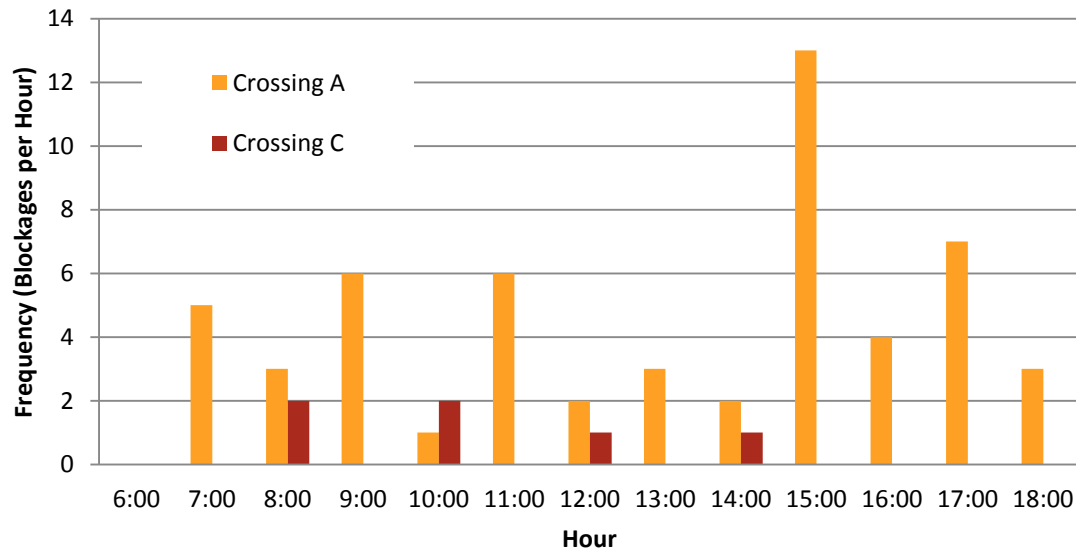
38

# Freight – Rail Crossings



## Two at grade crossings

- Between Haven & Newkirk
- Between Newkirk & Ponca
- 1,600 feet apart

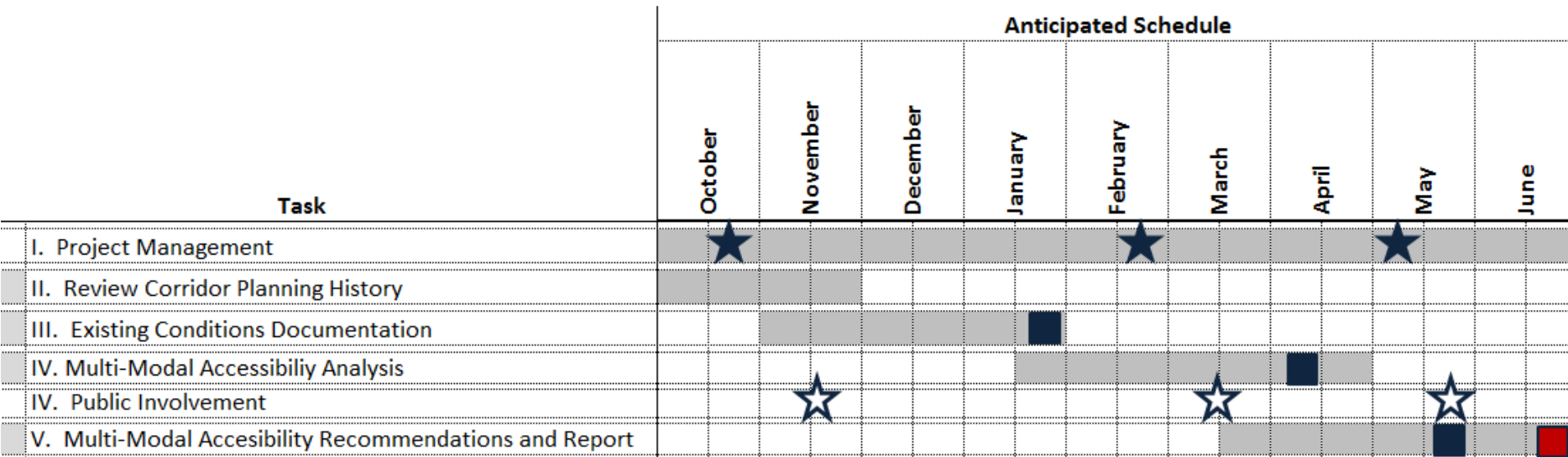


## Gates lowered 55 times over two days excluding nighttime hours

Most common duration of lowered gates	50 seconds
Average duration of lowered gates	2 minutes

# Study Schedule

## Boston Street Multi-Modal Corridor Study Schedule



### LEGEND

- Advisory Panel Meeting ★
- Public Meeting ☆
- Draft Deliverable ■
- Final Deliverable ■

### KEY DATES:

- 26-Oct** First CAP Meeting: Project Purpose, Schedule, Scope of Work
- 17-Nov** Community Meeting #1: Introduction to Study, Study Purpose & Schedule- Share Online Survey Link
- 27-Feb** Second CAP Meeting: Existing Conditions, Opportunities & Constraints
- 16-Mar** Community Meeting #2: Existing Conditions, Opportunities & Constraints, Get Feedback
- Early May** Third CAP Meeting: Present Analysis Findings & Next Steps
- Late May** Community Meeting #3: Present Analysis Findings & Next Steps

# Next Steps

- Meetings
  - Next Community Meeting on March 16<sup>th</sup> from 7:00 to 8:30 PM:  
Church on the Square 1025 S. Potomac, Baltimore, MD 21224
  - Next CAP Meeting early May (Final date TBD)
  - Final Community Meeting in late May (Final Date TBD)
- Continued Analysis of Data
  - Provide options for multimodal transportation on Boston Street
- Continue the Multi-modal Travel Behavior  
Questionnaire : Open Through April 30,2017

Survey Monkey Link: [www.surveymonkey.com/r/BostonCorridorStudy](http://www.surveymonkey.com/r/BostonCorridorStudy)

- Final Report - June



# Thank You for your participation

Please contact Gladys Hurwitz, City Planner at the Department of Transportation

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