



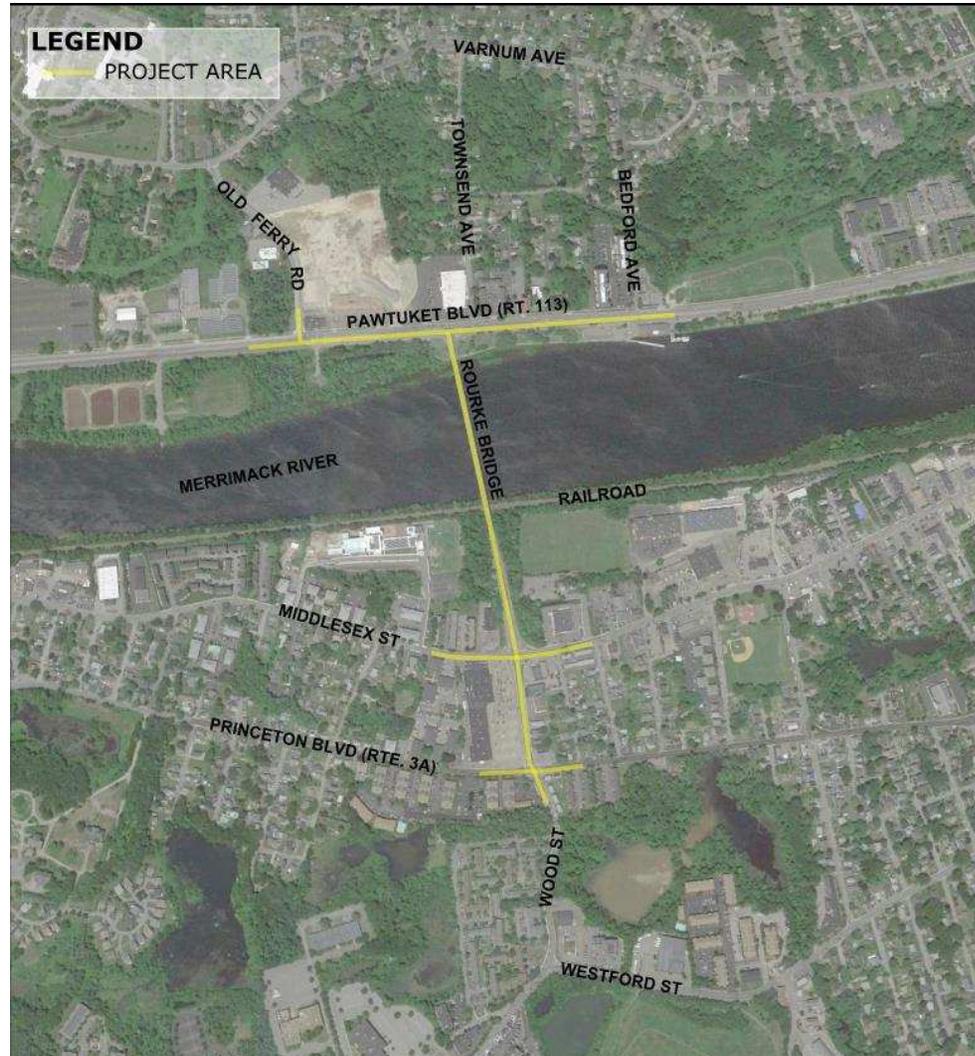
# Welcome!

Rourke Bridge Replacement Project  
Lowell, MA  
MassDOT #607887

## Project Briefing

April 28, 2020

# Project Limits



# Project Purpose



**Bridge Replacement**



**Enhance safety and connectivity for Pedestrians, Bicycles, Emergency Vehicles and Watercraft**



**Improve Traffic Operations at the Wood Street intersections with Pawtucket Boulevard, Middlesex Street, and Princeton Boulevard**

# Project Need



## Functionally Obsolete

- Substandard Pedestrian Walkway
- No Shoulders for Emergency Vehicles
- No Bicycle Accommodations
- Inadequate Approach Intersection Capacity



## Maintenance Issues

- Deck Patching
- Replacement Parts

# Project Need



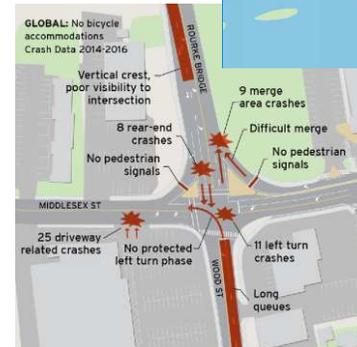
## Safety & Operations

### Lack of Bike/Ped Accommodation

#### Wood Street & Pawtucket Boulevard



#### Wood Street & Middlesex Street



#### Wood Street & Princeton Boulevard





# History of the Project

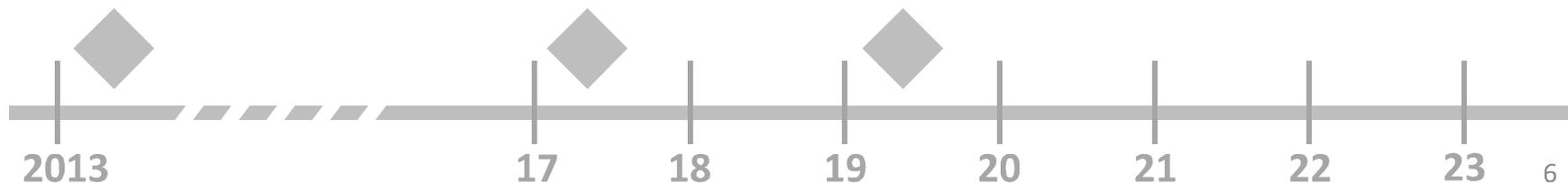
**2013 Corridor Study & Feasibility Analysis (NMCOG)**

**2017 Road Safety Audits (MassDOT)**

**Pawtucket Boulevard & Rourke Bridge**

**Wood Street from Middlesex Street to Princeton Boulevard**

**2019 Bridge Replacement Design Contract Awarded (MassDOT)**

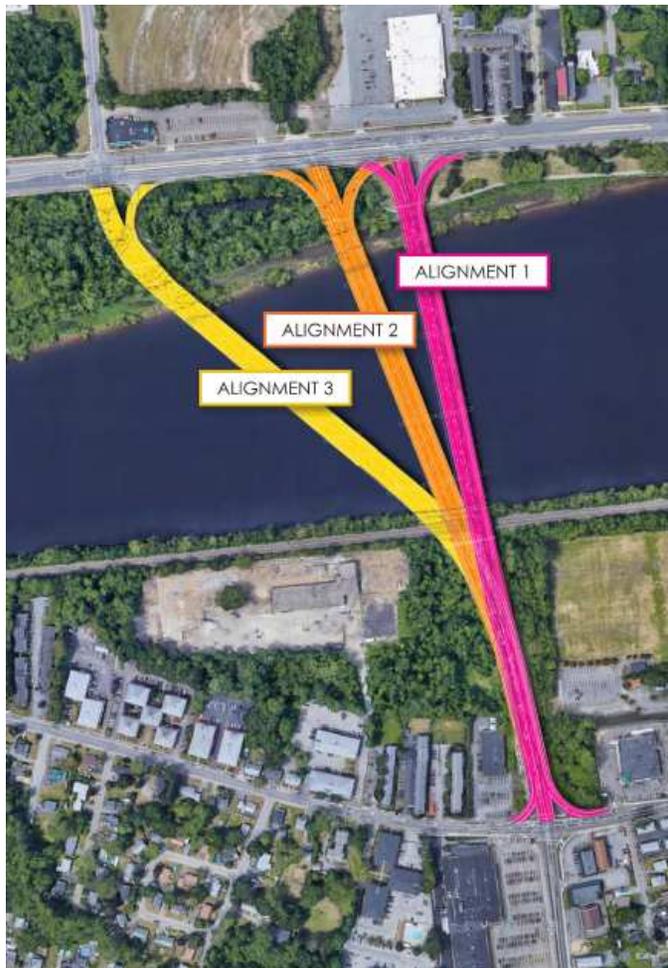


# Design Contract Scope



- **Identify Preferred Bridge Alignment**
- **Identify Preferred Bridge Type**
- **25% Design & Bridge Sketch Plans**
- **Environmental Permitting**
- **Final Design or Design Build RFP**

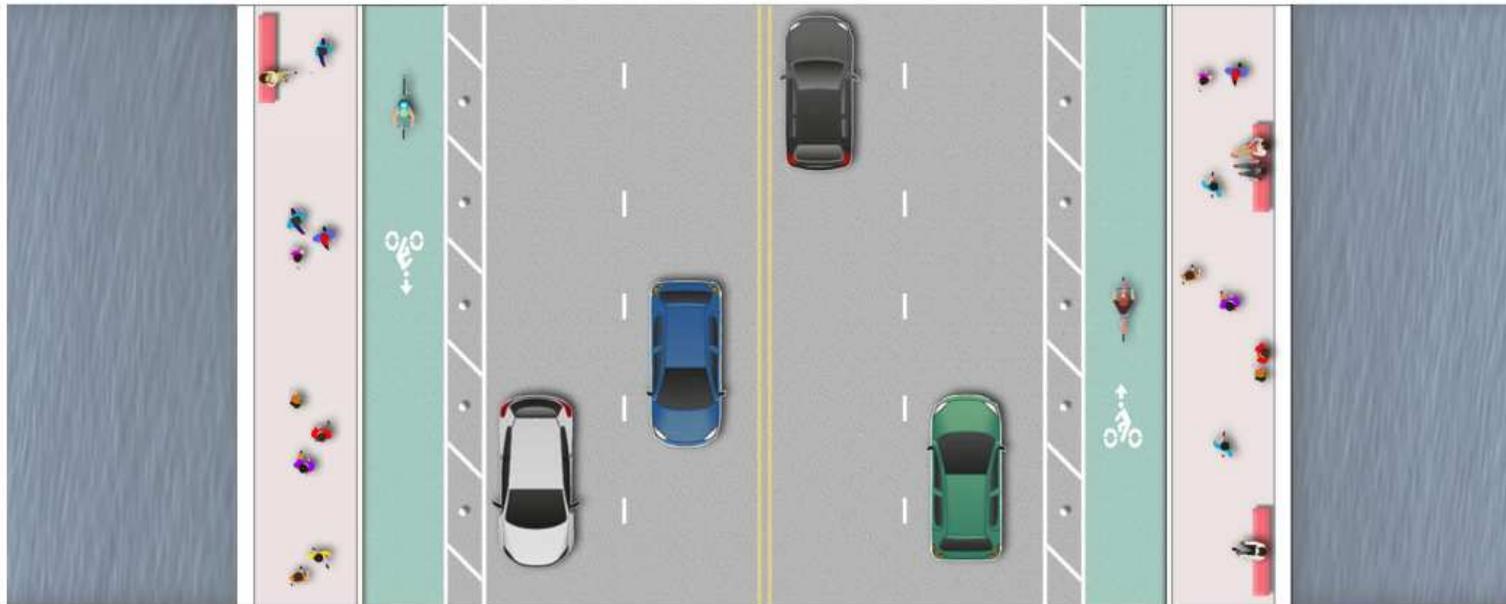
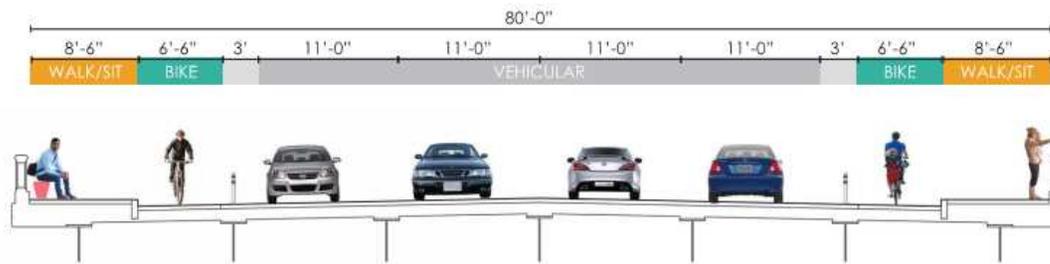
# Alignments to be Evaluated



Environmental Impacts  
Bike/Ped Connectivity  
Emergency Response  
Traffic Operations  
Water Recreation  
Constructability  
ROW Impacts  
Open Space  
Aesthetics  
Schedule  
Cost

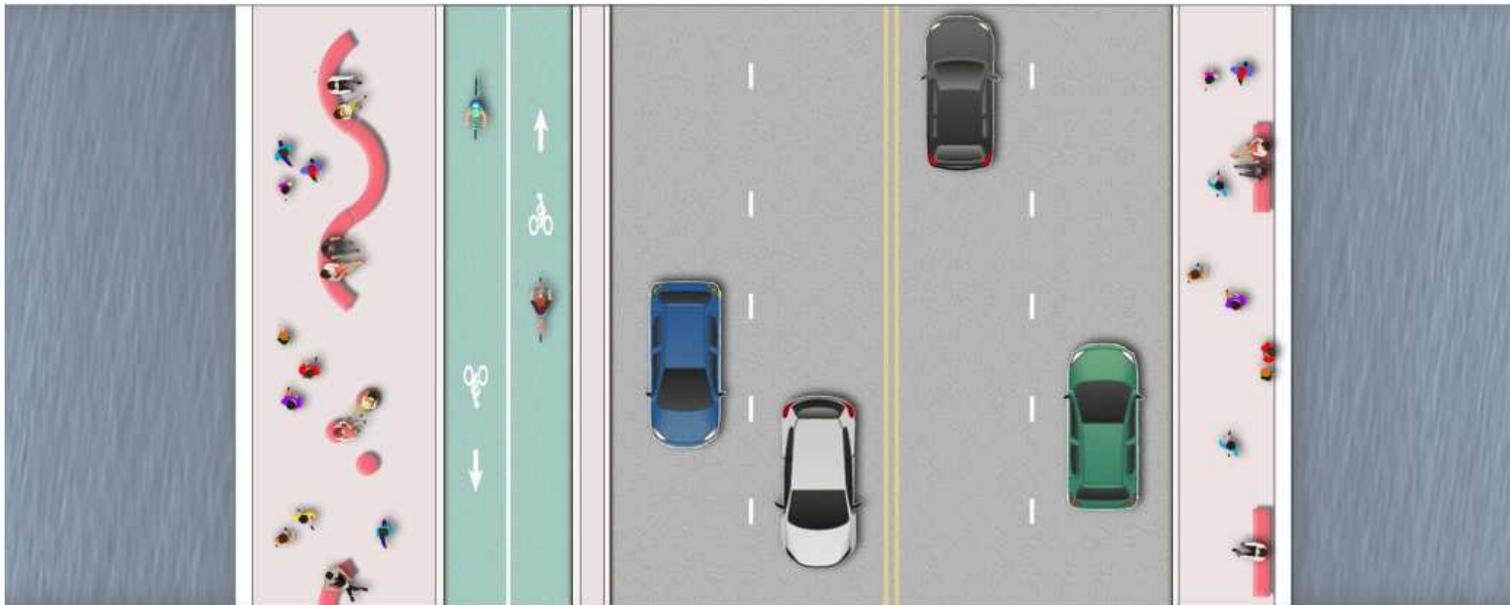
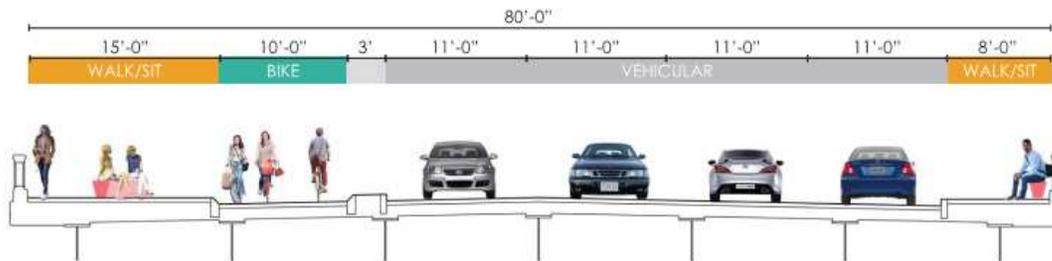


# Multi-Modal Considerations





# Multi-Modal Considerations



# Watercraft Considerations



2k Course Map  
Bellegarde Boathouse  
Merrimack River  
Lowell, MA



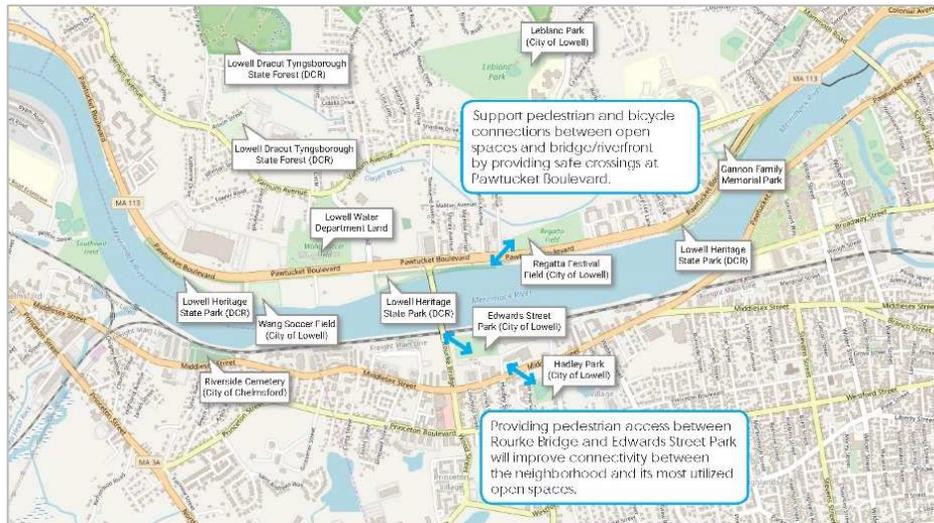
@UMass Lowell Rowing



@UMLRowing



# Adjacent Site Use



Edwards Street Park – Lowell Youth Soccer



Lowell Heritage State Park – Vandenberg Esplanade

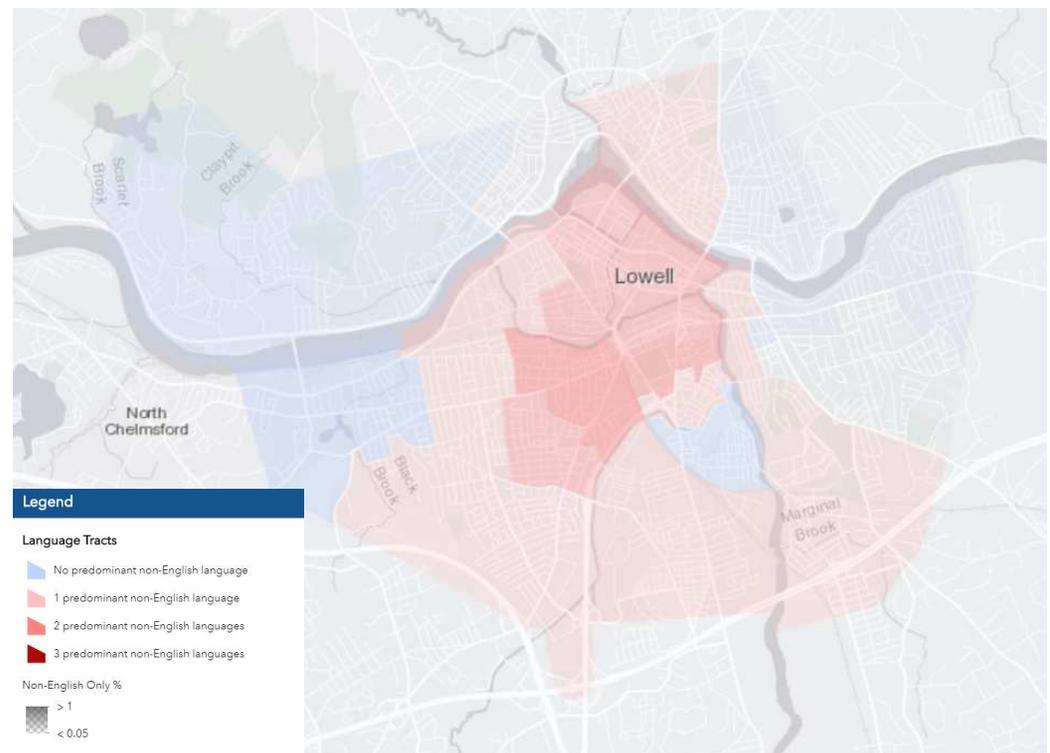


Lowell Heritage State Park – Boat Launch



# Environmental Justice

- **Lowell has a diverse population with a large concentration of EJ communities**
- **Will comply with state and federal EJ policy**
- **The Project is not anticipated to result in disparate impacts to EJ populations**



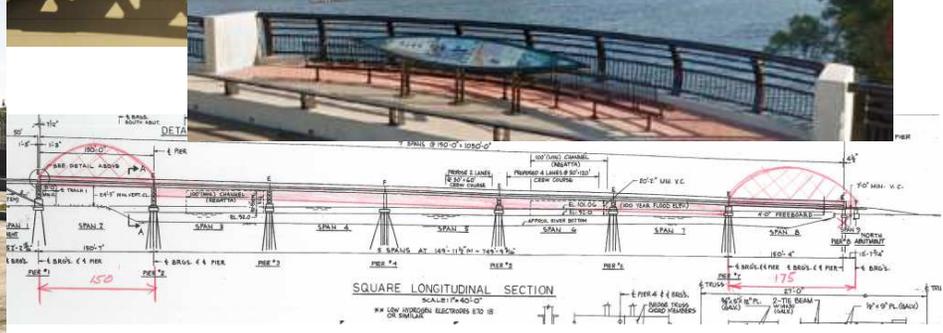


## **Anticipated Environmental Filings**

- **NEPA – Categorical Exclusion**
- **MA Wetlands Protection Act – NOI**
- **MA Endangered Species Act (MESA)**
- **MA Article 97**
- **MA Chapter 91**
- **Section 401 Water Quality Certificate**
- **USACE Section 404 Permit**
- **Section 4(f) Review**
- **Section 6(f) Review**
- **Section 106 Review**



# Bridge Type & Aesthetics



# Completed Work



**Survey**

**Wetland Delineation**

**Geophysical Evaluation**

**Preliminary Hydraulic Analysis**

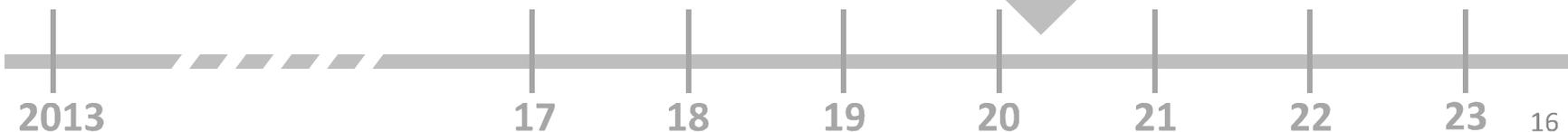
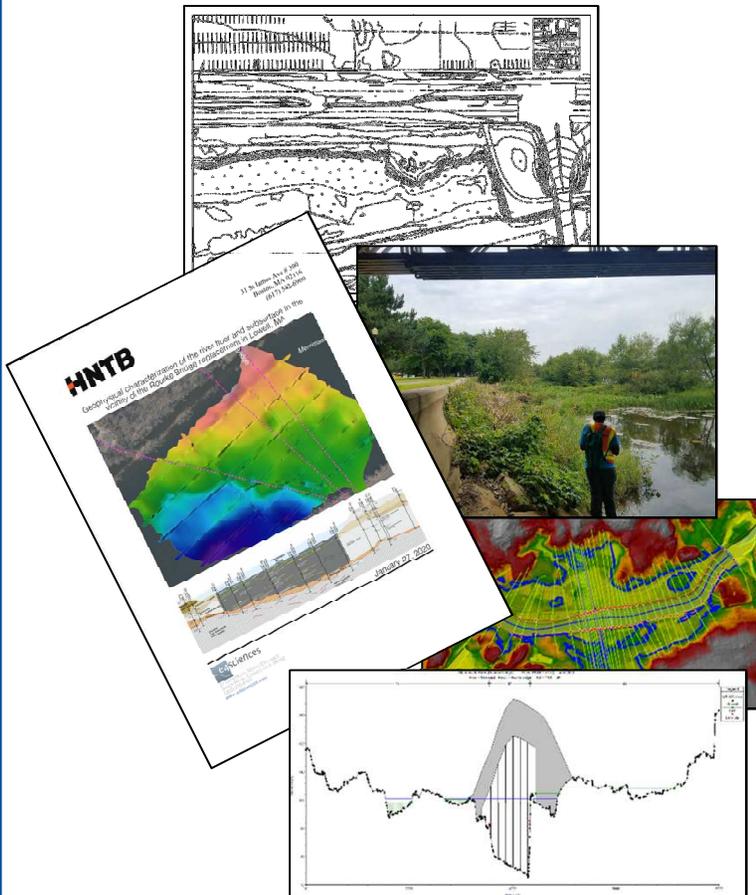
**Public Involvement & Outreach Plan**

**Urban/Landscape Concept Evaluation**

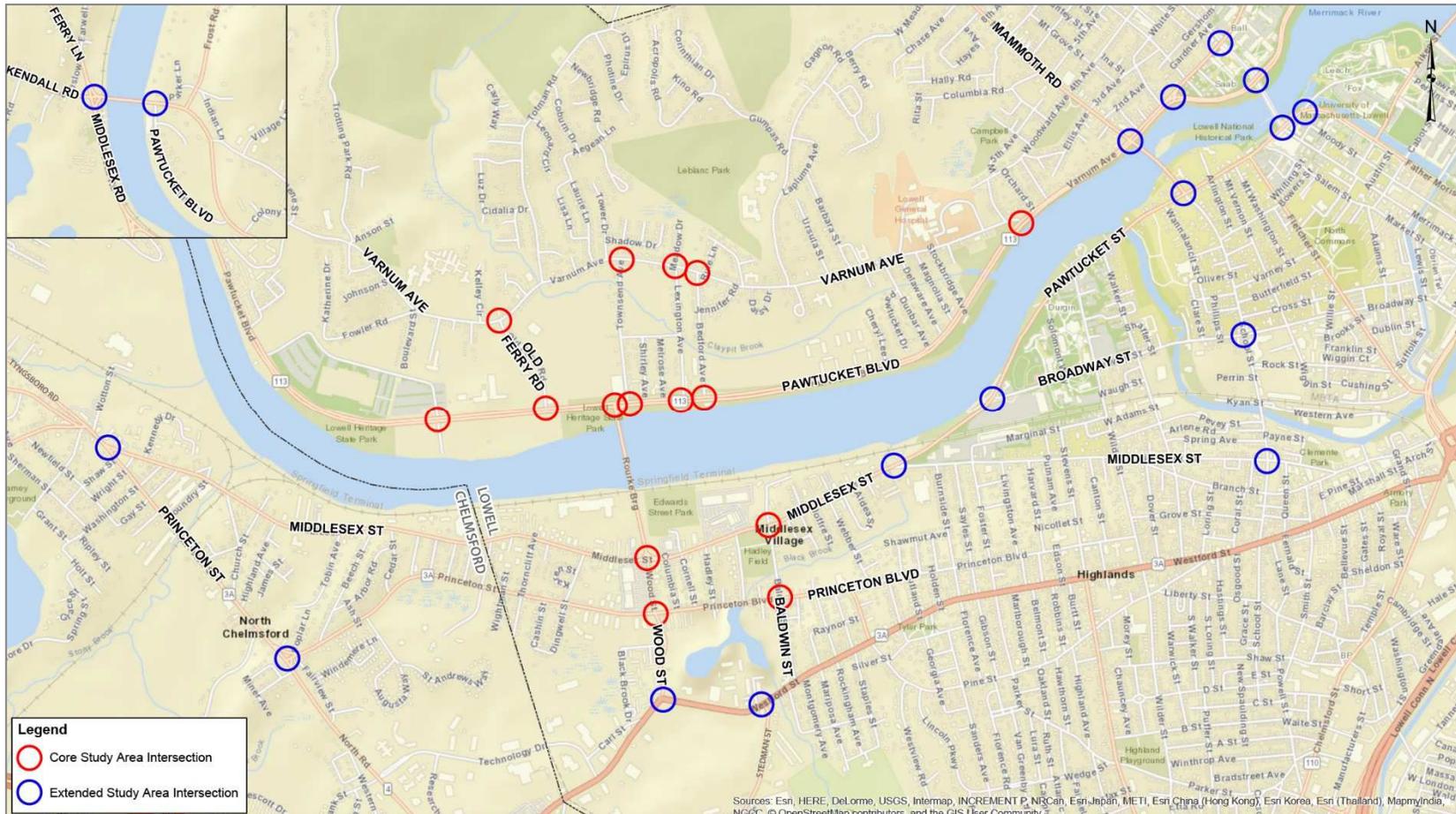
**Traffic Counts (veh/ped/bike/truck)**

**Safety Analysis**

**Traffic Modeling**



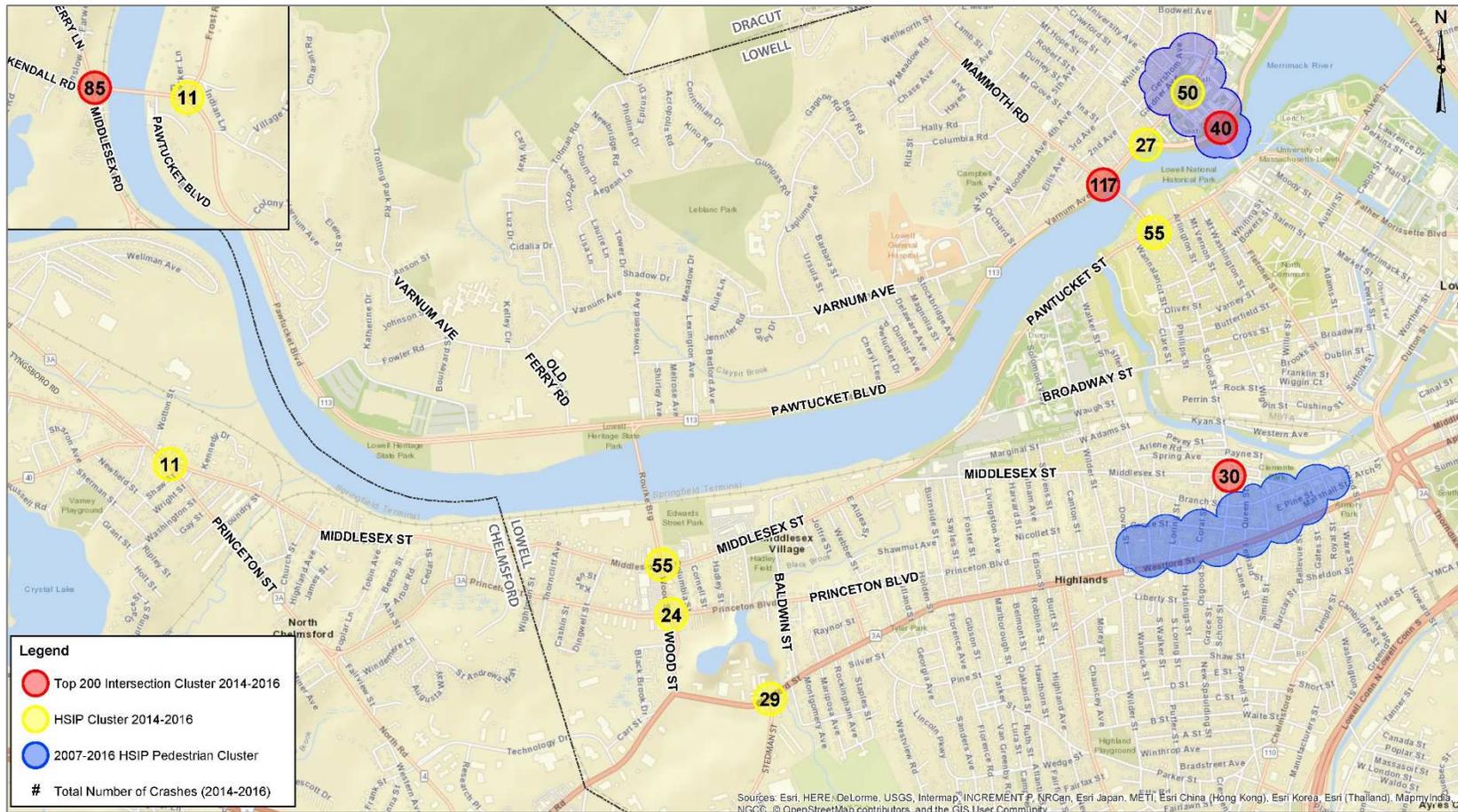
# Traffic Study Area



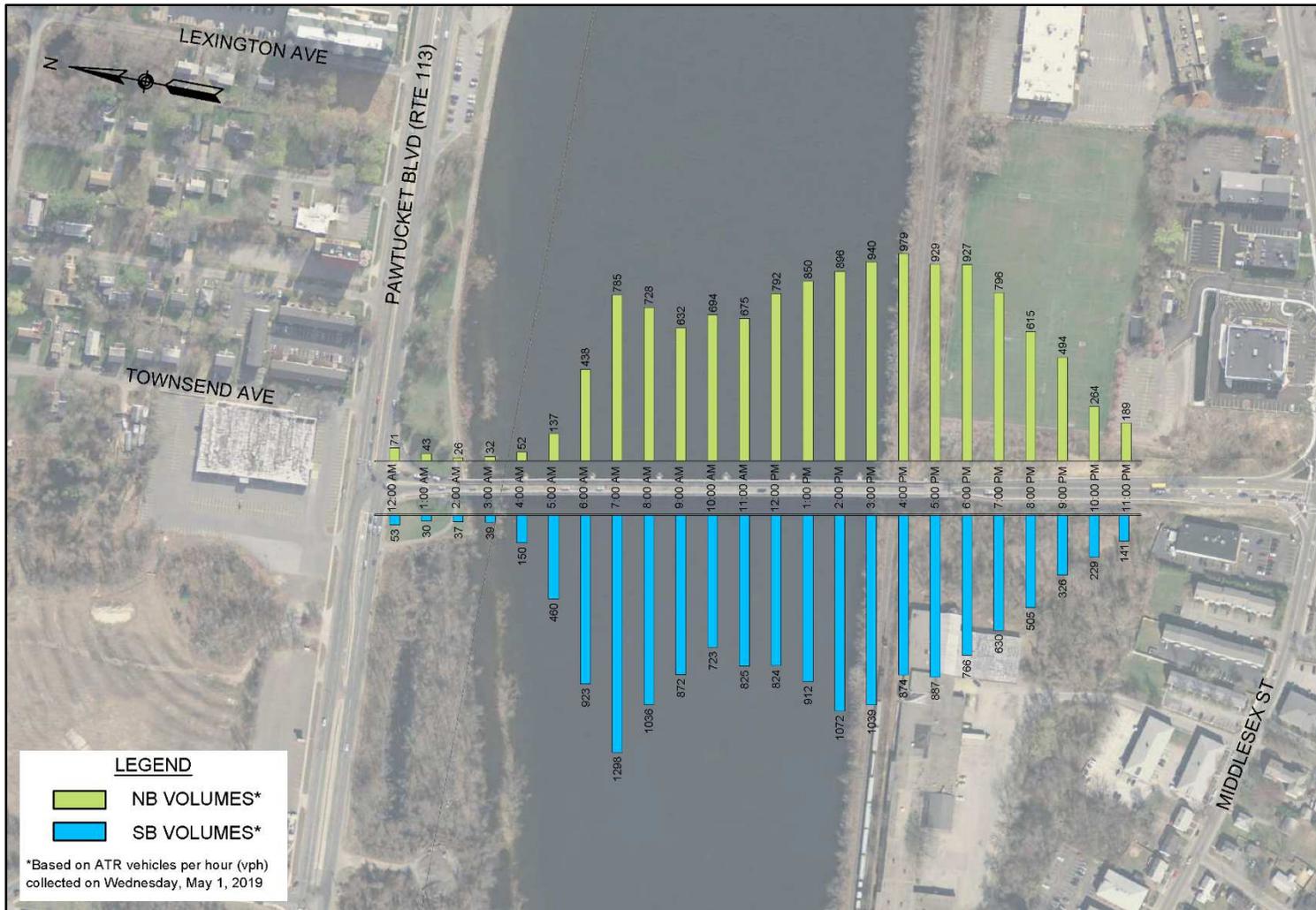
# Safety Analysis



## Highway Safety Improvement Data



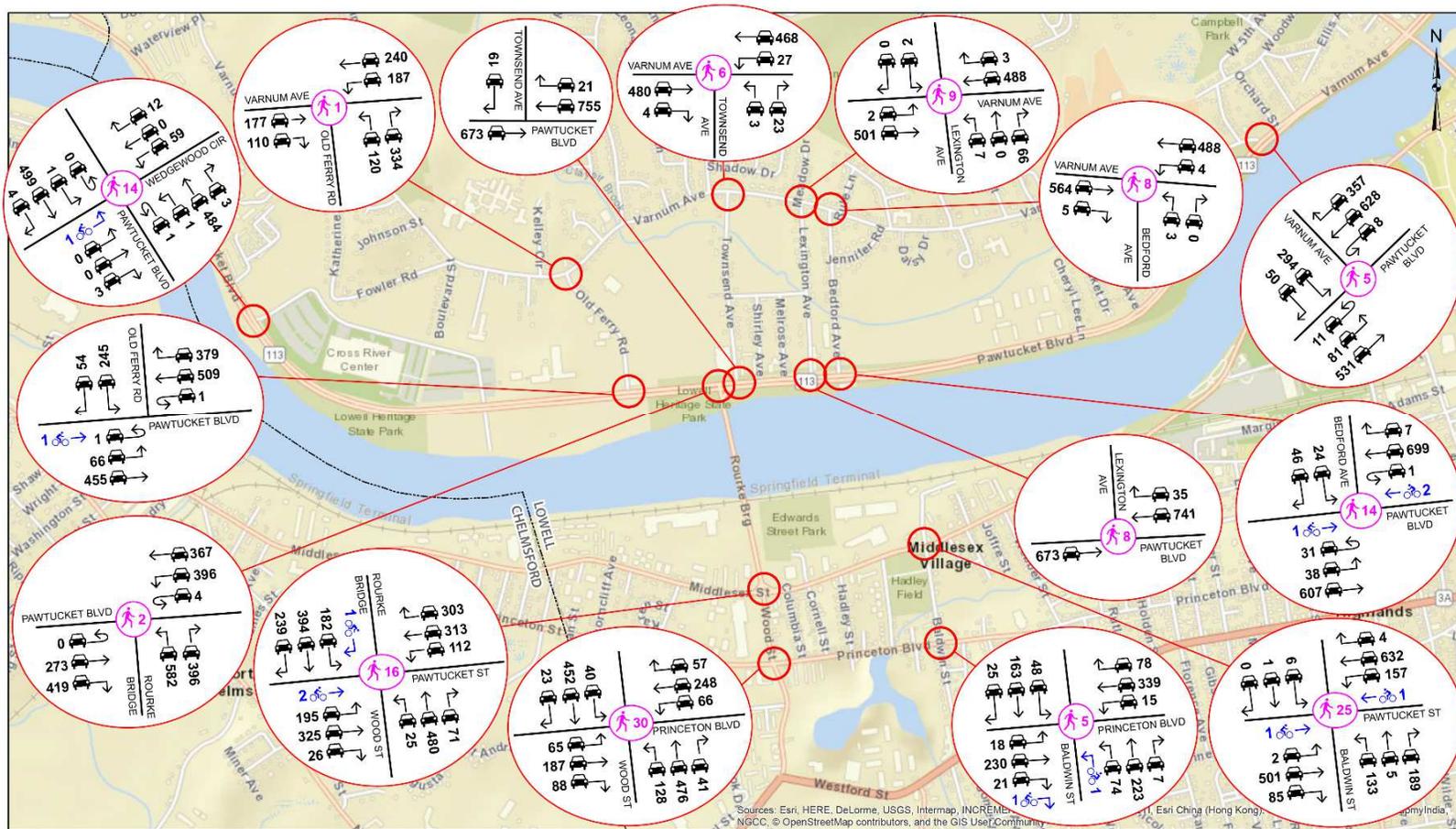
# Traffic Volumes



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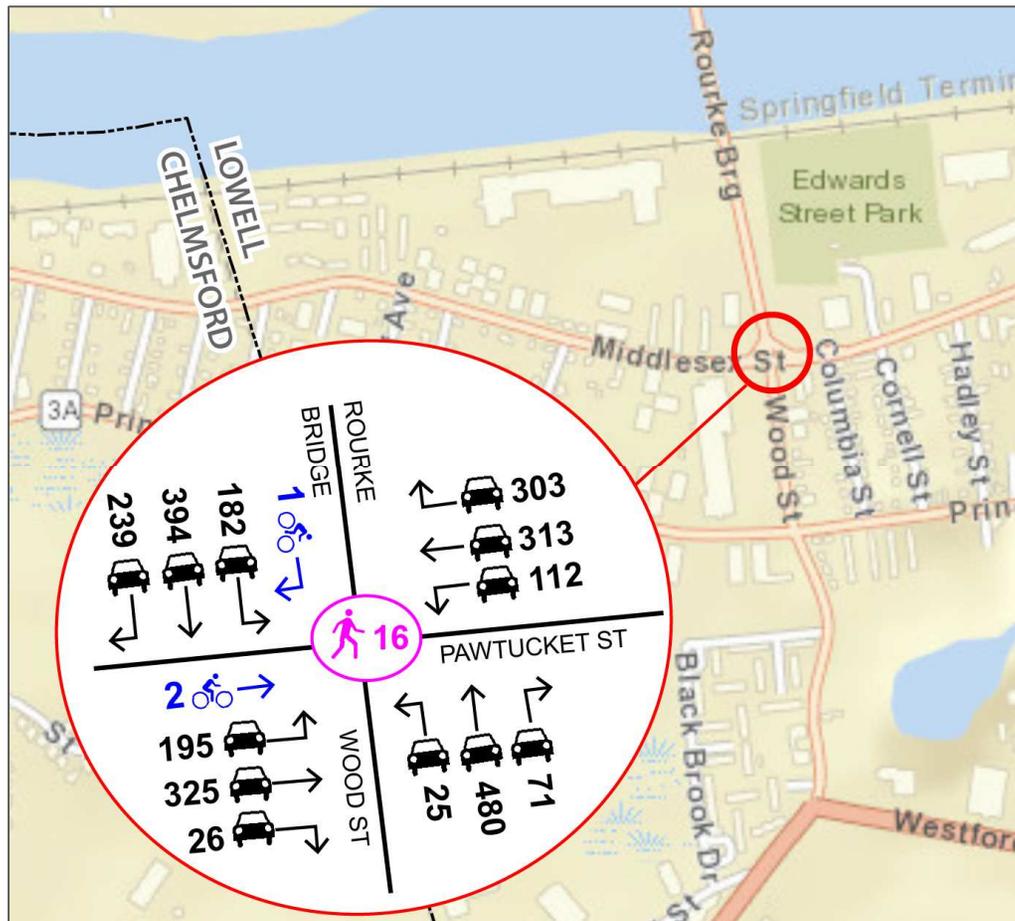
## PM Volume Map for core intersections





# Traffic Volumes

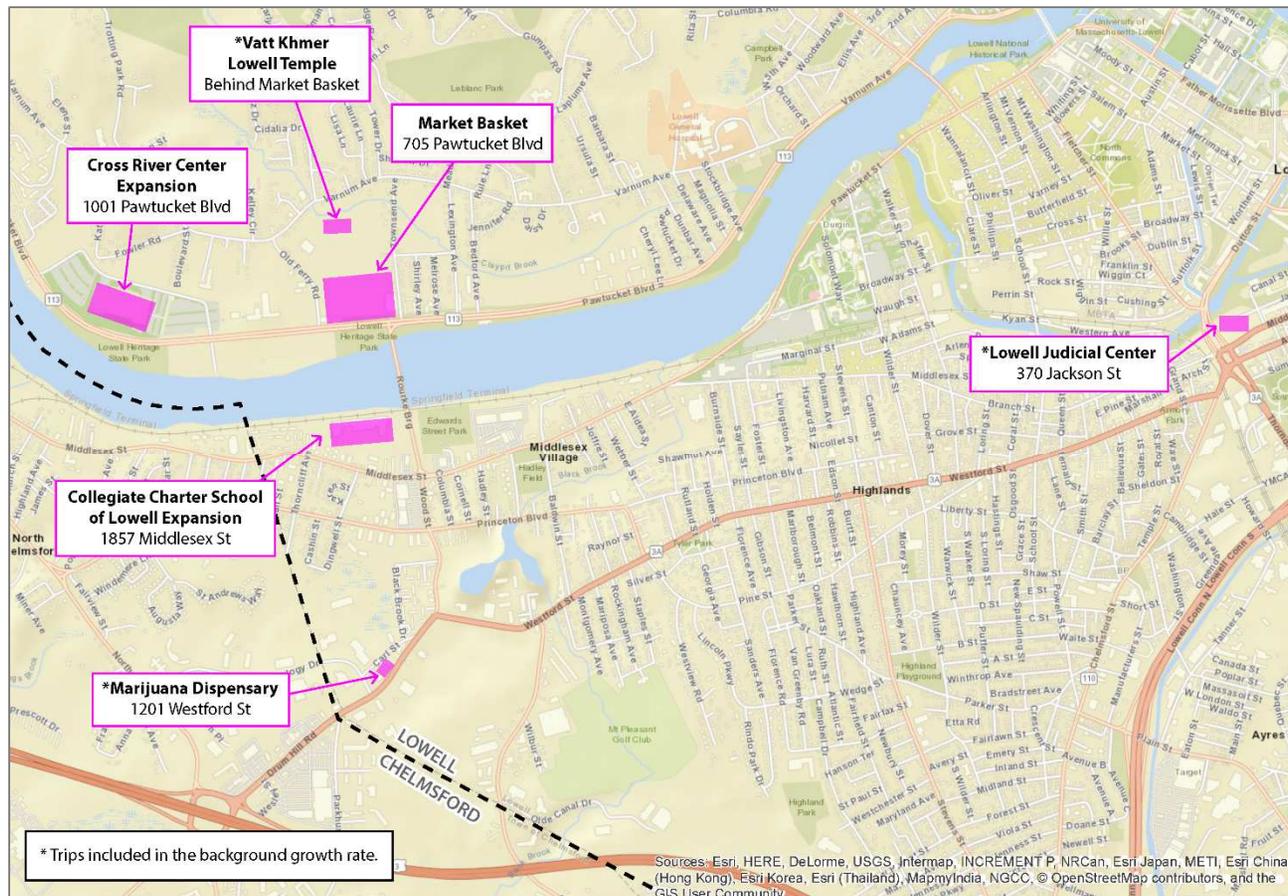
## PM Volume Map for core intersections



# Traffic Volumes



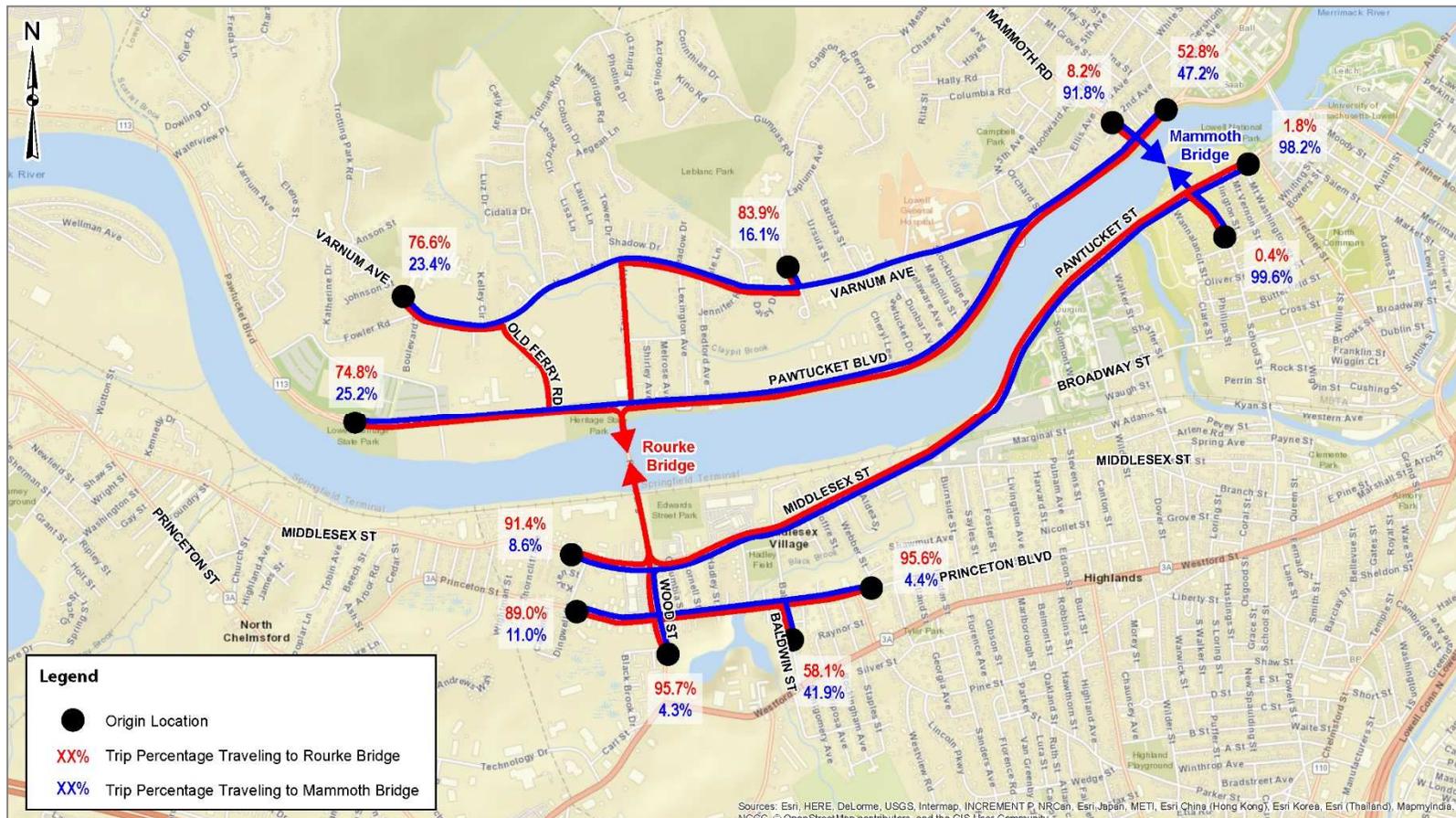
## Identified site traffic generators



# Origin/Destination Study



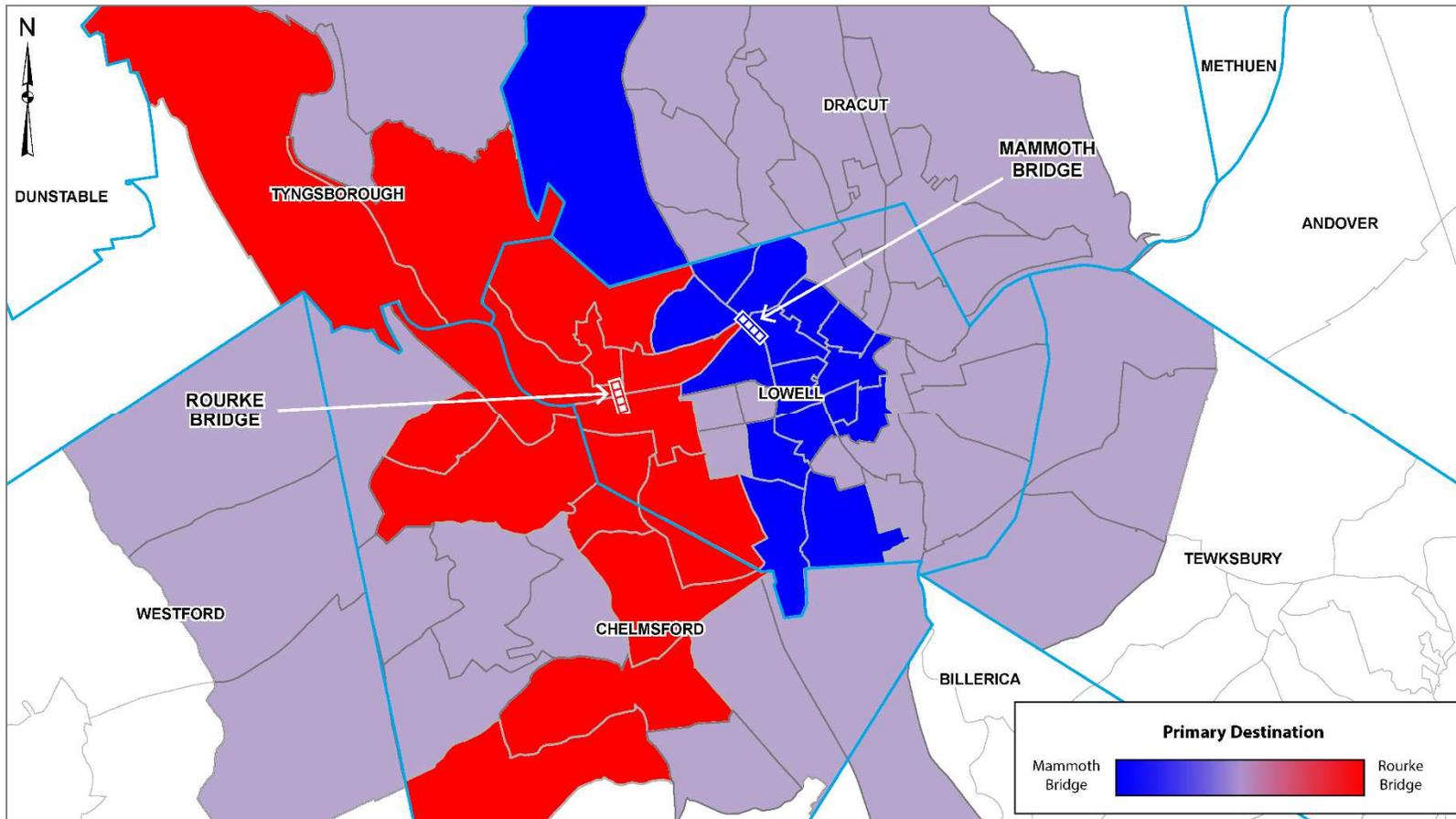
## PM Origin-Destination map



# Origin/Destination Study



- PM Bridge Traffic Zones**



# Public Outreach



**Stakeholder Briefings**

**Continued Partnership with NMCOG**

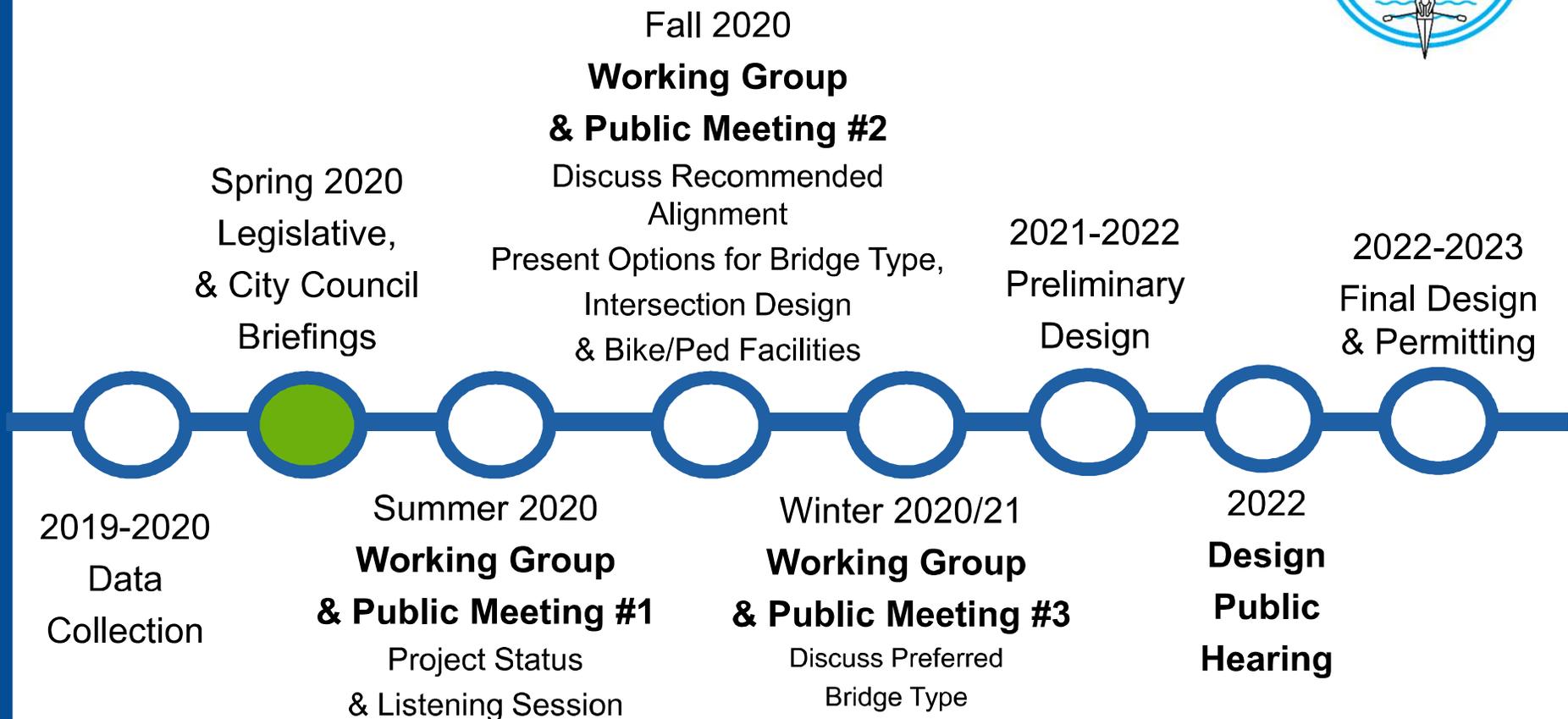
**Presence at Key Community Events**

**Local Working Group** (3 Meetings Planned)

**Public Outreach Meetings** (3 Meetings Planned)

**Ongoing Response to Online Feedback**

# Schedule



# Next Steps



**Public Outreach**

**Noise/Land Use/Mobility Studies**

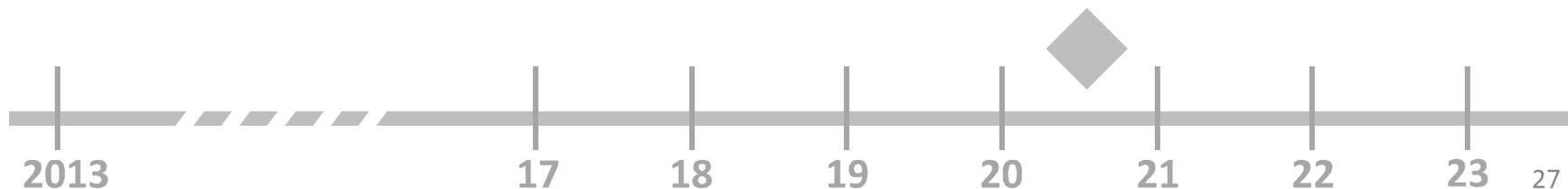
**Traffic Modeling**

**Alignment Concept Refinement**

**Development of Measures of Effectiveness**

**Evaluation of Alternatives**

**Preferred Alignment Recommendation**





# **Thank You!**

**Please provide feedback online  
via the links below:**

<https://www.mass.gov/rourke-bridge-replacement-project>