



**Working Hard...**

**massDOT**  
Massachusetts Department of Transportation



**to Keep You MOVING.**

**massDOT PLAN AHEAD**



# Construction Coordination & Management Planning MassDOT-Highway/MBTA

Joint Board Meeting  
February 12, 2018



# Project Purpose

## *Maintenance and Growth:*

Over **1,000** public and private projects are planned and/or programmed for construction in MA, particularly in Metro-Boston area with an initial focus on 2018-2022

## *The Goal:*

Minimize impacts to communities and the traveling public with effective construction coordination, clear communication, and detailed outreach and mitigation planning.



# Project Approach

## Applying an integrated approach to:

- Data Collection: Collect and analyze transit and highway data to coordinate construction scheduling, messaging and management
- Identify the Impacts: Coordinate construction projects to maximize resources and minimize impacts and costs
- Communications and Outreach Plan: Implement lessons learned and best practices from past projects (Wollaston Station, Callahan Tunnel, Commonwealth Avenue). Develop a **dashboard on our GeoDOT site** with a website resource to communicate and plan current and future construction activity
- Ongoing Coordination: Joint review and management team to develop procedures, update and manage construction activities for the next 3-5 years state-wide.

***Mission Critical:  
Share and build  
off best practices  
and lessons  
learned.***

# Inter-Agency Partnership



- Partnership with all MassDOT departments and divisions
- Coordination with Agencies and Impacted communities
- Four inter-agency working groups:
  - **Data Collection & Analysis**
  - **Resource Planning**
  - **Mitigation Planning**
  - **Communications**
- Weekly Meetings Ongoing



# Working Group Focus

## Data Collection & Analysis

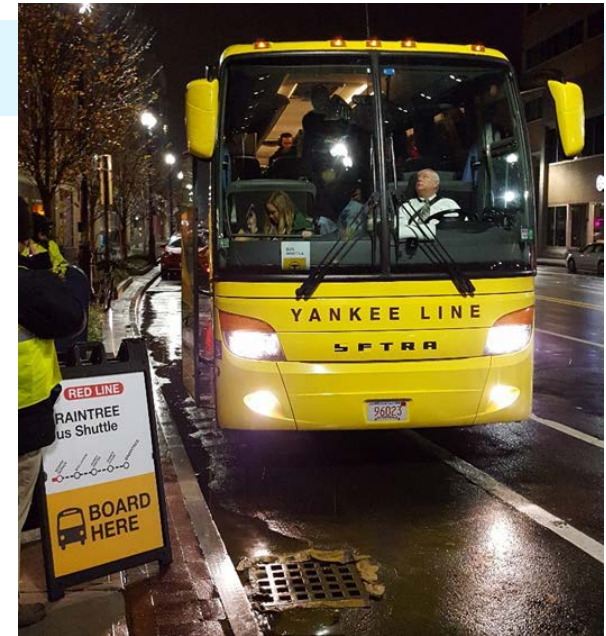
- Geo-Code data, projects profiles and schedules

## Resource Planning

- Identify Hot Spot areas to sequence projects to minimize impacts
- Examine existing plans, needs and capacity to manage construction
- Identify opportunities to share resources to reduce costs

## Mitigation Planning

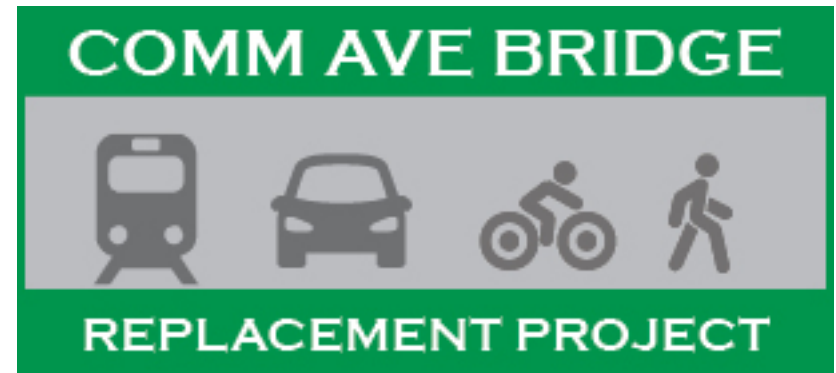
- Build on Best Past Practice
- Use latest technologies and techniques to promote better circulation
- Promote alternative modes: bus, ferry, bike and walking



# Working Group Focus

## Communications

- Coordinate messaging for all outreach materials
- Connect with transit companies and others to advance communications and alternatives
- Partner with municipalities and agencies to effectively engage public
- Launch a specific web site and dashboard



# Stakeholder Outreach & Engagement

- Outreached to State and local agencies to collect data
- Meet with Hot Spot Communities
- Conduct Business, agency, institutions and community advocacy focus group meetings

## Outreach Status Update

Agency	Contacted	Added to Database
MBTA & Commuter Rail	✓	✓
MassDOT (HQ, D3, D4, D5, D6)	✓	✓
Communities (Boston, Quincy, Braintree, Cambridge)	✓	On-going
Other (Massport, DCR, MWRA, Major Utilities, Private Developments)	✓	✓

# Preliminary Project Database

Preliminary project data collected for **1,100 planned projects** with an initial focus on 2018-2022:

- 530 MassDOT Highway
- 225 MBTA / Commuter Rail
- 345 Other

## Project Types

Type	Number	Percent of Total
Roadway	400	36%
Bridge	130	12%
Transit *	225	21%
Ped/Bike	30	3%
Utilities	65	6%
Development	190	17%
Other	60	5%

\*Transit includes 58% Subway, 22% Commuter Rail, 4% Bus, 9% Other and 7% TOD projects.

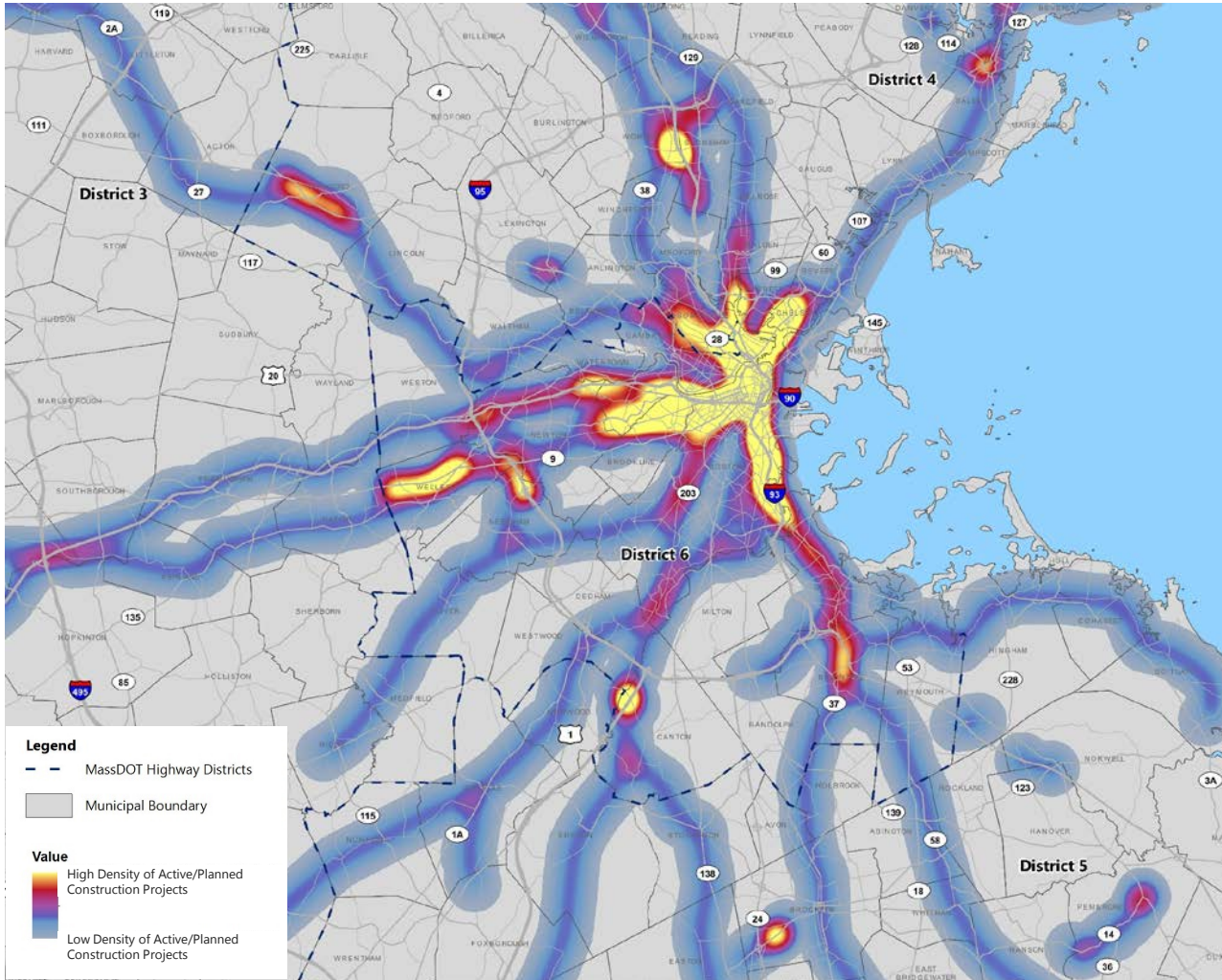
**Projects are able to be filtered (pending availability of data) based on:**

- Anticipated construction year(s)
- Anticipated impacts (capacity reductions, diversions, service interruptions, parking impacts)
- Geographic proximity of projects
- Owner/Proponent & City/Town
- Highway, MBTA and Commuter Rail Projects
- Ad Date, Bid Open Date, Contract Start Date, Completion Date
- Total Construction Cost
- Peak, Non-Peak, Saturday and Sunday time periods
- Resiliency, and more....

*Based on evolving project database using available information from MassDOT, MBTA, DCR, Massport, municipalities, utilities and/or private developments as of February 5, 2018. Database shall continue to be refined and expanded as information is available.*



# Sample 2018 Construction Impacts Heat Mapping As of February 5, 2018



## 2018 Planned Projects – 111 total

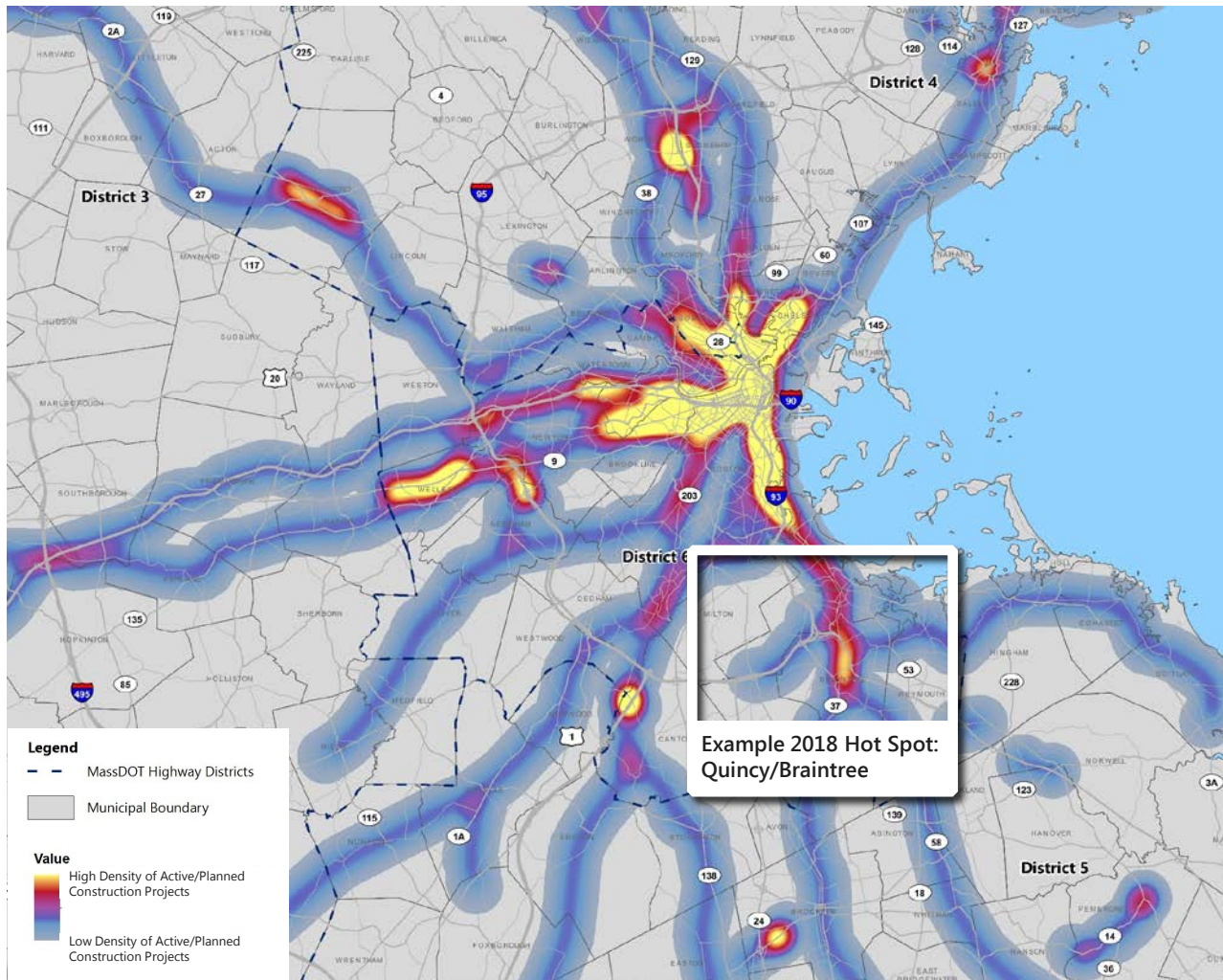
Owner/ Proponent	Number	Percent of Total
MassDOT Highway	44	39%
MBTA	64	58%
Other	3	3%
Project Type	Number	Percent of Total
Roadway	27	24%
Bridge	17	15%
Transit *	65	59%
Ped/Bike	0	0%
Utilities	2	2%
Development	0	0%
Other	0	0%

\*Transit includes 89% Subway, 6% Commuter Rail, 1% Bus and 3% Other projects.

Based on evolving project database using available information from MassDOT, MBTA, DCR, Massport, municipalities, utilities and/or private developments as of February 5, 2018. Database shall continue to be refined and expanded as information is available. Heat map includes projects with active or planned construction in 2018 with projected impacts, including roadway lane closures, transit service disruptions/diversions, and/or parking impacts. As noted above, anticipated construction impact information is not yet available for all projects and heat mapping reflects this missing data.



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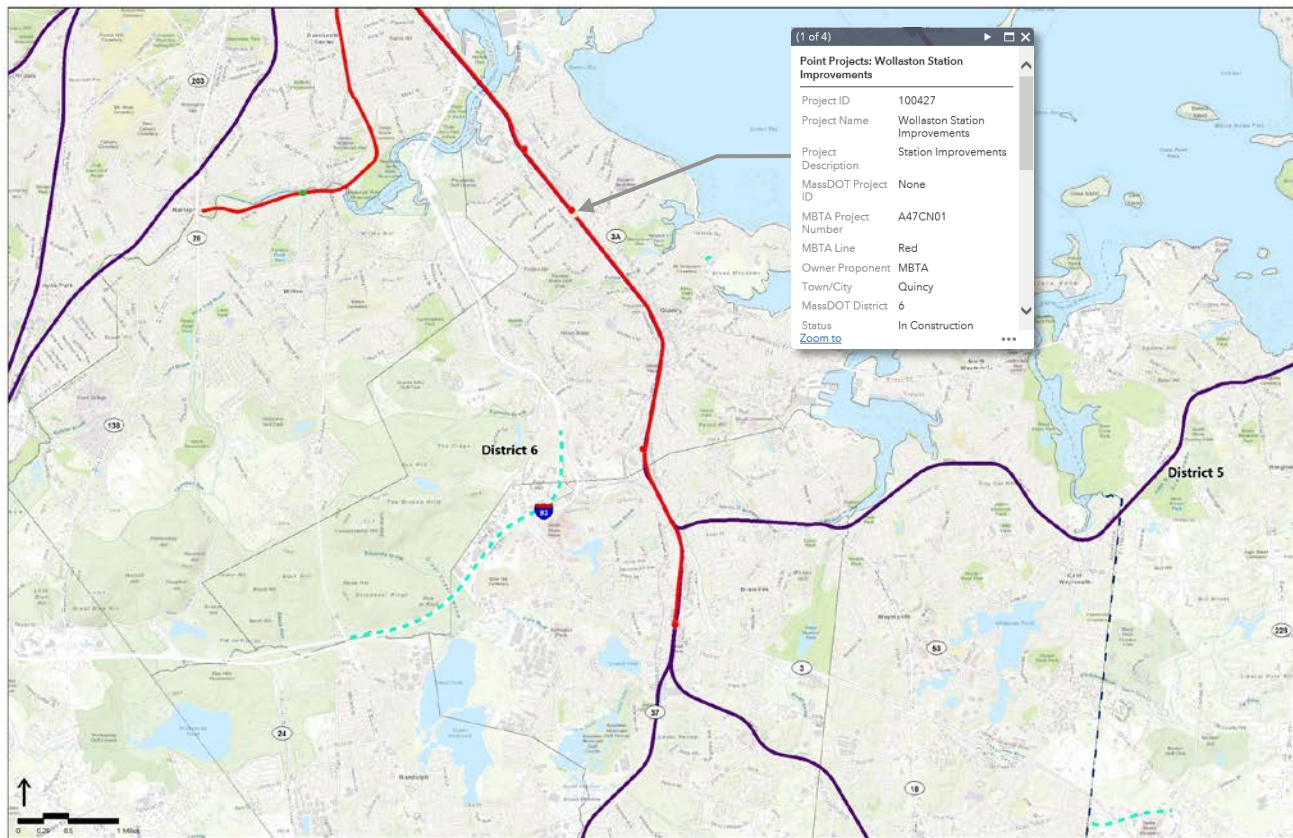
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# 2018 Example Hot Spot: Quincy/Braintree



## 2018 Example Hot Spot: Quincy/Braintree Planned Projects – 14 total

Owner/Proponent	Number	Percent of Total
MassDOT Highway	4	29%
MBTA	10	71%
Other	0	0%

Project Type	Number	Percent of Total
Roadway	3	22%
Bridge	1	7%
Transit *	10	71%
Ped/Bike	0	0%
Utilities	0	0%
Development	0	0%
Other	0	0%

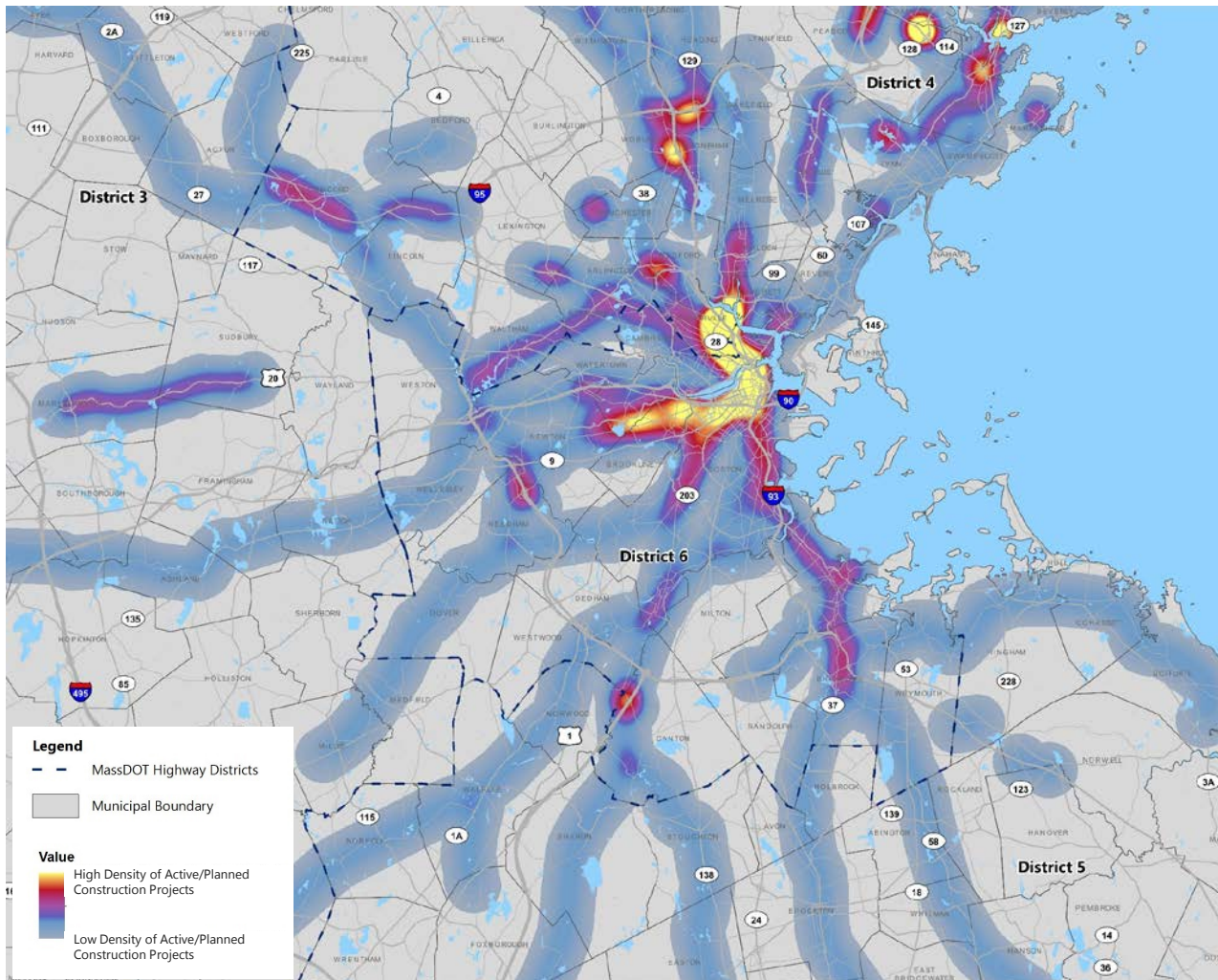
\*Transit includes 70% Subway, 10% Commuter Rail, and 20% Other projects.

- MassDOT Highway Districts
- DCR
- Town/City
- Orange Line
- - - Utility
- Commuter Rail
- Municipal Boundary
- Utility
- Private
- Red Line
- - - MassDOT
- Blue Line
- MWRA
- Commuter Rail
- Silver Line
- - - Town/City
- Green Line
- MassDOT
- Blue Line
- Other/Variou
- - - Private
- Orange Line
- Massport
- Green Line
- Red Line

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# Sample 2019-2022 Construction Impacts Heat Mapping As of February 5, 2018



## 2019-2022 Planned Projects – 134 total

Owner/ Proponent	Number	Percent of Total
MassDOT Highway	55	41%
MBTA	69	52%
Other	10	7%
Project Type	Number	Percent of Total
Roadway	41	31%
Bridge	17	13%
Transit *	69	62%
Ped/Bike	4	3%
Utilities	3	2%
Development	0	0%
Other	0	0%

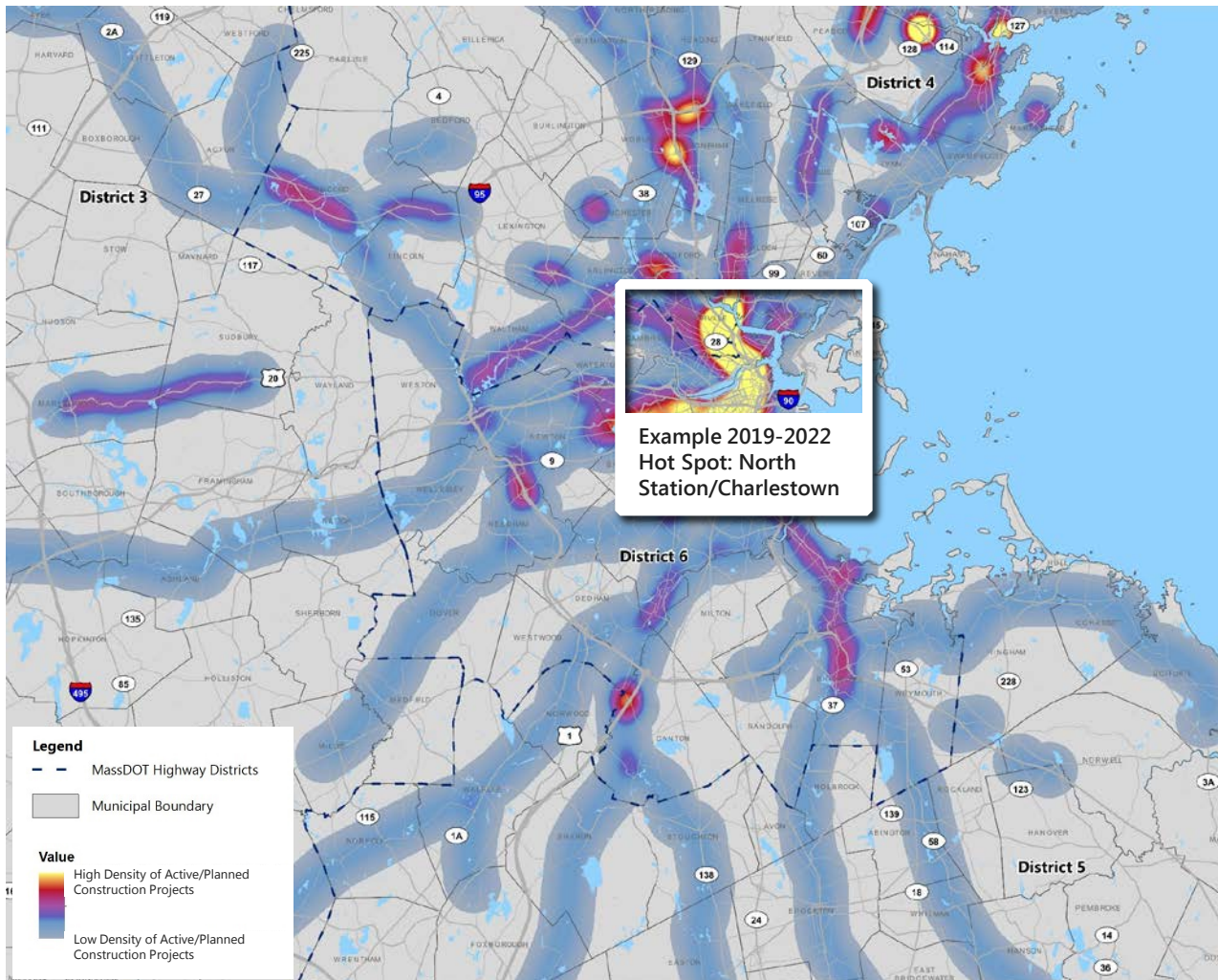
\*Transit includes 91% Subway, 7% Commuter Rail and 2% Other projects.

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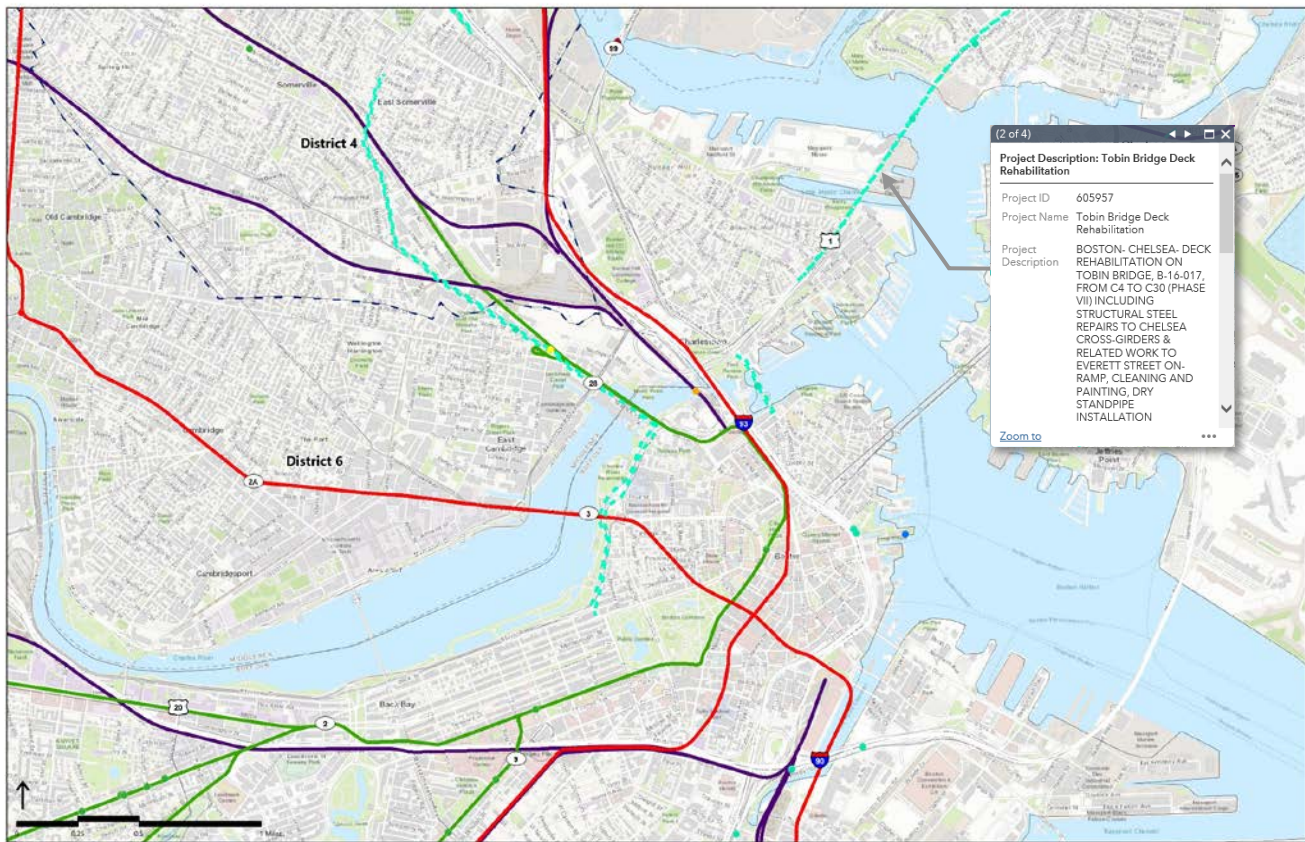
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# 2019-2022 Example Hot Spot: North Station/Charlestown



- MassDOT Highway Districts
- DCR
- Town/City
- Orange Line
- - - Utility
- Commuter Rail
- Municipal Boundary
- Utility
- Private
- Red Line
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- Silver Line
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## 2019-2022 Example Hot Spot: North Station/Charlestown Planned Projects – 31 total

Owner/Proponent	Number	Percent of Total
MassDOT Highway	10	32%
MBTA	19	61%
Other	2	7%

Project Type	Number	Percent of Total
Roadway	8	26%
Bridge	4	13%
Transit *	19	61%
Ped/Bike	0	0%
Utilities	0	0%
Development	0	0%
Other	0	0%

\*Transit includes 95% Subway and 5% Commuter Rail projects.





# Next Steps

- Zoom in on Hot Spot Areas, update project list and delineate impacts.
- Identify construction overlaps, neighborhood impacts, degree of mobility impacts, and opportunities for implementing mitigation opportunities.
- Meet with local business groups and municipalities to address potential mitigations and ideas for alternatives.
- Develop integrated IT/DOT communications plan for public outreach on planned construction activities and commuting/travel options.

