

ACEC/MA Meeting

Carrie Lavallee, P.E.
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MassDOT Highway Division

December 19, 2024

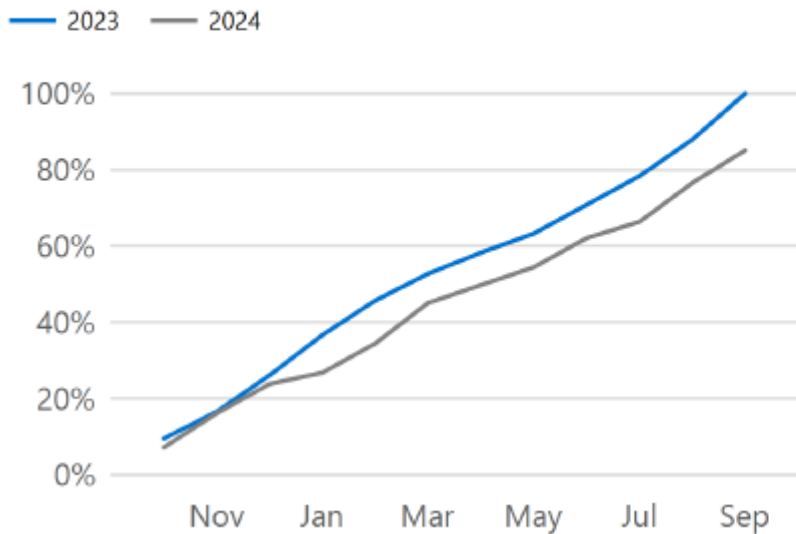


2024 In Review

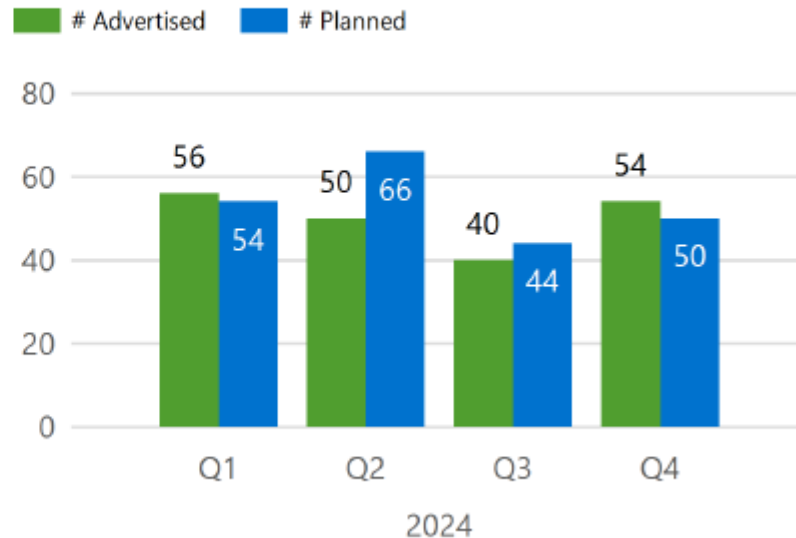
Successful Delivery of FFY 2024 advertisement program

- 200 total projects vs 214 Planned/Programmed (93.5%)
 - Fed Aid: 87 STIP
 - NFA: 113 Non-STIP
- 89.7% of the Original STIP delivered (87 vs 97 Original)
 - 10 amended off
- On-time performance was 85.5%

Progress through 9/27/2024

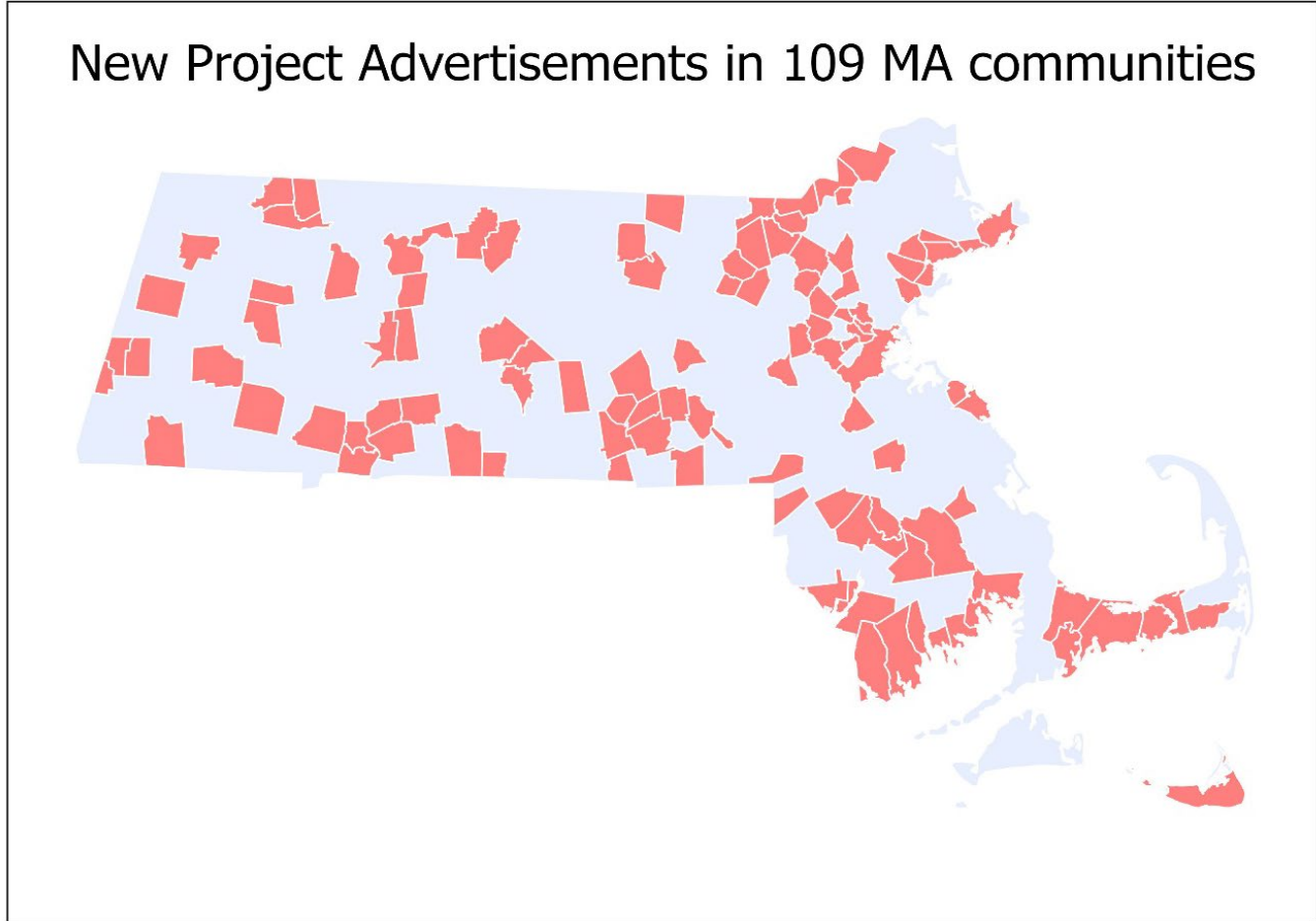


Ads By Quarter thru 9/27/2024



Projects advertised by type, location

Program	# Projs
Bridge	74
Roadway Improvements	42
Safety Improvements	17
Roadway Reconstruction	17
Intersection Improvements	13
Non-Interstate Pavement	12
Facilities	7
Interstate Pavement	6
ADA Retrofits	5
Bicycle and Pedestrian	3
Safe Routes to School	3
Intelligent Transportation Systems	1
Tunnels	1
	201



Sumner Tunnel



Sumner Tunnel Restoration Project reached substantially complete status on October 7th .

The schedule allowed for an additional five weekend closures that would have continued into mid-November but are no longer required.

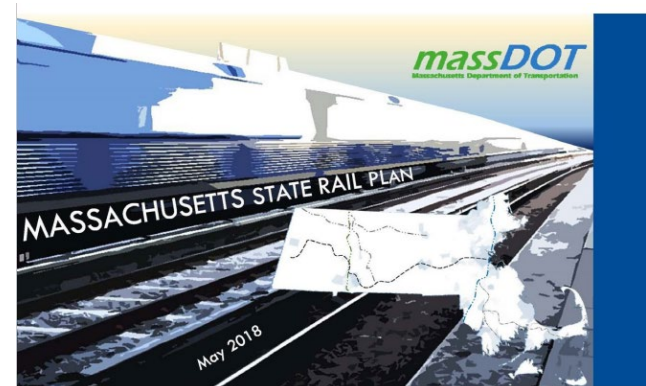
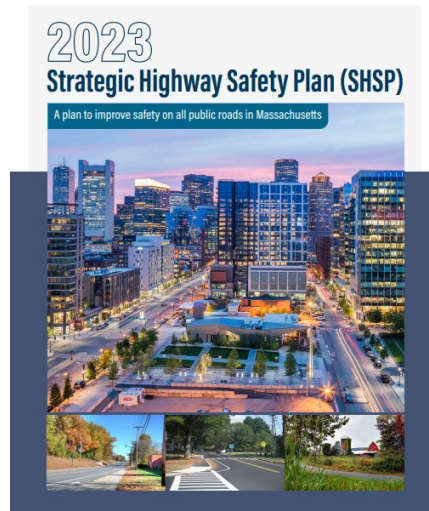
Remaining work will be finished under normal off-peak operations and will wrap up in the next few weeks.

By the Numbers-

- **13,516** square yards of concrete roadway was rehabilitated
- **4,307** tons of asphalt paving was laid
- **420** linear feet of granite curbing was replaced
- **69** new drainage inlets were installed
- **16,5000** square feet of fireboard was installed
- **735** precast arch segments and **146** precast ceiling slabs were installed
- **502** new light fixtures installed
- **42,800** linear feet of conductor installed
- **24,000** linear feet of fiber optic cable installed

MassDOT Strategic Planning

- Planning at the program or project level
- MassDOT Office of Transportation Planning (OTP) integrates parallel planning efforts
- Guided by strategic planning documents
- Continuous improvements to stakeholder engagement



Modernization Programs

Working toward the vision of safety, mobility, and resiliency in our infrastructure

PRIORITIES → PROGRAMS → PROJECTS

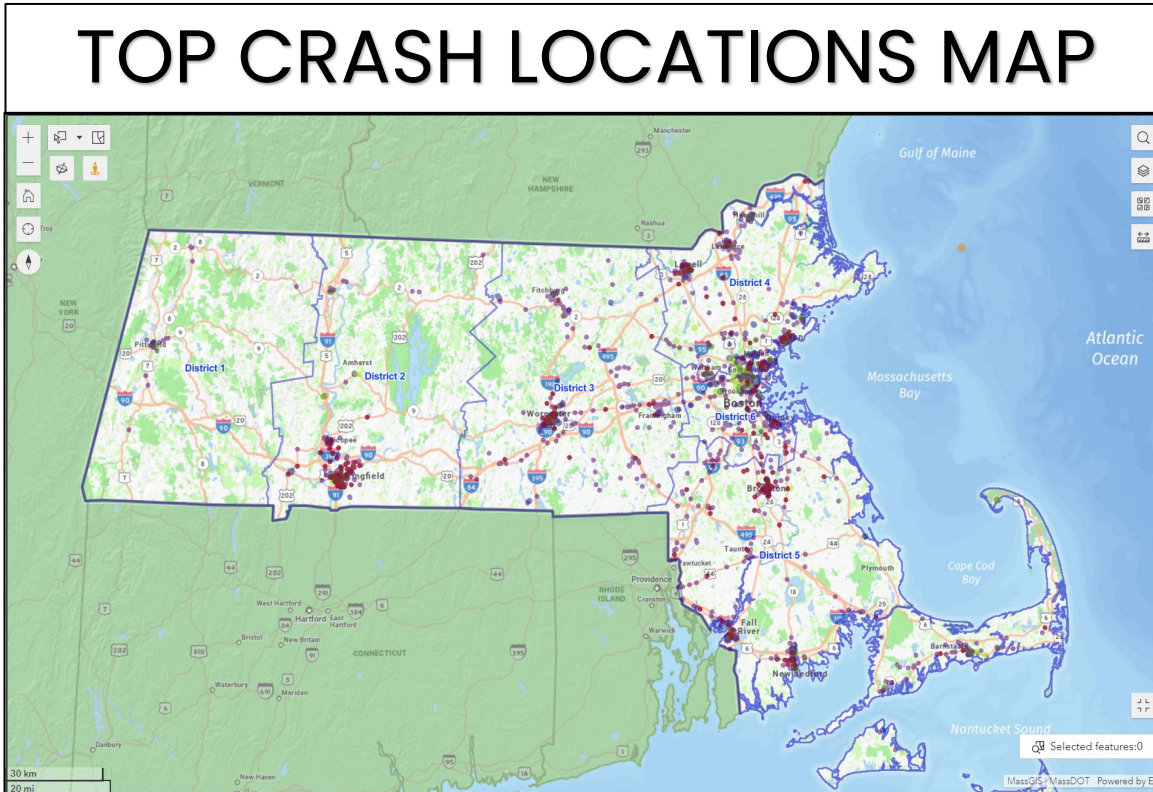
MODERNIZATION

- **Safety**
- **Intersections**
- Roadway Reconstruction
- Resiliency
- Safe Routes to Schools
- Shared Use Paths / Trails
- Bicycle and Pedestrian
- Accessibility
- Non-interstate pavement
- Interstate pavement
- Bridge Replacement/Rehabilitation
- Bridge Preservation
- Intelligent Transportation Systems



Intersection Improvement Projects

Standalone intersection reconstruction projects following a data-driven approach



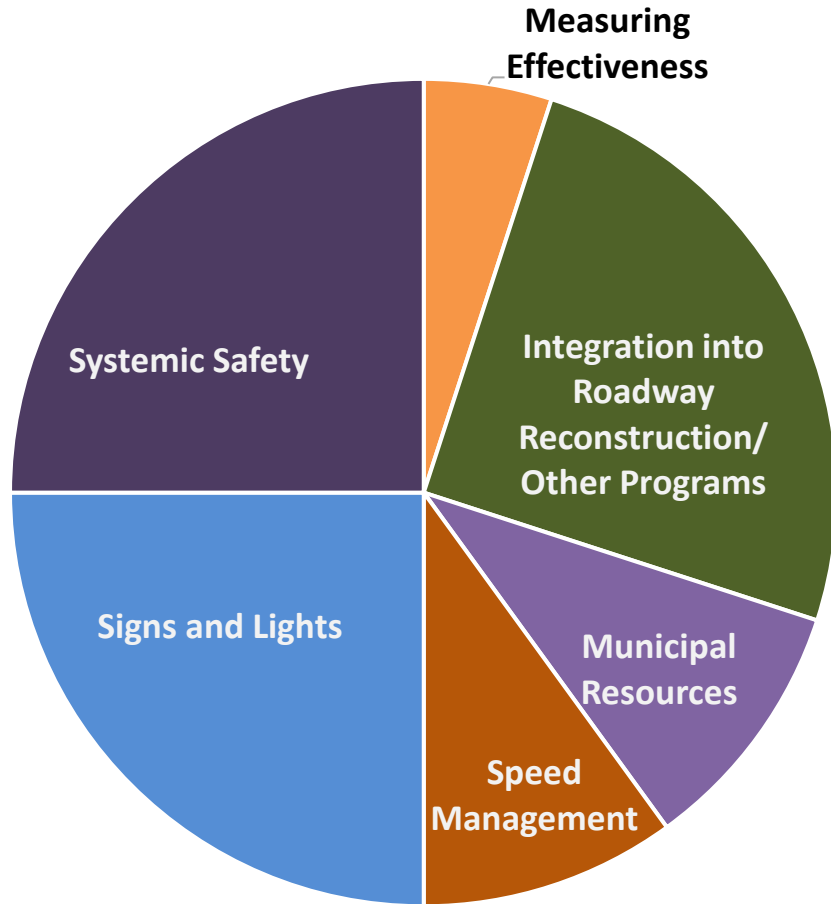
20 intersection projects: \$130 million total

- Crash data to identify top intersections
- Input from Metropolitan Planning Organizations, highway districts and municipalities
- Road Safety Audits



Safety Improvement Projects

Identify and mitigate risks to reduce fatal and injury crashes



Program Vision*

Not to scale

- Funds systemic safety and sign upgrade projects, as well as integration into other existing projects.
- Projects have been advanced to follow other federal safety programs including High Risk Rural Roads & Everyday Counts (EDC).
- **31 safety projects: \$117 million total**
- Past safety projects include: deployment of wrong-way driver countermeasures, mile-based exiting & curve warning sign upgrades, cable barrier installation, assisting municipalities with safety-related equipment procurement, signs, and lighting projects

2024 Municipal Programs

- **Complete Streets Funding Program** awarded approximately \$5M to 12 communities and expects another round of awards late January.
- **Shared Streets and Spaces Funding Program** awarded 28 communities and 2 Regional Transit Authorities a total of \$6.5M in 2024. This program is accepting applications for FY25 until January 13.
- **Municipal Pavement Program** awarded \$50M in calendar year 2024. This awards two rounds funding (FY25 and FY26) serving 45 municipalities and 51 roadway segments across the commonwealth.
- **Municipal Small Bridge Program** awarded 36 bridges, totaling approximately \$10.35M. This can be broken down into 30 Phase 1 (design) awards totaling \$7.5M and 6 Phase 2 (construction) awards totaling \$2.85M in FY24. This program is accepting applications for FY25 until February 3.
- **Local Bottleneck Reduction Program** is expecting to announce awards late January.









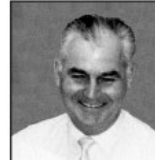










New Project Info Release 1 Introduction

MassDOT Bridge Manual – 100th Edition

1920 MassDOT Bridge Section 2020 Celebrating One Hundred Years

 <p><i>W.F. Williams</i> BRIDGE ENGINEER William F. Williams Nov. 1920 – Dec. 1922</p>	 <p><i>G.E. Harkness</i> BRIDGE ENGINEER George E. Harkness Nov. 1924 – Jan. 1942</p>	 <p><i>R.O. Spofford</i> BRIDGE ENGINEER Ralph O. Spofford Jan. 1942 – Feb. 1951</p>	 <p><i>J.C. Rundlett</i> BRIDGE ENGINEER John C. Rundlett Mar. 1951 – Dec. 1956</p>	 <p><i>S. Kirshen</i> BRIDGE ENGINEER Simon Kirshen Dec. 1956 – Jan. 1958</p>
 <p><i>J.H. Kane</i> BRIDGE ENGINEER James H. Kane Feb. 1958 – Feb. 1963</p>	 <p><i>J.F. McGovern</i> BRIDGE ENGINEER John F. McGovern Feb. 1963 – Dec. 1965</p>	 <p><i>R.J. McDonagh</i> BRIDGE ENGINEER Robert J. McDonagh Dec. 1965 – Jul. 1971</p>	 <p><i>J.J. Aherne Jr. P.E.</i> BRIDGE ENGINEER John J. Aherne Jul. 1971 – Dec. 1981</p>	 <p><i>Robert V. Costello P.E.</i> BRIDGE ENGINEER Robert V. Costello Jan. 1982 – Jun. 1987</p>
 <p><i>Thomas A. Eddlem</i> BRIDGE ENGINEER Thomas A. Eddlem Jun. 1987 – Nov. 1988 (Acting)</p>	 <p><i>Paul J. Sullivan</i> BRIDGE ENGINEER Paul J. Sullivan Nov. 1988 – Mar. 1991</p>	 <p><i>Joseph P. Gill P.E.</i> BRIDGE ENGINEER Joseph P. Gill Mar. 1991 – Nov. 1994</p>	 <p><i>Arthur C. Daiopoulos</i> BRIDGE ENGINEER Arthur C. Daiopoulos Nov. 1994 – Mar. 1995 (Interim)</p>	 <p><i>Alexander K. Bardow</i> BRIDGE ENGINEER Alexander K. Bardow Mar. 1995 –</p>

Massachusetts State Bridge Engineers 1920-2020

Project Development & Design Guide

Home > Massachusetts Department of Transportation > Highway Division > MassDOT Highway Project Management and Design

OFFERED BY Highway Division | Massachusetts Department of Transportation

MANUAL

MassDOT Project Development and Design Guide

This guide serves as a national model for developing context-sensitive, community-friendly road and bridge projects.



ORGANIZATION: [Highway Division](#)
[Massachusetts Department of Transportation](#)

DATE PUBLISHED: October 4, 2023

Overview

The purpose of the Project Development and Design Guide (PDDG) is to define the Massachusetts Department of Transportation (MassDOT) Highway Division's project development process and guide the planning and design of transportation projects. The PDDG's intended audience includes planners, designers, practitioners, and decision makers.

The previous edition of the PDDG, published in 2006, expanded MassDOT's framework for incorporating context-sensitive design and multimodal elements into transportation improvement projects. This edition of the PDDG expands on those elements and formally incorporates process changes and guidance revisions that have occurred since 2006. **MassDOT is actively updating the 2006 edition's content and modernizing the PDDG to a web-based format to aid the ease and regularity of future updates.** Updated chapters are published in this new web-based format. For chapters currently undergoing updates, the 2006 edition is temporarily posted to that chapter's web page.

Engineering Directive E-24-004

Supersedes:

- **E-06-001** – Massachusetts Highway Department Project Development and Design Guidebook, 2006 Edition
- **E-14-002** – Minimum Length of Horizontal Curves
- **E-21-002** – Pre-25% Design Scoping Procedure



Number: E-24-004
Date: 10/17/24

ENGINEERING DIRECTIVE

Carrie Lavallee, P.E. (signature on original)

CHIEF ENGINEER

MassDOT Highway Division Project Development and Design Guide Active Update Edition

This Engineering Directive formally announces changes to the *MassDOT Highway Division Project Development and Design Guide* (PDDG) and provides direction on the appropriate use of the PDDG for new and existing projects.

Starting in October 2023, MassDOT began to update elements of the 2006 Edition of the PDDG by posting revised chapters on mass.gov. Eventually, all chapters of the 2006 Edition of the PDDG will be updated and converted to a web-based format. The web-based version of the PDDG will be actively updated and will be used on all transportation projects where one or more of the following conditions exist:

- MassDOT is the proponent
- MassDOT is responsible for project funding (state or federal-aid projects)
- MassDOT controls the infrastructure (projects on state highways)

Latest Chapter Status

Chapter		PDDG Phase 1 Update - Status				
		Under Development	Under Review by Chief's Office	Under Review by FHWA	In Publication Process	Published
1	Introduction					
2	Project Development					
3	Basic Design Controls					
4	Horizontal and Vertical Alignment					
5	Cross-Section and Roadside Elements					
6	Intersection Design					
7	Interchanges					
8	Drainage and Erosion Control					
9	Pavement Design					
10	Bridges					
11	Shared Use Paths and Greenways					
12	Intermodal Facilities and Rest Areas					
13	Landscape Design					
14	Wildlife Accommodation					
15	Access Management					
16	Traffic Calming and Traffic Management					
17	Work Zone Management					
18	Plans, Specs, and Estimates					

Look Ahead: FY2025 Program

- FFY 2025 Fed Aid AD program (\$1,119,930,000)

• 82 total projects	By #	(%)	By \$	(%)
• Q1	16	19%	\$307,710,000	27%
• Q2	15	18%	\$195,330,000	17%
• Q3	21	26%	\$238,230,000	21%
• Q4	30	37%	\$407,500,000	35%

- FFY 2025 Non-Fed Aid AD program (\$311,860,000)

• 102 total projects	By #	(%)	By \$	(%)
• Q1	38	37%	\$116,870,000	37%
• Q2	35	34%	\$93,820,000	30%
• Q3	23	23%	\$63,500,000	21%
• Q4	6	6%	\$37,680,000	12%

Total FY25 AD Program \$1,431,790,000

MassDOT Innovation Conference



May 6-7, 2025

DCU Center
Worcester, MA

[MassDOTInnovation.org](https://www.massDOTInnovation.org)

Thank You

