2024 Triennial Inspection of the Metropolitan Highway System

March 12, 2025



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Report Background





The report satisfies a requirement of the MHS Trust Agreement for regular inspection of the system.

- Independent verification of inspections
- Visual Inspection of MHS assets not inspected since the previous triennial inspection
- Research for records of work done since the previous Triennial
- Research for records of planned projects
- Estimation of costs necessary to repair or maintain the MHS through 2034



Recommendation structure

Timeline for recommendations:

- Short Term (1–5) FY2025 through FY2029
- Long Term (6-10) FY2030 through FY2034

Cost Development based on full life cycle approach

- Inspection
- Maintenance
- Rehabilitation
- Replacement





Scope

- Bridges and Culverts
- Buildings
- Communication Facilities
- Park
- Pavement
- Pump Stations
- Roadway and Interchanges
- Sign Structures
- Tunnels and Boat Sections
- Walls
 - Concrete Retaining
 - Metal Bin
 - Noise Barrier



Figure 1: Metropolitan Highway System Transportation Networks



Summary of recommendations

- 10-year investment is consistent in magnitude to 2021 report, (2021 \$1.83B, 2024 \$1.95B)
- By asset class, building and roadway needs have remained consistent, tunnel/boat sections have decreased, and bridge needs have increased
- 25-29 Capital Investment Plan forecasts approximately \$938M in MHS investment





Tunnels



Significant recommendations for tunnel investment include rehabilitation of the Central Artery North Area Tunnel (programmed) and Callahan Tunnel (design initiated).

MassDOT is advancing large, system-wide tunnel preservation project this spring



Bridges

Increased bridge needs are a result of additional deterioration of poor condition bridges along the Turnpike Extension, exclusive of bridges within Newton/Weston and Allston interchanges.







- Staff are reviewing triennial recommendations for prioritization of MHS maintenance program
- Recommendations will also be considered in upcoming 26– 2030 Capital Investment Plan
- The Office of Transportation Planning will be issuing a Request For Proposals to develop a Resiliency Framework for the Metropolitan Highway System



ThankYou

