Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbits-Nutt, Secretary and CEO
Jonathan L. Gulliver, Highway Administrator

massDOT
Massachusetts Department of Transportation
Highway Division

September 30, 2024

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act Office
Attn: Tori Kim, MEPA Director
100 Cambridge Suite, Suite 900
Boston, MA 02114

RE: MEPA Climate Resiliency Policy (Straw Proposal)

Dear Director Kim,

The Massachusetts Department of Transportation (MassDOT) is pleased to provide comments on the Massachusetts Environmental Policy Act (MEPA) Office's straw proposal regarding potential updates to the current 2021 MEPA Interim Protocol on Climate Change Adaptation and Resiliency (2021 Interim Protocol). The proposed changes include additional minimum analyses using the MA Climate Resilience Design Standards Tool (RMAT Tool) outputs, along with providing associated justifications or mitigation measures. MassDOT appreciates the opportunity to comment on MEPA's straw proposal and, as outlined below, hopes that MEPA's updated resiliency policy will allow for a flexible approach to resiliency in recognition of the unique challenges associated with linear project corridors that contain limited vegetation cover and necessary impervious area. MassDOT proposes that its ongoing resiliency efforts be considered to satisfy these requirements. This would allow for a consistent approach and evaluation on all our projects and not just those subject to MEPA review.

As an agency responsible for more than 9,500 roadway miles, over 5,000 bridges, and numerous culverts, pedestrian, transit, and bicycle facilities, MassDOT values the MEPA Office's emphasis on resiliency, which aligns with our mission to provide safe, reliable, robust and resilient transportation infrastructure. Our commitment to resilient infrastructure is demonstrated by the recent publication of MassDOT's Resilience Improvement Plan (RIP) which received approval from the Federal Highway Administration (FHWA) —an achievement shared by only a few DOTs. The RIP reflects the Commonwealth's proactive approach to planning for and mitigating damage from extreme weather events and anticipated climate change impacts. It outlines MassDOT's systematic efforts to incorporate and enhance resilience across various project development stages, integrating considerations related to extreme weather and climate change into both immediate and long-range planning activities. The development of the RIP provides MassDOT additional federal funding for resilience through the Promoting Resilient Operations for Transformative, Efficient and Cost-Saving Transportation (PROTECT) program.

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MassDOT is currently using the RMAT Tool as part of the MEPA filing process per the 2021 Interim Protocol. The RMAT Tool has been beneficial during design development as a way to screen for climate hazard exposure over the useful life of a proposed project. However, MassDOT has identified some challenges in using the RMAT Tool for project considerations that go beyond an initial screening, including:

- Exposure inherently varies geographically, and many MassDOT projects are long and linear, with variable conditions. The RMAT Tool's three-square mile limit in polygon size is still too large to capture site-specific nuances, and as a result, the preliminary exposure score and rationale does not always apply to the entire project corridor.
- Projects that receive a High Exposure score to a climate hazard will always receive a High Risk Rating for that hazard. Individual project assets may receive unique risk ratings based on their type and level of exposure (e.g. an at-grade shared use path may be at higher risk of coastal flooding compared to an elevated boardwalk). These risk ratings are determined by the Asset Criticality/Overall Project Exposure Relationship Matrix which underlies the RMAT Tool.[1] Factors that inform risk should consider both site-specific information and the larger context of built, social, and natural environments, not just exposure.
- The RMAT Tool and supporting documentation note "*The Preliminary Climate Exposure and Risk Screening outputs are not intended for final opinions for site suitability, regional coordination, capital planning, permitting and/or construction*," so additional evaluations of environmental conditions are required.[2] Due to constraints for transportation projects and the data used for the RMAT Tool,[3] MassDOT's approach to resiliency aligns with the original intent of the RMAT Tool where the RMAT Tool output, site specific considerations and subject matter experts are utilized to define the best approach for each specific project location.

While the straw proposal provides the benefit of standardizing requirements and expectations for analyses, resiliency for transportation projects cannot be a one size fits all approach for each project. Rather than using the RMAT Tool recommendations as a design standard, MassDOT urges the MEPA Office to take a more holistic approach for MassDOT projects that equally considers resiliency strategies such as adaptive management or designing and preparing for rapid infrastructure recovery. For example, the Bipartisan Infrastructure Law defined resilience for a project *"as a project with the ability to anticipate, prepare for, or adapt to conditions or withstand, respond to, or recover rapidly from disruption."* This definition promotes a flexible approach to building resilience, which is a key component of MassDOT's RIP. As documented in the RIP (Appendix 2), MassDOT is working to develop screening criteria and resiliency guidance with a focus on proactively screening for climate hazards and incorporating resiliency measures early in the design process. This would occur prior to the MEPA process, as waiting until that

[1] SECTION 3: PRELIMINARY CLIMATE EXPOSURE & RISK SCREENING: Refer to Table 3.4. Preliminary Climate Risk Rating Relationship Matrix (based on Overall Project Preliminary Exposure Score & Asset Criticality Score)

[2] SECTION 3: PRELIMINARY CLIMATE EXPOSURE & RISK SCREENING: Refer to Section 3.3 Limitations.

[3] SECTION 4: CLIMATE RESILIENCE DESIGN STANDARDS: "This is not a regulatory tool and is intended to provide a basis-of-discussion and point of reference for planning, early design, and evaluation that is standardized across the Commonwealth."

stage often is too late in the design. The screening criteria and resiliency guidance will address highway-specific constraints and considerations, acknowledging the distinct challenges posed by linear project corridors with limited vegetation cover and essential impervious areas. This initiative directly aligns with action items identified for MassDOT in the 2018 State Hazard Mitigation and Climate Adaptation Plan (SHMCAP) and the 2023 SHMCAP Update: ResilientMass Plan.

MassDOT respectfully requests that, instead of mandating additional analyses regarding compliance with RMAT Tool recommendations, MEPA consider allowing MassDOT to leverage our ongoing resiliency initiatives to fulfill this proposed requirement. This would mitigate potential design and scope impacts at a late design stage, providing consistency in approach for all MassDOT projects regardless of if they are subject to MEPA review or not and eliminating different procedures for projects that exceed a MEPA threshold. Drawing inspiration from the Massachusetts Department of Environmental Protection's (MassDEP) regulatory approach, we propose highway-specific guidance appropriate for linear project corridors that aligns with our commitment to resilience and allows for flexibility. This ongoing effort will evolve over time as MassDOT navigates process updates and strikes a balance between resilience improvements, recovery measures, project scope, schedule, and costs. Progress and updates can be reported and tracked in future SHMCAP updates and in individual MEPA filings for MassDOT projects.

We welcome the opportunity to engage in further discussions with MEPA to share details about our proposed work and explore collaborative solutions.

Sincerely,

Carrie Lavallee

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Deputy Administrator and Chief Engineer