

Boston Region MPO Project Inclusion in MassDOT RIP

MPO REG. ON	MUN. C/PALTY	MUNICIPALITY	MASSDOT PROJ. CT. NUMBER	FAPPL. CABLE	MASSDOT DISTRICT	PROJECT DESCRIPTION	PURPOSE AND NEED	HAZARD #1 ADDRESSED	HAZARD #2 ADDRESSED	PROJECT SCOPE	RIP PHASE	OTHER NOTES
Boston	Rockport		612737		4	ROCKPORT- ROADWAY RECONSTRUCTION OF ROUTE 127A	Roadway elevation to mitigate sunny-day flooding with replacement of widening of existing underseal culverts and addition of new culverts between Red Fox Lane and Seawall Street.	Coastal Flooding and Sea Level Rise	Coastal Erosion		Improve	FFY - \$12,081,325. may achieve 25% design in 2025 for FFY 2031 construct?
Boston	Ipswich		612738		4	IPSWICH- ARGILLA ROAD ROADWAY RECONSTRUCTION	Roadway elevation to mitigate sunny-day flooding which will lead to frequent inundation by 2030. Western flooding often leads to ice flows being pushed up onto the roadway and creating a hazard. Primary throughfare towards Crane Beach.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Widening of culvert with elimination of old dam near to southern inlet. Reinforcement of roadway embankments.	Improve	CMZ grant award, major involvement from Trustees of Reservations. Funded FFY's 2029 and 2030 of Boston Region TIP.
Boston	Brookline				6	BROOKLINE- TANNER BROOK DRAIN CULVERT REPLACEMENT	Replacement of stone culvert near 1600 Beacon Street in Washington Square. Culvert had partially collapsed under MBTA Green Line C Branch in 2021, which required emergency repairs conducted via night work.	Flooding from Precipitation		Team of Brookline recommends an engineering firm evaluate the culvert, estimate costs, and plan and design spaces to replace the asset. Town water and sewer staff estimate \$750,000 in cost back in 2021 for a structural liner, to be installed after mortaring the stone culvert walls to smooth out.	Plan	\$750,000 local estimate. Town has photos and reports available.
Boston	Brookline				6	BROOKLINE- TAPPAN STREET DRAIN TO VILLAGE BROOK DRAIN	Replacement of stone drainage culvert near UA building at Brookline High School. Underseal stone culvert narrows in with near the Brookline Hills stop on the MBTA Green Line D Branch. Town inspection via CCTV indicated loose stones in drain and failed air pressure.	Flooding from Precipitation		Evaluation of culvert to determine possible improvements. Rehabilitation of existing drain preferred, but recent renovation of MBTA Brookline Hills station may preclude option. Town proposes investigating installation of a relief drain.	Plan	Town has photos and reports available.
Boston	Lynn				4	LYNN- RIVERWORKS COMMUTER RAIL STATION	Improve the existing Riverworks MBTA Station to ensure public accessibility via relocation, consistent with the City of Lynn's goals to redevelop the area to create a site more resilient to flooding from the Saugus River. New planned station location will be moved further inland and designed in such a way to accommodate replacement of the Saugus River Drawbridge (MBTA asset). The current station is at-grade and within a 100 year flood zone.	Coastal Flooding and Sea Level Rise	Average and Extreme Temperatures	Eliminate current Riverworks MBTA station and replace with a fully accessible public commuter rail station with pedestrian connectors in West Lynn.	Plan	Refer to Reconnecting Communities and Neighborhoods grant application from City of Lynn. MBTA may be interested in rehabilitation of Saugus Draw Bridge in inform (\$15,000,000).
Boston	Martinehead				4	MARBLEHEAD- STATE STREET LANDING AND MARBLEHEAD HARBORMASTER'S OFFICE (TUCKER'S WHARF)	The Tucker's Wharf Seawall is a high-priority asset for the Town of Marblehead due to prior issues around port damage and sinkholes. The seawall abuts high density residential dwellings. The State Street Landing is a primary artery for the local fishing industry and public access. Its seawall is currently subject to minor deterioration, section loss, cracking, scour, and undermining.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	This project would reinforce, repair, and improve the Tucker's Wharf and State Street Landing seawalls to ensure continued access to sites in the town.	Maintain	
Boston	Martinehead				4	MARBLEHEAD- OCEAN AVENUE CAUSEWAY ELEVATION	Ocean Avenue Causeway between Gilbert Heights Road (Riverside Beach) and Harbor Avenue in Marblehead is at extreme risk of inundation despite a relatively recent replacement. The roadway is actually built upon a natural gateway to Marblehead Neck and is the primary east-west connection for many parts of town.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Elevate Ocean Avenue Causeway. Conduct public engagement to plan around resilience measures in the project area.	Plan	
Boston	Martinehead				4	MARBLEHEAD- MARBLEHEAD SHIPYARD PROJECT (PARKER'S YACHT YARD, MARBLEHEAD YACHT CLUB, CLIFF STREET BOAT YARD, COMMERCIAL STREET LANDING)	This project provides for continued and expanded access by all transportation modes to Marblehead's historic shipyard, which serves not only as a key cultural resource but also an economic resource for the Town of Marblehead.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Reconstruction and elevation of seawalls with public access. Infrastructure and walkways to improve ADA accessibility while protecting water-dependent and industrial commerce. Installation of wave attenuating docks. Roadway widening and resurfacing for Commercial Street with parking consolidation for stormwater management and increases to open space/public realm at Hammond Park.	Improve	Town has developed 79% design plans presented in December 2023 with Design Hole Group and Collins, in partnership with Salem Source Community.
Boston	Martinehead				4	MARBLEHEAD- FRONT STREET, FORT BEACH, LITTLE HARBOR SEAWALLS	The Front Beach and Fort Beach Lane seawalls are at high risk of inundation due to coastal flooding and sea level rise. Fort Beach Lane seawall is a concrete structure with some voids and sections of lime mortar stone fill. Little Harbor seawall is a cast-in-place concrete seawall between bedrock outcrops.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Evaluation of and maintenance/rehabilitation for seawalls in the area listed under this line item, including section repair and other drainage improvements and reinforcements as needed.	Maintain	
Boston	Hull		613089 (Refer to eSTIP Universe)		5	HULL- NANTASKET AVENUE REDESIGN FOR TWO-WAY CONVERSION	There is a confluence of traffic safety, traffic volume, local redevelopment, and coastal flooding concerns along Nantasket Avenue and Hull Shore Drive near Hull Municipal Light Plant. The project area is at risk of coastal flooding that could dramatically sever access from large sections of town to inland.	Coastal Flooding and Sea Level Rise	Coastal Erosion	Redevelopment of gravel squares near to Nantasket Beach for installation of additional beach facilities, recreational zones, and open space to improve drainage along the corridor. Reconfiguration of the roadway to allow for two-way travel and consolidation of lanes and road width to further free up land for improvements. General state-of-good-repair improvements throughout.	Improve	Town has submitted MA204 for two-way traffic flow conversions along corridor. (\$850,000. 2023 quotes was \$300,000. Town had created a 100% design for the project recently but design was not brought to FRC, and would require substantial review and further design investment to do so.
Boston	Littleton		613162 (Bundke Candidate)		3	LITTLETON- WIDDINGEN REHABILITATION OF BEAVER BROOK CULVERT AT GREAT ROAD/ 495 SB RAMPS	While not in the initial recommendation by the town regarding flooding at Russell Street elementary school, the culvert is just downstream of a more difficult-to-access culvert under I-495 and may be suited to funding in the existing culvert replacement/widening crossing Project 613162 also on Great Road.	Flooding from Precipitation	Changes in Groundwater/Groundwater Rise	Rehabilitation of existing culvert or replacement with larger asset. Ensures that bottleneck that is currently upstream would not be bottlenecked down to this asset should that one be resolved. Refer to other Littleton culvert project proposed for incorporation into this list.	Improve	Town had indicated interest in separate correspondence for signal installation nearby on Great Road at Beaver Brook Road as well.
Boston	Littleton				3	LITTLETON- WIDDINGEN OF BEAVER BROOK CULVERT AT I-495/ROUTE 119 GREAT ROAD INTERCHANGE	The town has cited the culvert as undersized, leading to significant floodplain elevation at upstream (south) side at Russell Street Elementary School and athletic fields. A municipal sewer pump station is also nearby.	Flooding from Precipitation	Changes in Groundwater/Groundwater Rise	Town is interested in replacement of headwalls/culverts with wider assets to mitigate upstream flooding. Recommend incorporating culvert improvements into future resurfacing contract for I-495.	Improve	
Boston	Essex				4	ESSEX, GLOUCESTER, IPSWICH- GREAT MARSH BARRIERS RESTORATION PROJECT	The project is proposed for inclusion in the Illustrative RIP but given potential for ecological benefits resulting from the project and daylighting of sections of the Muddy River.	Coastal Flooding and Sea Level Rise	Coastal Erosion	Steps 1 and 2: Town Farm Road Crossings (Ipswich): Culverts undersized, leading to frequent roadway flooding and isolation of neighborhood due to insufficient drainage. Requesting permit level designs and feasibility analyses. Step 3: Chebeco Road Crossing (Ipswich): Poor condition crossing with scour and falling headwalls indicative of risks to infrastructure and ecosystem. Headwaters of Cadee Neck River, currently under restoration by Ipswich River Watershed Association. Requesting permitting and final design work. Step 4: Route 133 Crossing (Essex): Refer to other line item included in this RIP project list. Step 5: Lufkin Street Crossing (Essex): Prior assessments have indicated poor crossing condition with severe restrictions in water flow, leading to marsh quality. Permitting and final design funding support requested. Step 6: Concord Street Crossing 1 (Gloucester): Historic Rainbow Street and American Ed site. Preliminary planning work underway. Requesting support for permitting and full implementation. Step 7: Concord Street Crossing 2 (Gloucester): Limited aquatic species poor condition, and severe flow restrictions including	Improve	Project reflects application from MAC2M and Ipswich River Watershed Association to a NOAA CZM HPRC grant. Funding request for \$4 million.
Boston	Essex				4	ESSEX- ROUTE 133 CAUSEWAY RESILIENCE PLANNING AND DESIGN STUDY	Route 133 is a major regional transportation corridor at severe risk of sunny day and coastal flooding. It supports GARA Route 6 bus service as well as regional connectivity between Ipswich and Gloucester/Rockport. ADIT is greater than the local population. Candidate for FFY 2024/25 PROTECT Discretionary Planning Grant in partnership with MassDOT Boston Region MPO. Planning activities to date were provided by technical assistance from the Boston Region MPO.	Coastal Flooding and Sea Level Rise	Coastal Erosion	Public engagement and preliminary planning work to determine series of alternatives for roadway modernization and reconstruction. Elevation of causeway and bridge structures difficult to accomplish without considerable impacts to community.	Plan	Recently completed project 606956 did not address items.
Boston	MassDOT (Boston)		606728		6	BOSTON- BRIDGE REPLACEMENT B-16-365, STORROW DRIVE OVER BOWNER RAMPS	The project is proposed for inclusion in the Illustrative RIP but given potential for ecological benefits resulting from the project and daylighting of sections of the Muddy River.	Flooding from Precipitation	Average and Extreme Temperatures	Refer to the scope of work for Project 606728, currently funded within the MassDOT STIP.	Improve	
Boston	Winthrop		609446 (Deactivated)		6	WINTHROP- RECONSTRUCTION AND IMPROVEMENTS ON ROUTE 145 (PLEASANT AND MAIN STREET)	The project is between the Boston city line and southern part of Winthrop Street along Route 145. Coastal flooding and sea level rise are concerns at Pleasant Street at Brook Field/Dorwin Beach, which can lead to inland flooding through green space and inundation of Lincoln and Pauline Streets as well.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Investigate possibility of incorporating or phasing improvements along corridor with new Project ID 613712 with eye towards culvert and drainage improvements.	Improve	Town has indicated priority is Main Street Project.
Boston	Winthrop		613712		6	WINTHROP- ROADWAY RECONSTRUCTION ON MAIN STREET, FROM WINTHROP STREET TO THE BOSTON CITY LINE	The project is between the Boston city line and the northern part of Winthrop Street at Revere Street. Coastal flooding is a risk along approaches to Belle Island Bridge (replaced in 2013) under MCFRM probability classes 4 through 7.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Investigate resilience improvements as part of broader project scope including reductions in impervious surface and drainage enhancements.	Improve	
Boston	Quincy				6	QUINCY- MERRYMOUNT PARKWAY AT FURNACE BROOK PARKWAY IMPROVEMENT, INCLUDING REPLACEMENT OF 01015 MERRYMOUNT PARKWAY (ROUTE 3A) OVER BLACKS CREEK	The replacement of Bridge 01015 in Quincy, which carries Route 3A over Blacks Creek, will ameliorate coastal flood and storm surge concerns that are particularly present during incidences of severe flooding, including MCFRM Probability Classes 4-7.	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	Bridge replacement to maintain continued access along Route 3A.	Improve	City of Quincy may be pursuing PROTECT discretionary grant during current application window.
Boston	Wrentham					WRENTHAM- IMPROVEMENTS TO ROUTE 140 AND EAGLE DAM	This project will improve the condition and capacity of the culvert that conveys Eagle Brook Lake Lake Pearl underneath Route 140 (Franklin Street) at Pondston Road and Eagle Lane. The project would also remove Eagle Dam.	Changes in Groundwater/Groundwater Rise	Flooding from Precipitation	Bridge/culvert rehabilitation, removal of Eagle Dam, potential reduction in impervious surfaces along the roadway.	Improve	Listed in eSTIP Universe and Boston Region TIP Universe of Projects under \$1000's. Listed in Wrentham MAP. More information on the project can be found here: https://www.wrentham.gov/22/Eagle-Dam-Feasibility-Study .
Boston	MBTA (Raggonwide)		613012		3, 4, 5, 6	MBTA- SYSTEMWIDE FLOOD MITIGATION	This funding was transferred to the MBTA in FFY 2024 to support a series of Flood Mitigation line items under the MBTA's Reliability/Modernization activities in its Capital Investment Plan (CIP).	Coastal Flooding and Sea Level Rise	Flooding from Precipitation	Flood mitigation activities include a series of improvements and practices including planning, training, and infrastructure improvements to bolster the resilience of assets in the face of storm surge, precipitation, and sea level rise.	Maintain	Reflects an August 2024 August Redistribution Plan of \$4M of PROTECT formula funds to the MBTA. This change was made under Amendment 13 to the FFY's 2024-28 TIP. 2021 cost estimates for full buildout was \$4M, but deliverables can start incrementally in areas lower in the watershed. Refer to documents from the team below: https://www5.mv.gov/cmbv/cip/ghw/roadway/DR_Report_FINAL_2024.06.pdf https://www5.mv.gov/cmbv/cip/ghw/roadway/DR_Report_FINAL_2024.06.pdf
Boston	Norwood				6	NORWOOD- COMPREHENSIVE MEADOW BROOK DRAINAGE IMPROVEMENTS	Norwood areas in the Meadow Brook Watershed have been subject to repeated and catastrophic flooding, including sections of the watershed home to key community assets including Norwood's Public Safety Building and Norwood Hospital. Other key assets, including the Post Office, two MBTA commuter rail stations, and roadways that serve as primary evacuation routes are also impacted.	Flooding from Precipitation	Changes in Groundwater/Groundwater Rise	Drainage improvements along multiple roadways as indicated in the reports provided by the town (refer to Other Notes). Primary roadways of concern are Nahatan Street, Washington Street, and Route 1A (Woodsie Street and Upham Road).	Improve	

Boston	Rockport		4	ROCKPORT- BACK BEACH REVETMENT EXTENSION	Beach Street and other nearby roadways, which support access to nearby homes and key seasonal tourism resources and a sewer pump station, are at risk of coastal flooding and sea level rise.	Coastal Flooding and Sea Level Rise	Coastal Erosion	The project would extend a partial revetment recently deployed under a FEMA Public Assistance Grant out towards a culvert under Beach Street. The extension would follow the same design as the pilot already developed along the roadway.	Improve	Work is a continuation of a FEMA Public Assistance Grant.
Boston	Rockport		4	ROCKPORT- PENZANCE ROAD MARSH RESTORATION AND TRANSPORTATION ACCESS	Homes along Penzance Road are at risk to being cut off in severe weather events. The nearby marsh is insufficient to accommodate flood storage needs. The marsh has issues with invasive species, namely <i>Phragmites australis</i> .	Coastal Flooding and Sea Level Rise	Severe winter storms/ Nor'easters	The project would study and evaluate the potential for raising the roadway through the marsh near Lobbley Cove/Pebble Beach and clearing the marsh of invasive species. Specific improvements would target improved emergency access, a restoration of flood storage capacity and ecological function, and a study of managed retreat for this repetitive-loss area.	Plan	Town has plans and mockups available for MassDOT staff to review.
Boston	MBTA (Boston, Everett, Lynn)	P0680 (MBTA CIP ID)	4, 6	MBTA: CLIMATE CHANGE VULNERABILITY ASSESSMENTS AND ADAPTATION	The MBTA's Climate Change Vulnerability Assessments and Adaptation Planning program evaluates the impacts of climate change and severe weather events on facilities and systems across all modes and the development of adaptation strategies, programs, and procedures to address these threats.	Coastal Flooding and Sea Level Rise	Flooding from Precipitation	Under Action 10A of the ResilientMass Plan, the MBTA will conduct a Vulnerability Assessment of Critical Locations Across the Commuter Rail System (esp. Historical flood locations) and assess the vulnerability of all 3 major Commuter Rail Facilities. This will include the completion of the Cabot Yard Vulnerability Assessment and completion of additional bus facility vulnerability assessments (in coordination with the Bus Modernization Program). The MBTA plans to request FY 24-25 PROTECT funding to support Climate Change Vulnerability Assessments (CCVAs) and associated resiliency and adaptation planning work at six locations: the Lynn Bus Maintenance Garage, the Fallway Bus Garage, the Everett Bus Maintenance Facility, the Charlestown Bus Facility, the Albany Street Bus Garage, and the Southampton Bus Maintenance Facility.	Plan	MBTA PROTECT Grant candidate. Listed in the MBTA CIP on Page 121.
Boston	MBTA (Boston, Cambridge)	P0912 (MBTA CIP ID)	6	MBTA: SYSTEMWIDE TUNNEL FLOOD MITIGATION PROGRAM	The MBTA's Systemwide Tunnel Flood Mitigation Program provides planning, training, and infrastructure improvements to improve tunnel resilience against flood exposures due to increased storm surge, precipitation, and sea level rise.	Coastal Flooding and Sea Level Rise	Flooding from Precipitation	Under Action 10C of the ResilientMass Plan, the MBTA is working on conceptual designs for flood protection of the Alewife Storage Tracks and the Airport Portal. The program will also upgrade track dewatering pump rooms. By protecting portals, the MBTA is seeking to keep coastal flood water out. Improving the pump rooms that handle everyday water on the tracks will help mitigate flooding internally. The next steps in the program will be addressing the D Street Portal on the Silver Line in the Seaport (designing flood protection), and addressing flood protection for the MBTA's lowest critical flood locations (especially the ones exposed to coastal flooding in the near term), such as vent shafts, manholes, emergency egresses, etc.	Improve	MBTA PROTECT Grant candidate. Listed in the MBTA CIP on Page 62.
Boston	MassDOT (Boston)	NA	6	MASSDOT-BOSTON- MORRISSEY BOULEVARD PLANNING STUDY	The project would improve the public realm, mobility, connectivity, safety, and climate resiliency throughout the Kosciuszko Circle/Morrissey Boulevard area for the City of Boston and other communities in the surrounding region.	Coastal Flooding and Sea Level Rise	Coastal Erosion	A planning study that includes the finalization of a preferred alternative and the development of conceptual design.	Plan	MassDOT PROTECT Planning Grant Candidate
Boston	Boston		6	BOSTON- BLUE HILL AVENUE TRANSPORTATION REDESIGN		Average and Extreme Temperatures		The Blue Hill Avenue Project's multimodal corridor redesign will create more than 2 acres of space for new green infrastructure to treat stormwater and expand the tree canopy with around 150 new trees in a neighborhood that experiences extreme heat and a lack of shade in the summer. The work will be conducted as part of the broader project, which will improve air quality along the corridor through reduced transportation-related emissions by investing in bus transit priority.	Improve	City of Boston PROTECT Construction grant candidate

Abbreviations

AADT = Annual Average Daily Traffic. ADA = Americans with Disabilities Act. CATA = Cape Ann Transportation Authority. CCTV = Closed Circuit Television. CIP = MBTA Capital Investment Plan. MBTA = Massachusetts Bay Transportation Authority. MCFRM = Massachusetts Coastal Flood Risk Model. MPO = Metropolitan Planning Organization. NA = not applicable. PROTECT = Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation Program. RIP = Resilience Improvement Plan. STIP = Statewide Transportation Improvement Program.