

**Draft PVMPO Performance Based Planning and Programming Framework**

**Operations and Maintenance**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
To provide a transportation system that is dependable and adequately serves users of all modes. To give priority to the repair of existing streets, roads, and bridges.	The Movement of People, The Movement of Goods, Sustainability	Invest in projects that preserve the existing transportation infrastructure, while enhancing the experience for all users	# Statewide Structurally Deficient Bridges	< 461 Structurally Deficient Bridges	MassDOT Bridge Inventory	% Structurally Deficient	Structurally deficient bridges below the percent of bridges considered structurally deficient in PV Region in 2014(%)	MassDOT Bridge Inventory	Prioritize funding for projects that will reduce the number of structurally deficient bridges in the Pioneer Valley. Bridges projects should continue to be funded outside of the regional target. <b>Tracking Mechanism = Structurally Deficient and Functionally Obsolete Bridges in Region</b>
			Bridge Health Index	Bridge health Index > 82		% Functionally Obsolete		MassDOT Bridge Inventory	Prioritize funding for projects that will increase Bridge Health Index <b>Tracking Mechanism = MassDOT Bridge Health Index</b>
			MassDOT Pavement Condition	65% of all pavement is in good or excellent condition	Pavement Condition Data	OCI	Increase the average Overall Condition Index (OCI) for the Region 5% by 2025	PVPC Pavement Management Data	Prioritize funding for projects that will increase the OCI for roadways in the pioneer Valley (Included in TEC). This is contingent upon the availability of additional federal and state aid that increases incrementally over time. <b>Tracking Mechanism = Regional OCI by functional Classification</b>

**Safety**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
To Provide and maintain a transportation system that is safe for all users	The Movement of People, The Movement of Goods, Safety and Security, Sustainability	Reduce the number and severity of crashes for all users	The Equivalent Property Damage Only (EPDO) index for auto, truck, bicycle, pedestrian in the Pioneer Valley Region	Reduce motor vehicle fatalities by 20% over five years (short term)	MassDOT Registry of Motor Vehicles Crash Data	EPDO	Reduce motor vehicle fatalities by 20% over five years (short term)	Top 100 High Crash Intersections Report	Prioritize projects with high crash locations and/or major safety components that are anticipated to improve safety along a corridor (Included in TEC) <b>Tracking Mechanism = Top 100 High Crash Intersection List updated every 3 years</b>
				Halve the number of fatalities and serious injuries on roadway (long term)	MassDOT Crash Portal	Fatality Rate	Halve the number of fatalities and serious injuries on roadway (long term)	Municipal Crash Reports	Implement intersection safety studies for the top crash locations (Included in TEC) <b>Tracking Mechanism = Number of safety studies completed per UPWP cycle</b>
			HSIP Clusters for all modes (High Crash Locations Based on EPDO Index)		MassDOT Top Crash Locations Report	Top 100 High Crash Locations	Complete 1 Safety study a year for locations identified in the Top 100 High Crash locations report	PVPC Top 100 High Crash Locations Report	Implement intersection safety studies for the top crash locations (Included in TEC) <b>Tracking Mechanism = Roadway Safety Audits in PVPC Region, safety recommendations advanced through TIP</b>

**Draft PVMPO Performance Based Planning and Programming Framework**

**Congestion**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
Identify, evaluate, and implement transportation performance measures that enhance the safety and efficiency of the movement of people, goods, and information.	Safety and Security, The Movement of People, The Movement of Goods, Sustainability	Reduce Delay for all modes	Vehicle hours of Delay (daily, annual), Speed Index, Travel Time Index, Volume to Capacity Ratio, Project vehicle hours of delay (daily, annual),	Maintain average driver delay at or below 4.8 hours of delay/1,000 VMT	Model, INRIX, CMP	Congestion Severity Ranking (CMP) Travel Time Index	Maintain average driver delay at or below 4.8 hours of delay/1,000 VMT	CMP Data collection, UPWP, FDR	Prioritize projects studied as part of the CMP, and UPWP (Included in TEC) <b>Tracking Mechanism = CMP Listing updated every 4 years</b>
		Expand the on/off Road bicycle and pedestrian network	New Miles of sidewalk, New miles of bicycle facilities (lanes, five-foot shoulders, paths)			Top Regional Bottleneck	Fund 1 congestion improvement project through the TIP every 5 years. Complete 1 congestion study per year for locations identified in the CMP / Top Bottleneck Report		Prioritize projects studied as part of the Top Bottlenecks Report, and UPWP (Included in TEC) <b>Tracking Mechanism = Top Bottlenecks Report updated every 4 years</b>
		Improve the efficiency of the Public Transportation System	Vehicle peak load points by line, Vehicle loads by key bus routes			Bicycle Condition Index (BCI)	Increase the total mileage of on road facilities by 10% by 2025	BCI analysis, Roadway inventory	Prioritize projects that include bicycle accommodations (Included in TEC) <b>Tracking Mechanism = on and off road bicycle and pedestrian network mileage</b>
						On time performance,	To be coordinated with the RTAs	PVTA/PVPC system analysis	Prioritize projects that include transit amenities <b>Tracking Mechanism = Number of new transit amenities implemented through the TIP</b>

**Green House Gas / Air Quality**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
To minimize the transportation related adverse impacts to air, land, and water quality and strive to improve environmental conditions at every opportunity	Safety and Security, The Movement of People, The Movement of Goods, The Movement of Information, Sustainability	Reduce GHG's resulting from the transportation system	GHG, VOC, NOX, CO, PM	Reduce GHG from the transportation sector 25% by 2020 and 80% by 2050	CMAQ Analysis/Model	GHG tracking with Picarro Analyzer	Reduce GHG from the transportation sector 25% by 2020 and 80% by 2050	Local GHG Data Collection	Prioritize projects with components that could improve air quality (Included in TEC) <b>Tracking Mechanism = Net GHG reduction per TIP year</b>
						CMAQ Analysis	Construct at least 1 Project that has been identified as improving AQ per TIP Year	CMAQ Analysis / FDR	Prioritize projects with components that could improve air quality (Included in TEC) <b>Tracking Mechanism = CMAQ project completed through TIP</b>

**Draft PVMPO Performance Based Planning and Programming Framework**

**Freight**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
To maintain a transportation system that promotes and supports economic stability and expansion.	Safety and Security, The Movement of People, The Movement of Goods, Sustainability	Improve the efficiency of the freight network	Average weekday average truck hours of delay, Number of weight restricted or closed bridges, # of projects that improve intermodal facilities		MassDOT bridge list	# of weight restricted, height restricted or closed bridges in region	Use State Target	MassDOT bridge list	Prioritize projects that improve efficiency of the freight network. Bridges projects should continue to be funded outside of the regional target. <b>Tracking Mechanism = Number of weight restricted bridges in region per TIP year</b>

**Intermodal**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
To provide access between travel modes for people and goods while maintaining quality and affordability of service.	Safety and Security, The Movement of People, The Movement of Goods, The Movement of Information, Sustainability	Increase the availability of bicycle and automobile parking near transit facilities				Park and Ride Occupancy	Strive to increase average park and ride lot use by 5% by 2025	Park and Ride Data Collection	<b>Tracking Mechanism = Monthly occupancy tracking at park and ride lots</b>
		Reduce single occupancy automobile usage in Pioneer Valley				Bike Path use volume	Demonstrate an overall annual increase use of regional bike paths	Bike Path count program	Prioritize projects that reduce dependency on single occupancy automobiles <b>Tracking Mechanism = Annual Bicycle and Pedestrian counts</b>

**Multimodal**

RTP Goal	Emphasis Areas	Objective	Statewide Performance Measures	State Target	Data	Local Performance Measure	Regional Target	Local Data	MPO Action / Tracking Mechanism
To provide a complete choice of adequate travel options that are accessible to all residents, visitors and businesses.	Safety and Security, The Movement of People, The Movement of Goods, The Movement of Information, Sustainability	Reduce single occupancy automobile usage in Pioneer Valley	Mode Share, Transit Ridership			PVTA and FRTA Ridership	Demonstrate an overall annual increase in PVTA and FRTA ridership	FRTA/PVTA/P VPC system analysis	Prioritize projects that close gaps between modes of transportation <b>Tracking Mechanism = Map Know gaps in regional transportation system to promote connectivity</b>
		Increase Access to multi use paths	Access points and miles of shared use paths			New miles of multi use paths, on-road bike facilities, and sidewalks	Increase the total mileage of all bicycle and pedestrian infrastructure by 10% by 2025 (No more than 5% off road paths)	RTP, UPWP, TEC, TIP	Prioritize projects that enhance access for bicycles and pedestrians via on-road improvements, new sidewalks, and new multi use paths <b>Tracking Mechanism = Map access points, monitor and track usage</b>