

Capital Improvement Program Update

December 17, 2015

Overview

- Project Selection Advisory Council Work
- New CIP Process
- Operationalizing Project Selection Scoring
- Stakeholder Engagement
- Schedule

Council Recommendations

Criteria/Goals

The Council defined a set of overarching goals or “criteria” to guide transportation investment decision-making. These goals are as follows:

System Preservation	<ul style="list-style-type: none">• Projects should contribute to a state of good repair on the transportation system.
Mobility	<ul style="list-style-type: none">• Projects should provide modal options efficiently and effectively.
Cost Effectiveness	<ul style="list-style-type: none">• Projects should result in benefits commensurate with costs and should be aimed at maximizing the return on the public's investment.
Economic Impact	<ul style="list-style-type: none">• Projects should support strategic economic growth in the Commonwealth.
Safety	<ul style="list-style-type: none">• Projects should contribute to the safety and security of people and goods in transit.
Social Equity & Fairness	<ul style="list-style-type: none">• Projects should equitably distribute both benefits and burdens of investments among all communities.
Environmental & Health Effects	<ul style="list-style-type: none">• Projects should maximize the potential positive health and environmental aspects of the transportation system.
Policy Support	<ul style="list-style-type: none">• Projects should get credit if they support local or regional policies or plans; or state policies not addressed through the other criteria.

Council Recommendations

Goals/Criteria	Roads & Paths Modernization	MBTA/Regional Transit Modernization	Roads & Paths Capacity	MBTA/Regional Transit Capacity
Cost Effectiveness	15	20	20	25
Economic Impact	10		15	20
Environmental & Health Effects	10	5	10	10
Mobility	10	30	25	25
Policy Support	10	10	10	10
Safety	10	10	10	
Social Equity			10	10
System Preservation	35	25		
Total	100	100	100	100

Council Recommendations

1. Project Evaluation

Score proposed projects within 1 of 6 scoring systems; projects below certain score will not receive funding from MassDOT.*

2. Performance Targets & Funding Need

Determine financially constrained system-wide targets and subsequent funding needs agency-wide using a scenario planning tool to inform the decision.

3. Prelim. Program Development

Re-score projects that scored above threshold on an annual basis. Based on score and project readiness, allocate to appropriate budget year.

4. Comparison to Targets

Evaluate outcome of prioritized projects against asset targets using scenario planning tool and regional targets.

5. Rebalancing

Rebalance projects to better meet asset targets or ensure equity across regions or modes.



*Projects can be resubmitted and re-evaluated with revised scopes.

Process Overview

- MassDOT is employing a new management practice to develop the new CIP
 - It involves the use of agile scrum techniques to enable more efficient engagement on issues.
 - It includes a wider range of participants in the process.
 - It has allowed more staff to interact with the findings of the Council.

Project Universe

Staff have identified the following methods for projects to enter the universe for scoring:

Roads and Paths

- Projects with a design submittal in the last eight (8) years (October 1, 2007 or later).
- Projects without a submittal in the past 8 years, but with extenuating circumstances identified by District staff, or if listed on the MPO's Long Range Plan/Regional Transportation Plan.
- All projects approved after October 1, 2005.

MBTA

- Submitted funding requests for the current CIP solicitation

Regional Transit

- Submitted funding requests for the current CIP solicitation above \$500,000

All modes

- New project ideas from Capital Conversations
- Bond bill projects
- Currently funded projects
- Projects in the out years or projects dropped from earlier CIPs

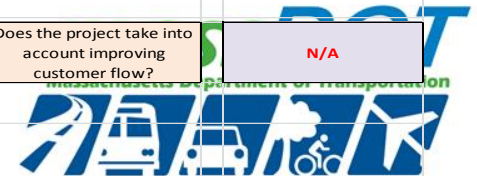


Criteria - Approach

- Divisions crosswalked existing criteria in use with those recommended by the Council.
- The metrics for criteria that matched were not changed.
- Metrics were developed for those that did not match.

Scoring Systems Crosswalk

PSAC Criteria		<i>determined by PSAC Committee</i>					
	Cost Effectiveness	Environmental & Health Effects	Mobility	Policy Support	Safety	System Preservation	Social Equity & Fairness
MBTA Criteria		<i>determined by meeting of senior management in 2013 as part of the development of a decision-support tool</i>					
	Impact on Operating/Maintenance Costs	Reduce Pollution and Consumption of Natural Resources	Improve Customer Experience	Legal or Regulatory Compliance	N/A	SGR Database Rating	N/A
	Impact on Operating Budget	Promote Mode Shift	Operations "Critical" Number of Riders Affected Operational Sustainability			Lifecycle Management Reduce Environmental Vulnerability	
RTA Criteria							
	Demonstrates cost reduction	Supports travel mode-shift	Significantly improves customers' transit experience	Aligns with the goals and objectives of relevant local, regional, and state plans	N/A	Meets a need identified in the RTA's Asset Management Plan	Makes transit more accessible and convenient for all riders
		Reinforces the three GreenDOT goals	Makes noticeable improvements to customer-facing facilities or equipment			Replaces or rebuilds vehicles, facilities, and/or equipment	
		Promotes convenient multimodal connections	Makes transit more accessible and convenient for all riders Leverages the latest technology to improve the convenience and usability of transit			Supports preventive maintenance	
Aeronautics Criteria		<i>From FAA guidelines</i>					
	Planning Factors: Cost/Benefit	Planning Factors: Multi-modal benefits	Planning Factors: Multi-modal benefits	State and Local Factors, Legal and Regulatory Requirements	Can submit safety justification	National Priority Ranking Factor (based on type of rehab)	N/A
	Financial Considerations	Planning Factors: Environmental review					
Highway Criteria		<i>Highway Division developed system for municipal projects</i>					
	N/A	Environmental Effects	Mobility	Sustainable Dev. Principles	Safety	Condition	Community Effects
RMV Criteria							
	Impact on Operating/Maintenance Costs	N/A	N/A	Legal or Regulatory Compliance	N/A	Does the project take into account improving customer flow?	N/A
	Impact on Operating Budget						
	Does the project serve customers the most efficiently in the most cost effective way?						



New Criteria

Roads and Paths

- Cost Effectiveness: Cost/ADT/Lane Mile/Service Life

MBTA

- Safety
- Equity

RTAs

- Safety

Scoring Priorities

Scoring projects is a very labor intensive effort. Considering the aggressive schedule for this effort, the following hierarchy will be applied to scoring projects:

- 1 – Projects on the DRAFT FFY 2016 through FFY 2019 STIP in accordance with the criteria described above, or as approved.
- 2 – Projects in the first 5 Year time band of each Region's Long Range Transportation Plan that are PRC approved.
- 3 – Projects not included on the Draft FFY 2016 through FFY 2019 STIP with an advertising date between October 1, 2016 and September 30, 2019, in accordance with the criteria described above, or as approved.
- 4 – Projects with an advertising date after September 30, 2019.



Balancing

Select a Plan Year:	2023	Your Scenario	<i>massDOT</i> Massachusetts Department of Transportation		Current "Baseline" Scenario							
	ENTER FUNDING Millions/Year	2023 Performance			Today's Funding Millions/Year	Today's Performance	2023 Performance					
Rail and Transit Division					CIP							
MBTA BRIDGES (10) % SGR	\$41	48%	0%	20%	40%	60%	80%	100%	\$41	65%	48%	
MBTA SUBWAY ELEVATORS/ESCALATORS (11) % SGR	\$13	66%	0%	20%	40%	60%	80%	100%	\$13	60%	66%	
MBTA ACCESSIBILITY (12) % of Stations ADA Compliant	\$35	86%	0%	20%	40%	60%	80%	100%	\$22	74%	82%	
MBTA ROLLING STOCK - BUS (13) % SGR	\$28	41%							\$28	N/A	41%	
MBTA ROLLING STOCK - COMMUTER RAIL (14) % SGR	\$113	51%							\$113	N/A	51%	
MBTA ROLLING STOCK - RAPID TRANSIT (15) % SGR	\$68	73%							\$68	N/A	73%	
MBTA ROLLING STOCK - OVERALL (16) % SGR	\$209	57%	0%	20%	40%	60%	80%	100%	\$209	60%	57%	
MBTA TRACK (17) Daily Hours of Delay	\$18	23	0	5	10	15	20	25	30	\$18	18	23
MBTA SIGNAL (18) Signal Failures	\$22	2,410	0	500	1,000	1,500	2,000	2,500	3,000	\$22	1,900	2,410
MBTA GENERAL FACILITIES (19) (includes power, stations, commuter rail accessibility etc.)	\$166	N/A							\$166	N/A	N/A	
MBTA ADD RAPID TRANSIT ACCESS (20) Households within Xxmi of a Station	\$0	88,867	0	30,000	60,000	90,000	120,000	\$0	0	88,867		
MBTA ADD CARRYING CAPACITY (21) Peak Hour Passenger Capacity	\$0	13,638	0	10,000	20,000	30,000	40,000	50,000	\$0	0	13,638	
MBTA Subtotal	\$713								\$700			



Stakeholder Committee

Last	First	Agency	Representation
Philbin	Thomas	Massachusetts Municipal Association	Municipalities
Ticotsky	Charlie	Transportation for Massachusetts	Transportation Advocates
Spfalzer	Sean	CTPS	Regional planning/data
Kilmer	Charles	Old Colony Planning Council	MPO/RPA
Strunkin	Jessica	495/MetroWest Partnership	Economic Development
Mares	Rafael	CLF	Transportation Advocates
Bourasa	Eric	Boston Regional Planning Organization	MPO/RPA
Bagley	Andrew	Massachusetts Taxpayers Foundation	Fiscal policy
Ledoux	Ray	Brockton Area Transit	RTA
MacInnes	Mary	Pioneer Valley Transit Authority	RTA
Cannon	Glenn	Cape Cod Commission	MPO/RPA
Bewsee	Michaelann	ARISE for Social Justice	EJ
Fischer	Steven	Regional Environmental Council	EJ



Committee Goals

- Advise on implementing Council recommendations
 - Metric development
 - Balancing
 - Transparency
 - Addressing data issues
- Observe process and make recommendations for improvements for going forward

Other Stakeholders

- MassDOT is working with our regional planning partners to update them on progress. Close coordination with the MPOs will be critical as we move forward with this CIP development process.
- The consulting industry will also play an important role.

Schedule

- Project scoring: Now-Mid December
- Project Selection Advisory Council Meeting: December/January
- Project selection and balancing: Late December/Early January
- Reassessment and refinement: Early 2016
- Presentation to MassDOT Board of Directors- January 2016