Decision Support Tool Overview



- The Decision Support Tool helps the MBTA prioritize projects for capital investment and inclusion in that year's CIP (Capital Investment Program)
- The tool was created two years ago via a group exercise in which MBTA Senior Managers discussed and determined criteria and weights
- Since then, departments give their list of projects to Capital Budget each year and an assigned Subject Matter Expert is responsible for rating each projects for their respective criteria
- The weighted list of projects is then optimized for total score within the financial constraints. After some manual manipulation, the list of projects is finalized



Decision Support Tool Criteria

- The tool ranks projects based on four key criteria: 1) Impact on the Environment/Alignment to GreenDot Objectives 2) System Preservation 3) Financial Considerations 4) Operations Impact
- Each parent criteria is assigned a weight with Operations Impact carrying the most weight (40%) and Impact on Environment/Alignment to GreenDot Objectives carrying the least (10%)
- Within each Parent Criteria, there are Child Criteria with their own weights that sum up to the Parent Criteria
- Legal or Regulatory Compliance is included in the project application and the DST, but if a project is found to be legally required it is automatically put into the CIP
- Safety is not included in the application process as any projects with a potential negative impact on rider safety are dealt with outside the DST process

Decision Goal: Prioritize Projects for CIP		Weight	
Parent Criteria	Child Criteria	Total	For Parent
Impact on the Environment/Alignment to GreenDot Objectives		10.0%	
10	Reduce Pollution and Consumption of Natural Resources	4.8%	48.1%
	Promote Mode Shift	5.2%	51.9%
System Preservation		35.0%	
	SGR Database Rating	17.7%	50.5%
	Lifecycle Management	10.6%	30.3%
	Reduce Environmental Vulnerability	6.7%	19.29
Financial Considerations		15.0%	
	Impact on Operating Costs	11.0%	73.19
	Impact on Operating Revenue	4.0%	26.99
Operations Impact		40.0%	
	Improve Customer Experience	10.0%	25.09
	Operations "Critical"	21.4%	53.5%
	Number of Riders Affected	4.9%	12.29
	Operational Sustainability	3.7%	9.39
Legal or Regulatory Compliance		100.0%	
Department Ranking		0.0%	

Source: "Rating Scale for Decision Support Tool", "Decision Support Tool Criteria Tree and Definitions"