

# BOARD OF TRANSPORTATION - PRIORITIZATION 3.0

## SCORING CRITERIA, WEIGHTS, AND NORMALIZATION FOR ALL MODES

November 7, 2013

**Objective:** The Board of Transportation recommends to the Joint Legislative Transportation Oversight Committee the following recommendations resulting from the Strategic Transportation Investments Law signed by Governor McCrory on June 26, 2013.

### Highway Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	[Travel Time] Benefit/Cost = 30% Congestion = 30% Economic Competitiveness = 10% Safety = 10% <u>Multimodal [&amp; Freight + Military] = 20%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	[Travel Time] Benefit/Cost = 25% Congestion = 25% Accessibility/Connectivity = 10% <u>Safety = 10%</u> <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	[Travel Time] Benefit/Cost = 20% Congestion = 20% <u>Safety = 10%</u> <b>Total = 50%</b>	25%	25%

Note: Divisions 1, 2, 3, 4 have approved different criteria and weights for their respective areas

### Aviation Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	NCDOA Project Rating = 40% FAA Airport Capital Improvement Plan = 40% Local Investment Index = 10% <u>Federal Investment Index = 10%</u> <b>Total = 100%</b>	--	--
<b>Regional Impact</b>	NCDOA Project Rating = 40% FAA Airport Capital Improvement Plan = 20% Local Investment Index = 5% <u>Federal Investment Index = 5%</u> <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	NCDOA Project Rating = 30% FAA Airport Capital Improvement Plan = 10% Local Investment Index = 5% <u>Volume/Demand Index = 5%</u> <b>Total = 50%</b>	25%	25%

### Bicycle & Pedestrian Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Division Needs</b>	Access = 10% Constructability = 5% Safety = 15% Demand Density = 10% <u>Benefit/Cost = 10%</u> <b>Total = 50%</b>	25%	25%

**Ferry Scoring**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b> <i>(Note: all vessels are excluded from this category)</i>	Safety [Route Health Index] = 15% Benefit/Cost [Travel Time] = 15% Accessibility/Connectivity = 10% Asset Efficiency = 10% Capacity/Congestion = 20% <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	Safety [Route Health Index] = 15% Benefit/Cost [Travel Time] = 15% Accessibility/Connectivity = 10% Asset Efficiency = 10% <b>Total = 50%</b>	25%	25%

**Public Transit Scoring (Expansion)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	Benefit/Cost = 45% Vehicle Utilization Data = 5% System Safety = 5% Connectivity = 5% System Operational Efficiency = 10% <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	Benefit/Cost = 25% Vehicle Utilization Data = 5% System Safety = 5% Connectivity = 5% System Operational Efficiency = 10% <b>Total = 50%</b>	25%	25%

**Public Transit Scoring (Facilities)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	Age of Facility, Facility Demand, Park & Ride, Bus Shelter = 40% Benefit-Cost = 5% System Operational Efficiency = 5% Facility Capacity = 20% <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	Age of Facility, Facility Demand, Park & Ride, Bus Shelter = 30% Benefit-Cost = 5% System Operational Efficiency = 5% Facility Capacity = 10% <b>Total = 50%</b>	25%	25%

**Public Transit Scoring (Fixed Guideway)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	Mobility = 20% Cost Effectiveness = 15% Economic Development = 20% Congestion Relief = 15% <b>Total = 70%</b>	15%	15%
<b>Division Needs</b>	Mobility = 15% Cost Effectiveness = 15% Economic Development = 10% Congestion Relief = 10% <b>Total = 50%</b>	25%	25%

**Rail Scoring (Track and Structures)**

Funding Category	Quantitative Data			Local Input	
		Freight	Passenger	Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b> (Class I Freight Only)	Benefit/Cost = Econ. Comp. = Capacity/Congestion = Safety = Accessibility = Connectivity = Mobility =	20% 10% 15% 15% 10% 10% <u>20%</u> <b>Total = 100%</b>	--	--	--
<b>Regional Impact</b> (Freight & Passenger)	Benefit/Cost = Capacity/Congestion = Safety = Accessibility = Connectivity = Mobility =	10% 15% 15% 10% 5% <u>15%</u> <b>Total = 70%</b>	10% 25% 15% -- -- <u>20%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b> (Freight & Passenger)	Benefit/Cost = Capacity/Congestion = Safety = Accessibility = Connectivity = Mobility =	10% 10% 10% 5% 5% <u>10%</u> <b>Total = 50%</b>	10% 15% 10% -- -- <u>15%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Rail Scoring (Freight Intermodal Facilities / Intercity Passenger Service & Stations)**

Funding Category	Quantitative Data			Local Input	
		Freight	Passenger	Division Rank	MPO/RPO Rank
<b>Regional Impact</b> (Intercity Passenger Service Only)	Benefit/Cost = Capacity/Congestion = Connectivity = Mobility =	-- -- -- --	15% 25% 10% <u>20%</u> <b>Total = 70%</b>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b> (Facilities/ Intercity Passenger Service & Stations)	Benefit/Cost = Capacity/Congestion = Connectivity = Mobility =	10% 15% 10% <u>15%</u> <b>Total = 50%</b>	10% 15% 10% <u>15%</u> <b>Total = 50%</b>	<b>25%</b>	<b>25%</b>

**Normalization – BOT Recommendation**

**For Prioritization 3.0 Only (Initial Implementation of Strategic Transportation Investments)**

- Statewide Mobility (only) – No normalization, scores are stand-alone for comparison (highway, aviation, freight rail)
- Regional Impact & Division Needs – Allocate funds to Highway and Non-Highway modes based on minimum floor or %s

Mode	Board of Transportation Recommendation	Historical Budgeted	Historical Expenditures
<b>Highway</b>	<b>90% (minimum)</b>	93%	96%
<b>Non-Highway</b>	<b>4% (minimum)</b>	7%	4%

*Note: Continue research with national experts  
Conduct a statistical analysis of scores by an outside agency after all quantitative scores are completed in 2014. Request other normalization recommendations.  
Incorporate research and analysis findings into Prioritization 4.0*