

Strategic Transportation Investments Implementation

REPORT

August 15, 2013

Executive Summary

In 2013 the North Carolina General Assembly (General Assembly) created the Strategic Transportation Investments Act (STI) to strengthen the state's economy and provide a new formula to direct construction funds through strategic transportation investments. Governor Patrick McCrory signed the Act on June 26, 2013. The law requires the North Carolina Department of Transportation (the Department) to report to the Joint Legislative Transportation Oversight Committee (JLTOC) and the Fiscal Research Division no later than August 15, 2013, on the Department's recommended formulas that will be used in the prioritization process to rank highway and non-highway projects. The Department's Prioritization Office (SPOT) shall develop the prioritization processes and formulas for all modes of transportation. The report will include a statement on the process used by the Department to develop the formulas, include a listing of external partners consulted during this process, and include feedback from a group of key planning partners, known as the Prioritization 3.0 (P3.0) workgroup, on the Department's proposed recommendations.

After the STI legislation was introduced in early April 2013 the P3.0 workgroup convened on a weekly basis to provide input and recommendations on the implementation of the Department's prioritization process under a proposed STI. Department staff from each mode (highways, aviation, bicycle-pedestrian, ferry, public transportation and rail) worked extensively with the P3.0 workgroup to identify quantitative scoring criteria unique to their respective mode and consistent with proposed requirements cited in STI.

The P3.0 workgroup recommendations were presented to the Department's Board of Transportation (BOT) on July 10, 2013. The BOT subsequently requested additional information be provided at a public meeting on July 23, 2013 in an effort to further understand the scoring criteria associated with each mode of transportation and to understand the overall implementation process. At its August 7th meeting, the BOT fully concurred with the P3.0 workgroup recommendations as cited in the following tables:

Highway Scoring

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

Note: Divisions 1, 2, 3, 4 have approved different criteria and weights for their respective areas (refer to Appendix A1, Highway Scoring slides).

Aviation Scoring

Funding Category	Quantitative Data (75 point scale)	Local Input	
		Division Rank	MPO/RPO Rank
Statewide Mobility	NCDOA Project Rating = 40% FAA Airport Capital Improvement Plan = 40% Local Investment Index = 10% Federal Investment Index = 10% Total = 100%	--	--
Regional Impact	NCDOA Project Rating = 40% FAA Airport Capital Improvement Plan = 20% Local Investment Index = 5% Federal Investment Index = 5% Total = 70%	15%	15%
Division Needs	NCDOA Project Rating = 30% FAA Airport Capital Improvement Plan = 10% Local Investment Index = 5% Volume/Demand Index = 5% Total = 50%	25%	25%

Bicycle & Pedestrian Scoring

Funding Category	Quantitative Data (100 point scale)	Local Input	
		Division Rank	MPO/RPO Rank
Division Needs	Access = 10% Constructability = 5% Safety = 15% Demand Density = 10% <u>Benefit/Cost = 10%</u> Total = 50%	25%	25%

Ferry Scoring

Funding Category	Quantitative Data (100 point scale)	Local Input	
		Division Rank	MPO/RPO Rank
Regional Impact <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% <u>Capacity/Congestion = 20%</u> Total = 70%	15%	15%
Division Needs	Safety [Route Health Index] = 15% Benefit/Cost [Travel Time] = 15% Accessibility/Connectivity = 10% <u>Asset Efficiency = 10%</u> Total = 50%	25%	25%

Public Transit Scoring (Expansion)

Funding Category	Quantitative Data (100 point scale)	Local Input	
		Division Rank	MPO/RPO Rank
Regional Impact	Benefit/Cost = 45% Vehicle Utilization Data = 5% System Safety = 5% Connectivity = 5% <u>System Operational Efficiency = 10%</u> Total = 70%	15%	15%
Division Needs	Benefit/Cost = 25% Vehicle Utilization Data = 5% System Safety = 5% Connectivity = 5% <u>System Operational Efficiency = 10%</u> Total = 50%	25%	25%

Public Transit Scoring (Facilities)

Funding Category	Quantitative Data (100 point scale)	Local Input	
		Division Rank	MPO/RPO Rank
Regional Impact	Age of Facility, Facility Demand, Park & Ride, Bus Shelter = 40% Benefit-Cost = 5% System Operational Efficiency = 5% <u>Facility Capacity = 20%</u> Total = 70%	15%	15%
Division Needs	Age of Facility, Facility Demand, Park & Ride, Bus Shelter = 30% Benefit-Cost = 5% System Operational Efficiency = 5% <u>Facility Capacity = 10%</u> Total = 50%	25%	25%

Public Transit Scoring (Fixed Guideway)

Funding Category	Quantitative Data (100 point scale)	Local Input	
		Division Rank	MPO/RPO Rank
Regional Impact	Mobility = 20% Cost Effectiveness = 15% Economic Development = 20% <u>Congestion Relief = 15%</u> Total = 70%	15%	15%
Division Needs	Mobility = 15% Cost Effectiveness = 15% Economic Development = 10% <u>Congestion Relief = 10%</u> Total = 50%	25%	25%

Rail Scoring (Track and Structures)

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

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

Funding Category	Quantitative Data (100 point scale)			Local Input	
		Freight	Passenger	Division Rank	MPO/RPO Rank
Regional Impact (Intercity Passenger Service Only)	Benefit/Cost = Capacity/Congestion = Connectivity = Mobility =	-- -- -- --	15% 25% 10% <u>20%</u> Total = 70%	15%	15%
Division Needs (Facilities/ Intercity Passenger Service & Stations)	Benefit/Cost = Capacity/Congestion = Connectivity = Mobility =	10% 15% 10% <u>15%</u> Total = 50%	10% 15% 10% <u>15%</u> Total = 50%	25%	25%

Normalization

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 percentages

Mode	NCDOT Recommendation	Historical Budgeted	Historical Expenditures
Highway	90% (min.)	93%	96%
Non-Highway	4% (min.)	7%	4%

Note: The Department will continue to research and seek recommendations on the topic of Normalization with national experts. The Department will also request the assistance of an outside agency to conduct a statistical analysis of project scores after all quantitative scores are completed in 2014. Any conclusive findings from this research and analysis will be incorporated into Prioritization 4.0.