PRIORITIZATION 4.0
SCORING CRITERIA, WEIGHTS, AND NORMALIZATION FOR ALL MODES
(WITH CRITERIA DEFINITIONS)

APPROVED BY THE BOARD OF TRANSPORTATION JULY 9, 2015

Objective: The Board of Transportation approves the following P4.0 Workgroup recommendations resulting from the Strategic Transportation Investments Law.

Highway Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Statewide Mobility	**Benefit/Cost = 25%** • Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT. **Congestion = 30%** • Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the total traffic volume along the roadway. **Economic Competitiveness = 10%** • Measurement of the estimated number of long-term jobs and the % change in economic activity within the county that the project is expected to provide over 10 years. **Safety = 15%** • Measurement of the number, severity, and frequency of crashes along the roadway. **Multimodal [+ Military] = 5%** • Measurement of congestion along routes that provide connections to multimodal passenger terminals. **Freight [+ Military] = 15%** • Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes. **Total = 100%**	--	--
Regional Impact	**Benefit/Cost = 20%** • Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT. **Congestion = 20%** • Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway, weighted by the total traffic volume along the roadway. **Safety = 10%** • Measurement of the number, severity, and frequency of crashes along the roadway. **Accessibility/Connectivity = 10%** • Measurement of county economic distress indicators and whether the project upgrades how the roadway functions. Goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network. **Freight [+ Military] = 10%** • Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes. **Total = 70%**	**15%**	**15%**

Division Needs	**Benefit/Cost = 15%** • Measurement of travel time savings and safety benefits the project is expected to provide over 10 years compared to the cost of the project to NCDOT. **Congestion = 15%** • Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway. **Safety = 10%** • Measurement of the number, severity, and frequency of crashes along the roadway. **Freight [+ Military] = 5%** • Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes. **Accessibility/Connectivity = 5 %** • Measurement of county economic distress indicators and whether the project upgrades how the roadway functions. Goal of improving access to opportunity in rural and less-affluent areas and improving interconnectivity of the transportation network. **Total = 50%**	**25%**	**25%**

Note: Divisions ___ have approved different criteria and weights for their respective areas

Aviation Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Statewide Mobility	**NCDOA Project Rating = 40%** • Assigns point values based on priority and need of the project. Projects are prioritized and classified within NC Division of Aviation (NCDOA) established project categories from the NC Airports System Plan. **FAA ACIP Rating = 10%** • Federal Aviation Administration (FAA) Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS). **Non-State Contribution Index = 30%** • Measurement of the project's Highway Trust funds compared to all other sources of project funding. Provides greater points for projects with a higher % of non-Highway Trust funding sources (i.e. local, federal, other state grants, or public-private funds). **Benefit/Cost = 20%** • Measurement of the project's total economic contribution to the area. Includes the number of IFR (Instrument Flight Rules) operations, NCDOA project rating, and project cost. **Total = 100%**	--	--
Regional Impact	**NCDOA Project Rating = 30%** • Assigns point values based on priority and need of the project. Projects are prioritized and classified within NC Division of Aviation (NCDOA) established project categories from the NC Airports System Plan. **FAA ACIP Rating = 5%** • Federal Aviation Administration (FAA) Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS). **Non-State Contribution Index = 20%** • Measurement of the project's Highway Trust funds compared to all other sources of project funding. Provides greater points for projects with a higher % of non-Highway Trust funding sources (i.e. local, federal, other state grants, or public-private funds). **Benefit/Cost = 15%** • Measurement of the project's total economic contribution to the area. Includes the number of IFR (Instrument Flight Rules) operations, NCDOA project rating, and project cost. **Total = 70%**	**15%**	**15%**

Division Needs	**NCDOA Project Rating = 25%** • Assigns point values based on priority and need of the project. Projects are prioritized and classified within NC Division of Aviation (NCDOA) established project categories from the NC Airports System Plan. **FAA ACIP Rating = 10%** • Federal Aviation Administration (FAA) Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS). **Non-State Contribution Index = 5%** • Measurement of the project's Highway Trust funds compared to all other sources of project funding. Provides greater points for projects with a higher % of non-Highway Trust funding sources (i.e. local, federal, other state grants, or public-private funds). **Benefit/Cost = 10%** • Measurement of the project's total economic contribution to the area. Includes the number of IFR (Instrument Flight Rules) operations, NCDOA project rating, and project cost. **Total = 50%**	**25%**	**25%**

Bicycle & Pedestrian Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Division Needs	**Safety = 15%** • Measurement of number of bicycle and/or pedestrian crashes, speed limit, and safety benefits to determine adequacy of safety for users of the project. **Access = 10%** • Measurement of the quantity and significance of destinations associated with the project as well as the distance to the primary destination. Measures benefit to the community as a result of constructing the project. **Demand = 10%** • Measurement of the density of population and employment within a walkable or bike-able distance of the project. Measures user benefit as a result of constructing the project. **Connectivity = 10%** • Measurement of the degree of bike/ped separation from the roadway, ADA compliance, and connectivity to a similar or better project type. **Cost Effectiveness = 5%** • Measurement of combined user benefits of Safety, Access, Demand, and Connectivity criteria compared to the cost of the project to NCDOT. **Total = 50%**	**25%**	**25%**

Ferry Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Regional Impact	**Asset Condition = 15%** • Measurement of the condition rating of the asset. **Benefits = 10%** • Measurement of the project benefits based on the monetized value of the number of hours saved by utilizing the ferry route instead of taking the shortest alternative route. **Accessibility/Connectivity = 10%** • Measurement of the accessibility and connectivity provided by the route to jobs, services, and other points of interest. Measured by the number of points of interest within pre-determined circles of 10, 20, & 30 miles. **Asset Efficiency = 15%** • Measurement of the cost effectiveness of continued maintenance of the asset compared to replacement of the asset. **Capacity/Congestion = 20%** • Measurement of the number of vehicles left behind at each departure compared to the total number of vehicles loaded and carried by the route in a year. **Total = 70%**	**15%**	**15%**
Division Needs	**Asset Condition = 15%** • Measurement of the condition rating of the asset. **Benefits = 10%** • Measurement of the project benefits based on the monetized value of the number of hours saved by utilizing the ferry route instead of taking the shortest alternative route. **Accessibility/Connectivity = 10%** • Measurement of the accessibility and connectivity provided by the route to jobs, services, and other points of interest. Measured by the number of points of interest within pre-determined circles of 10, 20, & 30 miles. **Asset Efficiency = 15%** • Measurement of the cost effectiveness of continued maintenance of the asset compared to replacement of the asset. **Total = 50%**	**25%**	**25%**

Public Transit Scoring (Vehicle)

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Regional Impact	**Access = 10%** • Measurement of the reported annual hours of operation compared to the number of vehicles in the fleet. **System Safety = 10%** • Measurement of the reported annual miles compared to the 3 year average of reported incidents. **Impact = 20%** • Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips. **Cost Effectiveness = 20%** • Measurement of the total projected passenger trips compared to the cost of the project to the state. **Market Share = 10%** • Measurement of the number of existing and projected annual passenger trips compared to the population in the service area. **Total = 70%**	**15%**	**15%**

Division Needs	**Access = 5%** • Measurement of the reported annual hours of operation compared to the number of vehicles in the fleet. **System Safety = 10%** • Measurement of the reported annual miles compared to the 3 year average of reported incidents. **Impact = 15%** • Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips. **Cost Effectiveness = 15%** • Measurement of the total projected passenger trips compared to the cost of the project to the state. **Market Share = 5%** • Measurement of the number of existing and projected annual passenger trips compared to the population in the service area. **Total = 50%**	**25%**	**25%**

Public Transit Scoring (Passenger Facility)

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Regional Impact	**Impact = 20% (Expansion projects only)** • Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips. **OR** **Age = 20% (Non-expansion projects)** • Age of the facility divided by 45 years (considered the useful life). **Cost Effectiveness = 20%** • Measurement of existing annual passenger trips compared to the cost of the project to the state. **Market Share = 15%** • Measurement of the number of existing and projected annual passenger trips compared to the population in the service area. **Ridership Growth = 15%** • Growth trend of ridership over the past 5 years. **Total = 70%**	**15%**	**15%**
Division Needs	**Impact = 15% (Expansion projects only)** • Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips. **OR** **Age = 15% (Non-expansion projects)** • Age of the facility divided by 45 years (considered the useful life). **Cost Effectiveness = 20%** • Measurement of existing annual passenger trips compared to the cost of the project to the state. **Market Share = 15%** • Measurement of the number of existing and projected annual passenger trips compared to the population in the service area. **Ridership Growth = 15%** • Growth trend of ridership over the past 5 years. **Total = 50%**	**25%**	**25%**

Public Transit Scoring (Admin/Maintenance/Operations Facility)

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Regional Impact	**Impact = 20% (Expansion projects only)** • Measurement of the existing and additional capacity compared to the existing capacity. **OR** **Age = 20% (Non-expansion projects)** • Age of the facility divided by 45 years (considered the useful life). **Cost Effectiveness = 20%** • Measurement of existing annual passenger trips compared to the cost of the project to the state. **Market Share = 15%** • Measurement of the number of existing and projected annual passenger trips compared to the population in the service area. **Ridership Growth = 15%** • Growth trend of ridership over the past 5 years. **Total = 70%**	**15%**	**15%**
Division Needs	**Impact = 15% (Expansion projects only)** • Measurement of the existing and additional capacity compared to the existing capacity. **OR** **Age = 15% (Non-expansion projects)** • Age of the facility divided by 45 years (considered the useful life). **Cost Effectiveness = 20%** • Measurement of existing annual passenger trips compared to the cost of the project to the state. **Market Share = 15%** • Measurement of the number of existing and projected annual passenger trips compared to the population in the service area. **Ridership Growth = 15%** • Growth trend of ridership over the past 5 years. **Total = 50%**	**25%**	**25%**

Public Transit Scoring (Fixed Guideway)

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Regional Impact	**Mobility = 20%** • Measurement of the projected annual trips. **Cost Effectiveness = 15%** • Measurement of the cost per trip over the life of the project. **Economic Development = 20%** • Measurement of the projected new employment and population growth in the fixed guideway corridor over 20 years. **Congestion Relief = 15%** • Measurement of the projected travel time savings to a passenger over 30 years. **Total = 70%**	**15%**	**15%**
Division Needs	**Mobility = 15%** • Measurement of the projected annual trips. **Cost Effectiveness = 15%** • Measurement of the cost per trip over the life of the project. **Economic Development = 10%** • Measurement of the projected new employment and population growth in the fixed guideway corridor over 20 years. **Congestion Relief = 10%** • Measurement of the projected travel time savings to a passenger over 30 years. **Total = 50%**	**25%**	**25%**

Rail Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Statewide Mobility (Class I Freight Only)	**Cost Effectiveness = 35%** • Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region. **System Health = 35%** • Measurement of the volume to capacity ratio, and various measurements of accessibility and connectivity provided by the project via vicinity to points of interest, improvements to statewide rail networks, or employment density. **Safety and Suitability = 20%** • Measurement of potentially hazardous rail crossings. **Project Support = 10%** • Measurement of outside contributions to the project compared to the cost of the project to the state. **Total = 100%**	--	--
Regional Impact	**Cost Effectiveness = 25%** • Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region. **System Health = 20%** • Measurement of the volume to capacity ratio, and various measurements of accessibility and connectivity provided by the project via vicinity to points of interest, improvements to statewide rail networks, or employment density. **Safety and Suitability = 15%** • Measurement of potentially hazardous rail crossings. **Project Support = 10%** • Measurement of outside contributions to the project compared to the cost of the project to the state. **Total = 70%**	**15%**	**15%**
Division Needs	**Cost Effectiveness = 20%** • Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region. **System Health = 10%** • Measurement of the volume to capacity ratio, and various measurements of accessibility and connectivity provided by the project via vicinity to points of interest, improvements to statewide rail networks, or employment density. **Safety and Suitability = 10%** • Measurement of potentially hazardous rail crossings. **Project Support = 10%** • Measurement of outside contributions to the project compared to the cost of the project to the state. **Total = 50%**	**25%**	**25%**

Note: Passenger Rail only eligible for Regional Impact and Division Needs.

Normalization – BOT Approval

P4.0

- 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.

Highways = 90% (minimum)

Non-Highways = 4% (minimum)