

Greenville MPO

The following methodology has been developed by the Greenville Urban Area MPO for the purpose of determining regional priorities for transportation funding, as carried out through the State of North Carolina's Strategic Transportation Investments (STI) law and the associated "SPOT" Prioritization Process. This methodology is intended to incorporate both measurable, objective data and information about priorities from local jurisdictions, to ensure a process that is both data-driven and responsive to local needs.

This methodology has been developed to meet the requirements of Session Law 2012-84 (Senate Bill 890), which requires that MPOs and RPOs have a process including both quantitative and qualitative elements for determining project prioritization.

Scores for the criteria in each mode will be weighted and awarded to each project. The percent weight times the points measurement will comprise the final points total.

Final scores and project ranking will be posted on the Greenville MPO home page on or before July 31, 2014. The URL link is

http://www.greenvillenc.gov/departments/public_works_dept/information/default.aspx?id=510

How the criteria were developed:

The projects are divided into highway, bicycle-pedestrian and transit projects, and sorted based on eligible Strategic Transportation Investment categories. Each mode has a series of measurable criteria and weighting in each criteria category.

Quantitative criteria are based on measurable data available from local and state sources. Qualitative criteria are based on staff knowledge of local conditions, public comment and suggestions from TCC and TAC members.

Data measurements were chosen based on staff knowledge of evaluation measures. Scoring percentages for each mode were established based on the percentages assigned to MPOs for local input at the regional and division level.

Qualitative measures for ranking

Qualitative measures must be defined and documented. The Greenville MPO solicited public input on the quantitative and qualitative criteria that will drive how local input points are allocated. There is at least one qualitative criteria for each project category. An example of qualitative criteria is "transportation plan consistency".

Public input to the selection criteria

Public input opportunities are available at TCC and TAC meetings when candidate projects are considered or points are awarded to projects. All public involvement opportunities are advertised in the local newspaper. All TCC and TAC meetings are advertised and open to the public. All TCC and TAC meetings have designated public comment periods. This criteria will be reviewed by TCC and TAC at their January 2014 meetings.

Public comment on the priority criteria will be available on April 8, 2014 (TCC) and April 22, 2014 (TAC). The criteria will be presented at a scheduled TCC and TAC meeting so that residents can understand how the projects will be ranked and selected. The information has also been posted on the City of Greenville's website, on the MPO home page, to assure wider dissemination of the points criteria.

Once the information is available, the TCC and TAC committees will consider the public comments in making preliminary points assignments for each project. The comments will be presented and discussed before the TAC has a final vote to approve or not approve.

Action	Date
Draft methodology conditionally approved by NCDOT	December 20, 2013
Advertise for public comments	December 30, 2013
Projects submitted by local jurisdictions	January 14, 2014
TCC meeting to receive public comments and review projects	January 14, 2014
TAC meeting to receive public comments and review projects	January 28, 2014

REGIONAL PROJECT PRIORITIZATION CRITERIA

Roadway--regional

Highway - REGIONAL PROJECT SCORING (MPO score=15% of total score)		
Criteria	Measurement	Percent Weight
NCDOT's congestion score	0-100 points	15%
Transportation plan consistency (is the proposed project included in the MPO's Long Range Transportation Plan?)	100 points = yes 0 points = no	40%
Environmental Documentation and Design (status of NEPA documentation and roadway design)	100 points = both completed 80 points = completed 1 60 points = both are underway 20 points = 1 is underway 0 points = not started	15%
Level of Regional connectivity	100 = connects 3 or more jurisdictions 50 = connects 2 jurisdictions 0 = within 1 jurisdiction	15%
Level of roadway tier on CTP map	100 = Freeway 80 = Expressway 60 = Boulevard 40 = Major Thoroughfare 20 = Minor Thoroughfare	15%

NCDOT's congestion score - 15% of MPO's regional score. This criteria will measure the level of roadway congestion as calculated by NCDOT and is based on existing traffic volume and roadway capacity.

- $((\text{Existing Vol/Capacity Ratio} \times 100) \times 60\%) + ((\text{Existing Vol}/1,000) \times 40\%)$

Transportation Plan Consistency - 40% of regional score - If a project is identified in the MPO's adopted Long Range Transportation Plan, then a score of 100 points will be awarded in this category. A project not in the MPO's LRTP will not receive any points in this category. Modernization and Access Management projects are consistent with the LRTP and will receive the full 100 points for this criteria.

Level of regional connectivity - 15% of MPO's regional score — For this criteria, points will be awarded to those projects that connect multiple jurisdictions. More points are awarded to those projects that connect more jurisdictions.

These criteria will use NCDOT's congestion score up to 100 points, with a 15% weighting. Points range:

100—connects 3 or more jurisdictions

50—connects 2 jurisdictions

0—within 1 jurisdiction.

Environmental documentation - 15% of MPO's regional score —NEPA documentation and roadway design are completed or underway.

Points range:

100 points—completed all documentation

80 points = completed 1 document, either NEPA or roadway design

60 points = both NEPA documentation and roadway design are underway

20 points = 1 is underway, either NEPA or roadway design

0 points = neither documentation has begun

Level of roadway tier on CTP - 15% of MPO's regional score —points will be based on functional classification of the new or existing roadway, with points awarded in the following manner:

Points assignment:

100 = Freeway

80 = Expressway

60 = Boulevard

40 = Major Thoroughfare

20 = Minor Thoroughfare

MPO percent weight—15%

Aviation Projects --regional

Aviation - REGIONAL PROJECT SCORING		
MPO ranking = 15% of total score		
Criteria	Measurement	Percent Weight
NCDOT's total quantitative data score calculated for a project	0-75 points x 1.3333 (to standardize to a 100-point scale)	60%
Transportation plan consistency (is the proposed project included in the MPO's Long Range Transportation Plan?)	100 points = yes 0 points = no	40%

Criteria for aviation projects will use NCDOT's total quantitative data score calculated for a project, and transportation plan consistency. Consistency with the MPO's Long Range Transportation Plan will be 40% of the score.

MPO score will equal 15% of total score for Regional airports. Pitt Greenville Airport (PGV) is the only airport in the MPO's planning area is classified as a "regional impact" airport.

NCDOT's quantitative data score (for Regional-level aviation projects) percentage calculations all add up to 70% of NCDOT's total score. Thus, all percentages will be proportionally scaled so that this quantitative data score will equate to 100%. Further, NCDOT only uses a 75-point scale for aviation projects. Therefore, a factor of 1.3333 must be applied to standardize to a 100-point scale.

Quantitative Criteria

NCDOT's total quantitative score is based on the following:

- 40% based on the NC DOA Project Rating'
- 20% based on the FAA Airport Capital Investment Plan;
- 5% based on the Local Investment Index
- 5% based on the Volume/Demand Index

Qualitative Criteria

Transportation Plan Consistency - 40% of score - If a project is identified in the MPO's adopted Long Range Transportation Plan, then a score of 100 points will be awarded in this category. A project not in the MPO's LRTP will not receive any points in this category.

Rail--regional

Rail - REGIONAL PROJECT SCORING		
MPO ranking = 15% of total score		
Criteria	Measurement	Percent Weight
NCDOT's total quantitative data score calculated for a project	0-100 points	60%
Transportation plan consistency (is the proposed project included in the MPO's Long Range Transportation Plan)	100 points = yes 0 points=no	40%

The MPO does not anticipate a funding request for a rail project. However, the 60% of the regional ranking would be based on the NCDOT data score and the remaining 40% is based upon consistency with the MPO's Long Range Transportation Plan.

NCDOT's quantitative data score (for Regional-level Rail projects) percentage calculations all add up to 70% of NCDOT's total score for the project. Thus, all percentages will be proportionally scaled so that this quantitative data score will equate to 100%.

NCDOT's Quantitative Score

For Track and Structures (Freight):

- 10% based on Benefit/Cost
- 15% based on Capacity/Congestion
- 15% based on Safety
- 10% based on Accessibility
- 5% based on Connectivity
- 15% based on Mobility

For Track and Structures (Passenger):

- 10% based on Benefit/Cost
- 25% based on Capacity/Congestion
- 15% based on Safety
- 20% based on Mobility

For Freight Intermodal Facilities, Intercity Passenger Service, and Stations:

Passenger

- 15% based on Benefit/Cost
- 25% based on Capacity/Congestion
- 10% based on Connectivity
- 20% based on Mobility

Transportation Plan Consistency - 40% of regional score - If a project is identified in the MPO's adopted Long Range Transportation Plan, then a score of 100 points will be awarded in this category. A project not in the MPO's LRTP will not receive any points in this category.

DIVISION PROJECT PRIORITIZATION CRITERIA

Highway--division

Highway-DIVISION PROJECT SCORING (MPO score=25% of total score)		
Criteria	Measurement	Percent Weight
Transit accessibility (Will project incorporate transit features?, eg bus pull-out bays, bus shelters, bus stop, etc)	Yes= 100 points No = 0 points	20%
Pavement Condition (Worst pavement condition = 100 points Best pavement condition = 0 points)	0-100 points	20%
NCDOT's congestion score	0-100 points	20%
Transportation Plan Consistency Is the proposed project included in the MPO's Long Range Transportation Plan? (Modernization/Access improvement projects are not specifically noted in LRTP, but are consistent with the LRTP, and thus would be awarded the full 100 points).	100 points = yes 0 points = no	40%

Transit accessibility—This criteria will award points to a project if a project will incorporate features that enable or improve accessibility to transit use. If the project will contain transit features, then it shall be awarded the full 100 points. If no transit features are a part of the project, then no points shall be awarded for this criteria.

Pavement condition—Points will be awarded based upon NCDOT's pavement condition score, with a higher score correlating with a lower pavement condition. Pavement Condition is defined as the percent of lane miles in good condition. A good condition for pavement is defined as a Pavement Condition Rating (PCR) value of 80 or higher (on a 0 to 100 scale). The PCR score displays a composite score determined using a pavement condition survey performed annually for interstate routes and every two years for primary and secondary routes. The survey uses the complete roadway length for all asphalt surface roadways and a sampling of every mile of concrete pavement. 0-100 points, 20% weight

Congestion – This scoring category will be computed by NCDOT. It is based on existing traffic volumes and capacity of roadway. Congestion data will be obtained from existing NCDOT databases until the statewide travel demand model is sufficiently developed to allow use of its outputs.

Transportation Plan Consistency - 40% of regional score - If a project is identified in the MPO's adopted Long Range Transportation Plan, then a score of 100 points will be awarded in this category. A project not in the MPO's LRTP will not receive any points in this category. Modernization and Access Management projects are consistent with the LRTP and will receive the full 100 points for this criteria.

Transit--division

Transit Facility - DIVISION PROJECT SCORING		
Criteria	Measurement	Percent Weight
Degree to which the facility benefits transit patrons	10 points for each of the following: 1. Safety 2. Heating/ Air Cond. 3. Restrooms 4. Seating 5. Protection from Elements	30%
Project cost as a percentage of total transit facility projects submitted for prioritization. If only one project submitted, then that project shall receive full score (100 points).	0 - 20% = 100 points >20% - 40% = 80 points >40% - 60% = 60 points >60% - 80% = 40 points >80% - 100% = 20 points	30%
Transportation plan consistency (is the proposed project included in the MPO's Long Range Transportation Plan?)	100 points = yes 0 points = no	40%

Degree to which the facility benefits transit patrons--30% weight. There are 5 measures for this criteria, if the project's intended design include them. 10 points each:

Safety - 10 points awarded if the facility increases safety for transit patrons via police or staff/employee presence.

Heating/Air Cond. - 10 points awarded if the facility provides a climate controlled environment for transit patrons.

Restrooms - 10 points awarded if the facility provides restrooms

Seating - 10 points awarded if the facility provides seating for transit patrons.

Protection from the elements - 10 points awarded if the facility provides protection from the elements for transit patrons.

Project cost as a percentage of total transit facility projects submitted for prioritization. If only one project submitted, then that project shall receive full score. 30% weight.

Bicycle and pedestrian--division

Bike/Ped - DIVISION PROJECT SCORING		
Criteria	Measurement	Percent Weight
Connectivity to existing greenway system	<p>100 points = connects to existing greenway, park trail, or park facility</p> <p>75 points = connects to existing greenway via sidewalks</p> <p>50 points = connects to sidewalks, but not existing greenway</p> <p>0 points = no connection to other non-highway modes</p>	20%
<p>NCDOT's Demand Density score for bike/ped projects</p> <p>(Higher score = project serves a greater population and employment)</p>	0-100 points	30%
Transportation plan consistency (is the proposed project included in the MPO's Long Range Transportation Plan or MPO's Bicycle and Pedestrian Master Plan)	<p>100 points = yes</p> <p>0 points = no</p>	40%

NCDOT's Safety score for bike/ped projects (higher score for those projects NCDOT's score determines to have a higher safety need)	0-100 points	10%
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Connectivity to existing greenway system--scoring is divided between direct connection and indirect connection.

The Greenville Urban Area MPO proposes to use NCDOT's Demand density score to allocate points to bicycle and pedestrian projects. Demand density is defined as areas with significant residential or employment density. Projects that score well in this category are those in areas with high population and employment. 0-100 points. This score is developed by NCDOT.

The Greenville Urban Area MPO proposes to use NCDOT's safety score to allocate points to bicycle and pedestrian projects. Safety improvements are defined as projects or improvements where bicycle or pedestrian accommodations are non-existent or inadequate for safety of users. Projects that score well in this category are those along corridors with high crash rates and/or high posted speed limits. 0-100 points.

Transportation Plan Consistency - 40% of regional score - If a project is identified in the MPO's adopted Bicycle and Pedestrian Master Plan, then a score of 100 points will be awarded in this category. A project not in the MPO's Bicycle and Pedestrian Master Plan will not receive any points in this category.

Rail--division

Rail - DIVISION PROJECT SCORING		
MPO ranking = 25% of total score		
Criteria	Measurement	Percent Weight
NCDOT's total quantitative data score calculated for a project	0-100 points	60%
Transportation plan consistency (is the proposed project included in the MPO's Long Range Transportation Plan?)	100 points = yes 0 points = no	40%

The Division-level Rail projects project scoring is based on the NCDOT data score and the consistency with the MPO's Long Range Transportation Plan. NCDOT's quantitative data score (for Division-level Rail projects) percentage calculations all add up to 50% of NCDOT's total score. Thus, all percentages will be proportionally scaled so that this quantitative data score will equate to 100%.

NCDOT Quantitative Score

For Track and Structures (Freight):

- 10% based on Benefit/Cost
- 10% based on Capacity/Congestion
- 10% based on Safety
- 5% based on Accessibility
- 5% based on Connectivity
- 10% based on Mobility

For Track and Structures (Passenger):

- 10% based on Benefit/Cost
- 15% based on Capacity/Congestion
- 10% based on Safety
- 15% based on Mobility

For Freight Intermodal Facilities, Intercity Passenger Service, and Stations:

Freight

- 10% based on Benefit/Cost
- 15% based on Capacity/Congestion
- 10% based on Connectivity
- 15% based on Mobility

Passenger

- 10% based on Benefit/Cost
- 15% based on Capacity/Congestion
- 10% based on Connectivity
- 15% based on Mobility

Transportation Plan Consistency - 40% of regional score - If a project is identified in the MPO's adopted Long Range Transportation Plan, then a score of 100 points will be awarded in this category. A project not in the MPO's LRTP will not receive any points in this category. Modernization and Access Management projects are consistent with the LRTP and will receive the full 100 points for this criteria.

For the division level, the criteria will use NCDOT's total quantitative data score calculated for a project, and whether the project is included in the Long Range Transportation Plan. Transportation Plan Consistency will be 40% of the score.