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ECRPO Prioritization 4.0 Methodology

Introduction

The Eastern Carolina Rural Planning Organization (ECRPO), covering Duplin, Greene, Lenoir and Wayne Counties, is required by state law to develop a local input methodology for prioritizing all transportation projects (aviation, bike and pedestrian, ferry, highway, public transportation and rail) within the RPO boundary that may compete for state and federal funding, and to submit the methodology to the North Carolina Department of Transportation (NCDOT) for approval.

The ECRPO has developed this prioritization method in an effort to satisfy the quantitative, data-driven requirements of the legislation while protecting the discretion of local officials by incorporating subjective, qualitative local input where possible.

This process is intended to be open and transparent. As such, all meetings of the Technical Coordinating Committee (TCC) and Transportation Advisory Committee (TAC) are open to the public and public participation will be solicited in accordance with the RPO's previously adopted Public Involvement Policy. In addition, the draft methodology and preliminary point assignments will be posted at the Eastern Carolina Council of Governments' ECRPO webpage: <http://www.eccog.org/planning-and-gis/planning/transportation-planning/ecrpo/> along with instructions for submitting comments. Comments will be collected by the RPO Coordinator and distributed to the TCC and TAC as part of their normal meeting packets.

Process

Assigning local priority points is based on a combination of the quantitative technical score provided by SPOT, an evaluation of the competitiveness of each project with respect to its potential funding category, and qualitative factors that reflect established regional goals and objectives. Every project in the strategic prioritization is classified into one of three categories: Statewide Mobility, Regional Impact, and Division Needs. Furthermore, NCDOT's methodology includes a weighting of the RPO's and Division's points by category. The RPO's ranking points contribute more towards a project's final score in the Division Needs category than the Regional Impact category. The Statewide Mobility category scoring is 100 percent quantitative. Table 1 below displays the contribution towards the final score for the NCDOT's quantitative data, Division points, and MPO/RPO points.

Category	Quantitative Data	Division Ranking Points	MPO/RPO Ranking Points
Statewide Mobility	100%	-	-
Regional Impact	70%	15%	15%
Division Needs	50%	25%	25%

Table 1. NCDOT Strategic Prioritization Categories

The Strategic Transportation Investments law (STI) states that projects in the Statewide Mobility category that are not programmed with funds from that category will also compete within the Regional Impact category. Likewise, projects that are not programmed at the Regional Impact category will also

compete for the remaining funds in the Division Needs category. This aspect of the STI law is commonly referred to as “cascading”.

It is the policy of the Eastern Carolina Rural Planning Organization that the RPO will, by default, not assign points to any cascading project, but reserves the right to address cascading projects on a case-by-case basis, and will provide written explanation and justification for any cascading project that justifies exception.

NCDOT determines the number of local prioritization points for each MPO, RPO, and Division based on the area’s population. For the fourth round of Strategic Prioritization (SPOT 4), ECRPO has 1300 points for the Regional Impacts category and 1300 points for the Division Needs category. Each MPO, RPO, and Division can assign a maximum of 100 points to each project; however, projects receiving zero priority points are still included in the prioritization with their total scores being based solely on their quantitative data points. For projects that span multiple MPOs/RPOs, the maximum points each organization can submit is equal to the percentage of the project in the organization (for a high priority, ECRPO would allocate 45 points for a project 45% within the ECRPO region). Organizations are allowed to donate points to a neighboring MPO/RPO for a project outside of their area that is a high priority.

Schedule

During every Strategic Prioritization Office of Transportation (SPOT) cycle the ECRPO will create a Prioritization Sub-committee where at least one voting member from each of the four counties and the three NCDOT Highway Divisions will participate. This Sub-committee will make the initial draft local point assignments.

At the initial convening of the Sub-committee any changes to Strategic Transportation Improvement legislation or the SPOT formulas, rankings, or process will be reviewed and discussed. Based on that review this methodology will be revisited to make any changes or adjustments necessary to remain in compliance and to optimize our prioritization process to the needs of the ECRPO region. Any changes or adjustments will be made available for public comment in accordance with the ECRPO Public Involvement Policy and subsequently approved by the TCC and TAC prior to being enacted.

When NCDOT opens the window for submission of new candidate projects the Sub-committee will meet to review existing SPOT projects from every transportation mode with the potential to be removed from the system and new candidate projects from every transportation mode with the potential to be submitted to the SPOT scoring system. The recommendations from this Sub-committee will be presented to the TCC and TAC at their next regularly scheduled meeting for approval. This meeting is open to the public.

After the Regional Impact scores are released by NCDOT the Sub-committee will meet to generate the Local Input Scores based on the scoring criteria described below and consultation with NCDOT Division staff, neighboring MPOs and RPOs, local aviation, Global TransPark, rail, and transit operators. As soon as those preliminary scores are calculated they will be posted on the Eastern Carolina Council of Governments’ ECRPO webpage: <http://www.eccog.org/planning-and-gis/planning/transportation-planning/ecrpo/> for public review and comment for no less than 30 days. Any public comment gathered during this time will be considered when applying Local Input Points.

The TCC and TAC will review the final Regional Impact Project Scores provided by the Sub-committee and discuss final application of Local Input Points at their meetings, which will be public meetings where public comment will specifically be sought on the final scores and where the public comments, and any others received during the prioritization process, will be a basis for applying points. Local Input Points will be discussed in an open meeting and any points assigned and their justifications will be documented in the meeting minutes. Final adjusted scores will be posted, with any appropriate justifications necessary, to the RPO website at that time. Final Regional Impact points will be entered into SPOT Online at this time.

After the Regional Impact programmed projects are released by NCDOT the Sub-committee will meet to generate the Division Needs Local Input Scores based on the scoring criteria described below and consultation with NCDOT Division staff, neighboring MPOs and RPOs, local aviation, Global TransPark,

rail, bicycle, pedestrian and transit operators. As soon as those preliminary scores are calculated they will be posted on the Eastern Carolina Council of Governments' ECRPO webpage: <http://www.eccog.org/planning-and-gis/planning/transportation-planning/ECRPO/> for public review and comment for no less than 30 days. Any public comment gathered during this time will be considered when applying Local Input Points.

The TCC and TAC will review the final Division Needs Project Scores provided by the Subcommittee and discuss final application of Local Input Points at their meetings, which will be public meetings where public comment will specifically be sought on the final scores and where the public comments, and any others received during the prioritization process, will be a basis for applying points. Local Input Points will be discussed in an open meeting and any points assigned and their justifications will be documented in the meeting minutes. Final adjusted scores will be posted, with any appropriate justifications necessary, to the RPO website at that time. Final Division Needs points will be entered into SPOT Online at this time.

For SPOT 4.0 in 2016 the timeline is as follows:

- Quantitative scores are released for SPOT 4.0 projects by NCDOT (March 31, 2016)
- Proposed Local Regional Impact input points are allocated to SPOT 4.0 projects (April-May 2016)
- A 30 day public comment period is provided to review and comment on local Regional Impact input point allocations (May 2016)
- ECRPO TAC endorses final local Regional Impact input point allocations and submits them to NCDOT (May 19, 2016)
- Proposed Local Division Needs input points are allocated to SPOT 4.0 projects (August-September 2016)
- A 30 day public comment period is provided to review and comment on local Division Needs input point allocations (September 2016)
- ECRPO TAC endorses final local Division Needs input point allocations and submits them to NCDOT (September 15, 2016)
- Final scores are issued to SPOT 4.0 projects and posted on the ECRPO website (October 2016)

Scoring Criteria

The RPO developed a methodology for distribution of prioritization points that maximizes the number of projects deemed to be competitive for advancement into the initial phase of the process and that addresses as many quantified transportation needs, regardless of mode, as possible. This process is based on the TAC decision to maximize the number of projects demonstrating need that score high enough to be considered for potential funding. This approach ensures that the maximum overall improvement to our regional network can be prioritized and potentially funded through the STI funding requirements in the STIP. This notion of maximizing funding potential and the number of competitive projects is the fundamental principle guiding the RPO's local priority point allocation.

Competitiveness is a relative term that simply describes the likelihood of a project advancing to the next step of programming. It should be noted that prioritization is simply one step of many towards the actual programming and completion of a project. The RPO estimates competitiveness based on a number of factors such as the projected revenue for the upcoming programming period, the priorities of neighboring MPOs and RPOs, how Division Engineers prioritize projects in previous cycles, and certainly the other transportation projects competing for funding within a given STI category. After reviewing all relevant factors, the RPO estimates the minimum SPOT score needed for consideration for programming. The RPO then examines the NCDOT calculated quantitative scores and assigns local priority points to the

highest scoring projects in order to maximize the number of projects that meet the competitive threshold. The following figures illustrate this methodology.

Figure X. shows a sampling of projects plotted by their NCDOT calculated quantitative scores. Based on these plotted scores and the funding available, the RPO estimated the competitive threshold to be approximately a project score of 43, shown as the red line. Projects already exceeding a score of 43 are already deemed competitive and thus do not benefit from additional local priority points.

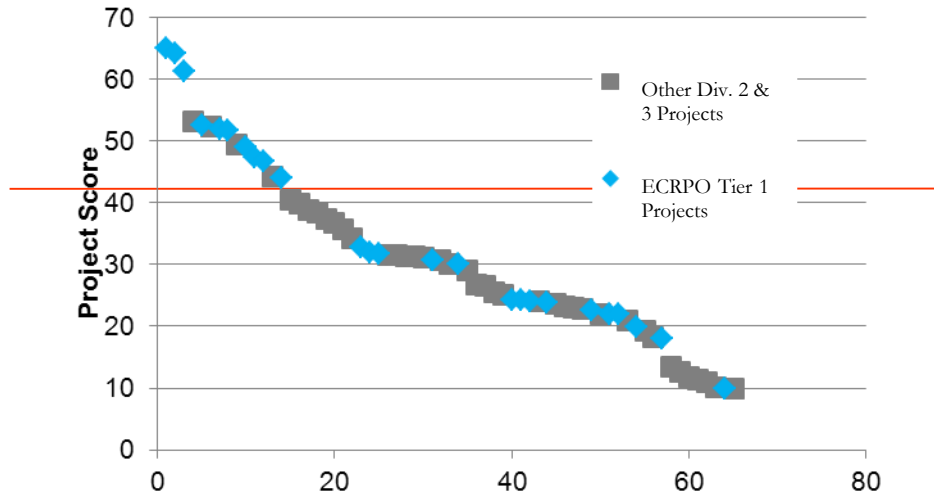


Figure X

Figure Y below shows the results of assigning local priority points to those projects just under the competitive threshold. Using this methodology results in more RPO projects ultimately being considered for the next step of programming.

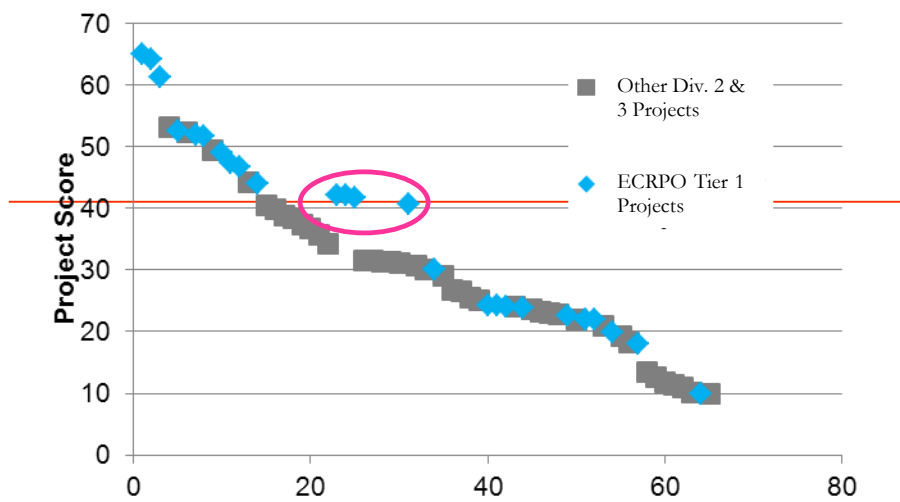


Figure Y

It should be noted that in some cases a project's quantitative score may be so low that even with the maximum number of local priority points (100 points), it may not meet the competitive threshold. In these cases the project is deemed uncompetitive and local priority points are not assigned. Competitiveness varies

across STI categories and modes because the amount of funding changes as does the number and types of projects competing for funding. A quantitative score of 50 in Lenoir County (Region B, Division 2) may be deemed more competitive than a quantitative score of 60 in Duplin County (Region B, Division 3) because of the competition and funding for those two different Divisions. Therefore, the RPO estimates competitive thresholds for all STI Regions, Divisions, and modes.

This methodology recognizes that a high score in the Strategic Prioritization process is the first step, with many other major contributing factors impacting the STIP project funding decisions. In part, these include fiscal constraint (both state/federal and local/private), cash flow, regulatory compatibility and funding source availability/eligibility for the region.

To achieve maximum funding potential for the maximum number of projects, the 1,300 points per category are applied where they have the greatest overall impact to the network, thus making a group of projects that are highly effective potentially competitive for STIP programming. Point allocation for each STI category is evaluated separately because funding levels are set by STI category, and projects are initially prioritized with other projects of the same category. Once the competitive threshold is determined, only enough points are applied to the competitive projects to meet or slightly exceed the threshold calculated for each STI category. This approach ensures that the RPO is prioritizing a suite of improvements that provide for the maximum network benefit.

To address prioritization across all modes of transportation, the RPO establishes target modal mixes for both the Regional Impact and Division Needs categories. These target point mixes are flexible but provide the initial budget of points per mode. Projects that are unable to meet the competitive threshold are deemed “uncompetitive” within the Strategic Prioritization system and do not receive local prioritization points. In the absence of a competitive project(s) for a mode, the target modal points are redistributed across the other modes based on the original distribution percentages. Table 2 below shows the target modal mixes adopted by the RPO for Strategic Prioritization four (SPOT 4).

Mode	Regional Impact	Division Needs
Aviation	N/A	100
Bicycle / Pedestrian	N/A	100
Ferry	N/A	N/A
Highway	1200	1000
Public Transportation	N/A	100
Rail	100	0
Total	1300	1300

Table 2. Eastern Carolina RPO Strategic Prioritization Target Modal Mixes

The RPO’s SPOT subcommittee reviews the target modal mixes for each Strategic Prioritization cycle and recommends adjustments to the targets as necessary. The TCC and TAC approve the target modal mixes, which allows staff to begin the recommended point allocation. The final point allocation is determined by the RPO TAC. To determine the modal mix for the fourth round of Strategic Prioritization (SPOT 4), the RPO’s SPOT subcommittee reviewed the previous cycles of Strategic Prioritization.

The following sections describe the unique aspects of each individual transportation mode in relation to the STI legislation.

Aviation

The RPO coordinates with the various airports and the NCDOT Division of Aviation throughout the project selection process to ensure the airport's highest priority projects are submitted. Each of the quantitative criteria are scored out of 100 and weighted to produce the total quantitative score. Aviation projects can receive up to 100 local priority points from the RPO and additional priority points up to 100 from the NCDOT Division. The RPO initially ranks the aviation projects with respect to their quantitative scores, reviews the projects for competitiveness within the Division Needs STI category and assigns local prioritization points in order to maximize funding potential and the number of potentially competitive projects with respect to the target modal mixes.

Bicycle & Pedestrian

The Strategic Transportation Investments law (STI) only allows bicycle and pedestrian projects to be programmed from the Division Needs category. STI also sets a required twenty percent (20%) local match for all bicycle and pedestrian projects and prohibits state funds for stand-alone bicycle and pedestrian projects outside of Powell Bill funds. Additional requirements for bicycle and pedestrian projects include a minimum project cost of \$100,000 and inclusion in a locally adopted bicycle or pedestrian plan. Each of the quantitative criteria are scored out of 100 and weighted to produce the total quantitative score. Like other modes, bicycle and pedestrian projects can receive up to 100 local priority points from the RPO and additional priority points up to 100 from the NCDOT Division. The RPO initially ranks the submitted bicycle and pedestrian projects based on their NCDOT calculated quantitative scores. Local priority points are then allocated in order to maximize the number of potentially competitive projects in the Division Needs category across both NCDOT Divisions.

Highway

These roadway projects are scored using a number of criteria generated by NCDOT. Each criterion is scored out of 100 points. The criteria are weighted to produce the total score. The maximum total score is 100 points. The criteria and weighting vary by STI category. Furthermore, the MPOs, RPOs, and Divisions 2 & 3 have agreed to use alternate criteria and weighting for projects in Region B and Divisions 2 & 3. To assign the local priority points for the highway mode, the RPO first estimates the competitive threshold for each STI category, region, and division. Points are then allocated in order to maximize the funding potential and the maximum number of competitive projects for each STI category, region, and division. In some cases, the quantitative score for a project may be too high or possibly too low to warrant additional local priority points.

Public Transportation

Public Transportation projects submitted for Strategic Prioritization are categorized into the Statewide Mobility, Regional Impacts, and Division Needs categories as defined by STI. NCDOT-PTD has developed an approach that creates a quantitative score for each candidate project submitted. Each of these categories and subcategories utilizes different criteria and weights. Like highway and other modes, each RPO prioritizes transit projects by assigning up to 100 local priority points per project. One major difference from the prioritization of other modes is that most transit projects are only competing for a state match that typically does not exceed 10 percent of the project cost. The majority of the federal funds for public transportation are designated to specific recipients through established agreements. Furthermore, required local match funds are subject to local transit authority approval. As such, a greater influence in the priority point allocation is given to qualitative criteria such as transit operator capital improvement program priorities and potential impact to service over the largest Eastern Carolina RPO area. The RPO initially ranks all submitted public transportation projects based on the transit systems' implementation schedules and local match availability. The RPO then allocates local priority points to maximize the number of potentially competitive projects based on the relative competitiveness across STI categories, regions, and divisions.

Rail

These rail projects are scored using a number of criteria generated by NCDOT. Each of the quantitative criteria are scored out of 100 and weighted to produce the total quantitative score. Rail projects can receive up to 100 local priority points from the RPO and additional priority points up to 100 from the NCDOT Division. The RPO initially prioritizes the rail projects for the region based on the quantitative score calculated by NCDOT and then allocates prioritization points in order to maximize the funding potential and potential competitiveness of projects across the STI categories with respect to the target modal mixes.