



DATE: December 9, 2015
SUBJECT: Prioritization 4.0 (P4.0) – Draft Local Input Point Methodology

BACKGROUND

The NCDOT's Strategic Planning Office of Transportation (SPOT) has been tasked with carrying out the project evaluation process outlined in the SL 2013-84 legislation enacted on June 26, 2013. One of the most significant tasks that must be accomplished by each MPO/RPO and NCDOT Division Office is to create a methodology that explains how the MPO/RPO/Division Office will allocate the eligible local input points assigned to projects (of all modes) in the prioritization database.

As stipulated by the STI legislation, local points may be assigned to projects in the Regional Impact and Division Needs categories, but not the Statewide Mobility category. The Land of Sky Rural Planning Organization (LOSRPO), serving the rural areas of Buncombe, Haywood, Madison and Transylvania Counties, may allocate the following number of local points for projects in the eligible categories:

- 1100 points – Regional Impact projects
- 1100 points – Division Needs projects

A committee of TCC members was created to develop a local input point methodology. The contents of this memorandum describe the methodology developed by the committee, which the LOSRPO proposes to use to allocate its local input points. NCDOT requires that the methodology include the following components:

- A minimum of one quantitative criteria
- A minimum of one qualitative criteria
- Public involvement (on the proposed methodology, and the preliminary assignment of local input points to projects based on the approved methodology)
- Dissemination of methodology, local points and public input on LOSRPO's website (www.landofskyrpo.org)

The LOSPRO will use the following criteria for assigning points:

- LOSRPO will score based on a 100 point system.
- Safety will account for 20%
- Destination Served/Existing Employment will account for 20%.
- Projected Employment Growth will account for 20%
- Multimodal Accommodation will account for 10% (for highway projects)
- Connectivity will account for 10% (for Bike/Ped Projects)
- Local Project Priority will account for 20%.
- The NCDOT Quantitative score will account for 10% of the overall score.



PROPOSED SCORING METHODOLOGY

Overview

The following principles will be used for the allocation of LOSRPO's local input points:

- LOSRPO will score Highway projects (both Regional Impact and Division Needs) with highway specific methodology and Bicycle, pedestrian projects with Bike and Pedestrian methodology.
- 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 an exception.

Draft Prioritization Methodology (100 point scale)

1. Safety is an important aspect of transportation planning in our region. The Safety Score will account for 20 percent or 20 points of the overall 100 point scale.

The Safety score of projects will be determined using the Safety score provided by the NCDOT SPOT office. The NCDOT SPOT office determines the safety score utilizing the following criteria:

NCDOT Highway - Safety

- I. Purpose – measure existing crashes along/at the project¹

| | |
|---------------|---------------------------|
| Segments | 33% - Crash Density |
| | 33% - Crash Severity |
| | 33% - Critical Crash Rate |
| Intersections | 50% - Crash Frequency |
| | 50% - Severity Index |

- ^{1.} All data provided by Mobility & Safety Division (3 year moving average)

- ^{1.} Higher scores indicate poorer performance

NCDOT Bicycle – Pedestrian Safety²

| | |
|-----------------|---|
| Measure: | Number of crashes * 40% + Posted speed limit * 40% + Project safety benefit * 20% |
|-----------------|---|

- ^{2.} Sources: – Division of Bike and Pedestrian Transportation (DBPT) 2007-2011 geocoded crash data
- ^{2.} NCDOT (Road Characteristics Data or Other)
- ^{2.} Safety benefit score based on lookup table



NCDOT Bike Pedestrian Facility Safety Look Up Table

| Proposed Project | Type Facilities Included: | Safety Improvement Points |
|--|---|---------------------------|
| Off-Road/Separated Linear Bicycle Facility; | Multi-use Path; Cycle Track; Side Path; Buffered Bicycle Lane; Bridge/Tunnel | 100 |
| On-Road; Designated Bicycle Facility | Bicycle Lane or Other Designated On-Road Space | 75 |
| On-Road Bicycle Facility | Shared Lane Markings; Paved Shoulder; Route Signage | 50 |
| Multi-Site Bicycle Facility | Bicycle Parking; Bicycle Share Stations; Bicycle Signals; Intersection Improvements | 25 |
| Protected Linear Pedestrian Facility | Sidewalks; Multi-Use Path; Side Path; Bridge/Tunnel | 100 |
| Multi-Site Pedestrian Facility; ADA Compliance | Curb Ramps; Accessible Pedestrian Signals; Streetscape/Corridor Improvements | 75 |
| Multi-Site Pedestrian Facility | Pedestrian signals; Curb extensions; Crosswalks; | 50 |
| Improved Pedestrian Facility | Trail Improvement; Sidewalk Widening; Paved Shoulder; Streetscape/Corridor Improvements; Wayfinding signage | 25 |

LOSRPO will use the following guidelines for applying safety scores to projects:

LOSRPO will put projects in ascending order based on safety scores provided by NCDOT SPOT office for each project. Highway Projects and Bike/Ped Projects will be scored separately.

- Zero (0) points if a project is (1 – 5) with the LOWEST safety scores.
- Five (5) points for a project whose safety score ranks (6 - 11).
- Ten (10) points for a project whose safety score ranks (12 - 17).
- Fifteen (15) points for a project whose safety score ranks (18 - 23).
- Twenty (20) points for a project whose safety score ranks (24 - 29) the HIGHEST.
- Bike and Pedestrian projects will ordered and ranked following the same guidelines



2. Destinations served and access to existing regional job centers is a critical component of our prioritization methodology. This criterion will account for 20 percent or 20 points of the overall 100 possible points. Projects will be scored based on their direct access to critical destinations, (education, health care facilities, grocery or retail establishments, recreation or entertainment/tourist destination and access to existing job centers). The number/type of destination served will be determined by utilizing GIS data on destinations collected during the drafting of the BLUE RIDGE BIKE PLAN, 2012. The number of existing jobs will be determined by using data developed for the FBRMPO Travel Demand Model (TDM). 2010 Census data was collected on population/housing and employment (Socio-economic (SE) Data) and projected out to 2040. The data was developed for the entire 5 county region with no regard to MPO/RPO boundaries. The SE Data is provided at the TAZ level. A TAZ (Traffic analysis Zone) is a group of census blocks that has at least one major thoroughfare going through it or touching the zone boundary that can be used for transportation modeling and other purposes.

The breakout for Destination served and access to existing employment will be as follows:

- Zero (0) points if a project does not provide direct access to any critical destination or job centers with fewer than 20 jobs.
- Five (5) points if a project provides direct access to 1 critical destination or job center with 20 – 49 jobs.
- Ten (10) points if a project provides access to 2 critical destinations or job center with 50 – 99 jobs.
- Fifteen (15) points if a project provides access to 3 critical destinations or job center with 100 – 149 jobs.
- Twenty (20) points if a project provides access to 4 or more critical destinations or job center with 150 or greater jobs.

3. Access to areas with Projected Employment Growth is very important in our region. This criterion of our methodology will account for 20 percent or 20 points of the overall possible 100 points. This score will also be based on the SE Data developed for the FBRMPO TDM.

- Zero (0) points if a project does not provide direct access to TAZ with 20 or more projected jobs.
- Five (5) points if a project provides direct access to TAZ with 20 - 49 projected jobs.
- Ten (10) points if a project provides access to TAZ with 50 - 99 projected jobs.
- Fifteen (15) points if a project provides access to TAZ with 100 - 149 projected jobs.
- Twenty (20) points if a project provides access to TAZ with 150 or greater projected jobs.



4. We encourage multimodal connections across our region. This criterion will account for 10 percent or 10 points of the overall possible 100 points.
 - Zero (0) points if a project does not include Bicycle or Pedestrian facilities.
 - Five (5) points if a projects includes EITHER Bicycle or Pedestrian facilities.
 - Ten (10) points if a projects includes BOTH Bicycle and Pedestrian facilities.
5. Local Priority will account for 20 percent or 20 points in the LOSRPO prioritization process. Each county in coordination with their municipalities will rank the projects. The number 1 and 2 ranking projects will receive 20 points; the number 3 and 4 ranking projects will receive 15 points, and so on. This exercise will be completed for projects in both the Regional Impact category and the Division Needs category.
6. SPOT Score - worth 10 percent or 10 points of the overall 100 point scale.

The SPOT score of projects will be determined using the following formula:

 - $\text{SPOT 4.0 Score} = [(\text{SPOT SCORE}/\text{Max SPOT Score}) * 100] * 10\%$
 - The Highest possible score for Regional Projects = Max Score = 70
 - The Highest possible score for Division Projects = Max Sore = 50
 - Example: Regional SPOT Score = 65 $[(65/70) * 100] * 10\% = 9.286$ LOSRPO Score 9
 - Example: Division SPOT Score = 35 $[(35/50) * 100] * 10\% = 7$ LOSRPO Score 7

PROPOSED ALLOCATION OF LOCAL INPUT POINTS

Land of Sky RPO receives 1,100 points at the Regional Level and 1,100 points at the Division Level to allocate to projects for local prioritization. The maximum number of points any project can receive is 100. The two top-scoring Regional Level projects within each county will be allocated 100 points each, accounting for 800 of the allowable points. Additionally, the remaining 300 points will be allocated to the next highest scoring projects within the RPO (regardless of county), to reach Land of Sky RPO's total point allocation of 1100 points. In the event that any counties do not have at least two Regional Level projects, then additional projects will be selected from the top of the list of remaining projects within the RPO as a whole. This promotes geographic equity of projects. Only projects that originate at the Regional Level are eligible for scoring and local points allocation under this methodology; Statewide Level projects that are not programmed at the Statewide Level will not be scored at the



Regional Level or receive Regional Level local points under this methodology, unless the Land of Sky RPO TAC elects to do so.

The two top-scoring Division Level projects within each county will be allocated 100 points each accounting for 800 of the allowable points. Additionally, the remaining 300 points will be allocated to the next highest scoring projects within the RPO (regardless of county), to reach Land of Sky RPO's total point allocation of 1100 points. In the event that any counties do not have at least two Division Level projects, then additional projects will be selected from the top of the list of remaining projects within the RPO as a whole. This promotes geographic equity of projects. Only projects that originate at the Division Level are eligible for scoring and local point's allocation under this methodology; Statewide Level and Regional Level projects that are not programmed at the higher levels will not be scored at the Division Level or receive Division Level local points under this methodology, unless the Land of Sky RPO TAC elects to do so.

Notwithstanding any of the above, however, no local points will be assigned to any project requiring local match if the local government in question expresses no desire to provide the required match and no desire to pursue the project at this time. In this case, points will be assigned to the next highest-ranking appropriate project.

The RPO TAC can adjust projects receiving points or adjust the number of points given to a project based on their discretion and/or public input. Any exceptions will require written explanation to be provided to NCDOT SPOT and be part of an open, public process that complies with Chapter 143, Article 33C of the North Carolina General Statutes and will be made available on the RPO's website as part of posting the point assignments per project.

A full table of proposed methodology is available on the Land of Sky RPO website <http://www.landofsky.org/rpo.html>



Highway Project Methodology

| Criteria | 0 points | 5 points | 10 points | 15 points | 20 points |
|-----------------------------|--|---|---|--|---|
| Safety | 5 Highway projects (1 -5) with the LOWEST safety scores as provided by NCDOT SPOT Office | 6 Highway projects whose safety score ranks (6 - 11) as provided by NCDOT SPOT Office | 6 Highway projects whose safety score ranks (12 - 17) as provided by NCDOT SPOT Office | 6 Highway projects whose safety score ranks (18 - 23) as provided by NCDOT SPOT Office | 6 Highway projects whose safety score ranks (24 - 29) the HIGHEST as provided by NCDOT SPOT Office |
| | Highway safety calculated by NCDOT SPOT office | | | | |
| Destination Served | No direct access to major destination | Direct access to 1 : critical educational, health care, grocery/retail recreation/entertainment destination OR TAZ with 20-49 employees | Direct access to 2 : critical educational, health care, grocery/retail recreation/entertainment destination OR TAZ with 50-99 employees | Direct access to 3 critical educational, health care, grocery/retail recreation/entertainment destination OR TAZ 100-149 employees | Direct access to 4 OR MORE : critical educational, health care, grocery/retail recreation/entertainment destination OR TAZ 150 or greater employees |
| | Does the project connect directly to a critical educational, health care, employment, grocery/retail or recreation/entertainment destination? | | | | |
| Projected Employment Growth | No direct access to TAZ with projected employment growth \geq 20 employees | Direct access to TAZ with projected employment growth 20-49 employees | Direct access to TAZ with projected employment growth 50-99 employees | Direct access to TAZ with projected employment growth 100-149 employees | Direct access to TAZ with projected employment growth 150 OR greater employees |
| | Does the project connect directly to a TAZ (Traffic Analysis Zone) with projected employment growth? (Based on Employment Growth Projections used in FBRMPO TDM) | | | | |
| Multimodal Accommodations | Project does not include bike/ped facilities or connections | Project includes EITHER bike/ped facilities or connections | Project includes BOTH bike/ped facilities or connections | | |
| | Whether the project includes facilities such as sidewalks, bicycle lanes, etc, or a connection to these type facilities. | | | | |
| Local Priority | The #9 and #10 projects for both Regional and Division level project lists | The #7 and #8 projects for both Regional and Division level project lists | The #5 and #6 projects for both Regional and Division level project lists | The #3 and #4 projects for both Regional and Division level project lists | The #1 and #2 projects for both Regional and Division level project lists |
| | Based on Regional Impact and Division Needs Prioritised lists from each county | | | | |
| SPOT 4.0 Score from NCDOT | SPOT 4.0 Score = $[(\text{SPOT SCORE}/\text{Max SPOT Score}) * 100] * 10\%$ | Regional Max Score = 70 Division Max Score = 50 | ie. Regional $[(65/70) * 100] * 10\% = 9.286$ ie. Division $[(35/50) * 100] * 10\% = 7$ | | |
| | The Quantitative SPOT 4.0 Score provided by NCDOT will account for 10% of overall score. | | | | |

Bike and Pedestrian Project Methodology

| Criteria | 0 points | 5 points | 10 points | 15 points | 20 points |
|------------------------------------|--|---|---|---|---|
| Safety | LOS RPO Bike/Pedestrian project with the lowest safety score as provide by NCDOT SPOT Office | LOS RPO Bike/Pedestrian project with the fourth highest safety score as provide by NCDOT SPOT Office | LOS RPO Bike/Pedestrian project with the third highest safety score as provide by NCDOT SPOT Office | LOS RPO Bike/Pedestrian project with the second highest safety score as provide by NCDOT SPOT Office | LOS RPO Bike/Pedestrian project with the highest safety score as provide by NCDOT SPOT Office |
| | Bike or Pedestrian safety calculated by NCDOT SPOT office, LOS RPO will Order and Rank Projects by safety scores | | | | |
| Destination Served | No direct access to major destination or TAZ with >= 20 employees | Direct access to 1 : critical educational, health care, grocery/retail, recreation/entertainment destination or TAZ with 20-49 employees | Direct access to 2 : critical educational, health care, grocery/retail, recreation/entertainment destination or TAZ with 49 - 99 employees | Direct access to 3 critical educational, health care, grocery/retail, recreation/entertainment destination or TAZ with 100-149 employees | Direct access to 4 OR MORE : critical educational, health care, grocery/retail recreation/entertainment destination or TAZ with 150 or greater employees |
| | Does the project connect directly to a critical educational, health care, employment, grocery/retail or recreation/entertainment destination? | | | | |
| Projected Employment Growth | No direct access to TAZ with projected employment growth >= 20 employees | Direct access to TAZ with projected employment growth of 20-49 employees | Direct access to TAZ with projected employment growth of 49-99 employees | Direct access to TAZ with projected employment growth of 100-149 employees | Direct access to TAZ with projected employment growth of 150 or greater employees |
| | Does the project connect directly to a TAZ (Traffic Analysis Zone) with projected employment growth? (Based on Employment Growth Projections used in FBRMPO TDM) | | | | |
| Connectivity | Project does not connect to bike/ped facilities or connections | | Projects that connect two previously disconnected (or inconveniently connected) sections of bicycle or pedestrian infrastructure (missing links) | | |
| | Whether the project includes facilities such as sidewalks, bicycle lanes, etc, or a connection to these type facilities. | | | | |
| Local Priority | The #9 and #10 projects for both from Bike/Ped project lists | The #7 and #8 projects from Bike/Ped project lists | The #5 and #6 projects from Bike/Ped project lists | The #3 and #4 projects from Bike/Ped project lists | The #1 and #2 projects from Bike/Ped project lists |
| | Based on Bike and Pedestrian Prioritised lists from each county | | | | |
| SPOT 4.0 Score from NCDOT | SPOT 4.0 Score = $[(\text{SPOT SCORE}/\text{Max SPOT Score}) * 100] * 10\%$ | Regional Max Score = 70 Division Max Score = 50 | ie. Regional $[(65/70) * 100] * 10\% = 9.286$ ie. Division $[(35/50) * 100] * 10\% = 7$ | | |
| | The Quantitative SPOT 4.0 Score provided by NCDOT will account for 10% of overall score. | | | | |



Public Involvement Process

Public Involvement Process for the Prioritization List will include the following steps based on the draft LOSRPO Public Involvement Plan, section VII. page 14:

- After consideration and preliminary adoption by the TAC, the draft Prioritization List will be published for a minimum two-week (14-day) public comment period and the notice will be advertised using our media resources provided in Appendix B.
- A Committee of TCC members was created to develop a local point methodology. After consideration and preliminary adoption by the TAC, the draft Prioritization Methodology will be published for a minimum four-week (28-day) public comment period and the notice will be advertised using our media resources provided in Appendix B.
- The notices for the public comment period and the public hearing will include an announcement stating that persons with disabilities will be accommodated. Special provisions will be made if notified 48 hours in advance (i.e. having available large print documents, audio material, someone proficient in sign language, a translator or other provisions as requested). The Prioritization List and Prioritization Methodology will be on file for review at the Land of Sky Regional Council Office, and available in a PDF format for downloading from the LOSRPO homepage. Written comments will be received during the comment period and will be directed to the LOSRPO. The LOSRPO's contact person, phone number and e-mail address will be included in the public notice. The LOSRPO will assemble all comments and forward comments to the TAC.
- The RPOTAC will hold a public hearing on the draft Prioritization List and the Prioritization Methodology. The public hearing will be held at a location which is accessible to persons with disabilities. The RPOTAC will approve a final Prioritization List and Prioritization Methodology after considering the public comments received. The public review periods for the Prioritization List and the Prioritization Methodology will sometimes be concurrent and sometimes will run separately, depending upon which schedule is more practical. The Prioritization List shall be submitted to the NCDOT at or before the NCDOT public hearings for input into the STIP. The RPOTAC may elect to open a dialogue with the State on specific project priorities.

When possible the Land of Sky RPO is duplicating timelines, meetings, and notices with the FBRMPO



NEXT STEPS/TIMELINE

- RPO board and NCDOT approve local input point methodology (October 15 – January 2015) with 28 day 4 week public comment period provided.
- Quantitative scores are given to P4.0 projects and STIP Unit Programs Statewide Mobility Projects (March 2016)
- Proposed Local input points for Regional Impact projects are allocated and posted on the LOSRPO website and endorsed by LOSRPO TAC (May - 2016) with minimum 2-week public comment period provided.
- STIP Unit Programs Regional Impact Projects (June – July 2016)
- Proposed Local input points for Division Needs projects are allocated and posted on the LOSRPO website and endorsed by LOSRPO TAC (September 30th- 2016) with minimum 2-week public comment period provided.
- NCDOT STIP Unit releases the NCDOT 2018 – 2017 DRAFT STIP