

Introduction

The following methodology was developed by the Winston-Salem Urban Area Metropolitan Planning Organization (WSMPO) for the purpose of determining 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 was 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. This standard has been updated for Prioritization 5.0 to require at least two criteria with at least one being qualitative.

Strategic Transportation Investments

Passed in 2013, the STI law allows NCDOT to use its funding more efficiently and effectively to enhance the state's infrastructure, while supporting economic growth, job creation and a higher quality of life. This process encourages thinking from a statewide and regional perspective while also providing flexibility to address local needs.

Prioritization

NCDOT uses a transparent, data-driven method for prioritizing transportation investment decisions. Through the process, called Prioritization, potential transportation improvement projects are submitted to NCDOT to be scored and ranked in the Statewide Mobility, Regional Impact and Division Needs funding categories, based on approved criteria such as safety, congestion, benefit-cost and local priorities. The scores and other factors are used to determine whether a project receives funding.

The NCDOT and North Carolina legislature have required that all metropolitan and rural planning organizations develop a ranking process to evaluate all eligible project categories (highway, bicycle and pedestrian, public transportation, aviation, rail and ferry). The evaluated projects must then be assigned points as per an NCDOT approved methodology. This process is known as Local Input Point Assignment. The WSMPO was assigned a total of 1800 Local Input Point (LIP). This entire methodology is approved by the NCDOT to ensure compliance with the legislative intent of the mandate. The process will apply to all projects ranked by the MPO in the MPO planning area that fall in the Regional Impact and Division Needs category. The STI law includes an innovative component known as cascading, where projects not funded in the Statewide Mobility category are eligible for funding in the Regional Impact category. Similarly, projects not funded in the Regional Impact category are eligible for Division Needs funds. Projects that cascade down are then subject to the scoring criteria and local input for the respective funding category.

MPO Transportation Planning

As the lead transportation planning agency for the Winston-Salem Urban Area that includes Forsyth County, its municipalities and portions of Davidson, Davie, and Stokes Counties, the City of Winston-Salem Department of Transportation develops and maintains a multimodal Transportation Plan. The planning process is open, inclusive, and encourages public participation in the overall development of the transportation system. The WSMPO Prioritization 5.0 project list is comprised of projects from various transportation planning documents with input from various subcommittees. Each planning document below was reviewed by the public and endorsed by the Transportation Advisory Committee (TAC).

Metropolitan Transportation Plan (MTP) or Transportation Plan

The MTP is a federally required long-term planning document listing the transportation improvements (projects) and policies to be implemented in the MPO area. The MTP is updated at least every four years and must cover at least the next twenty years into the future.

Needs Report

The needs report is a single prioritized transportation project list for Forsyth County and the surrounding communities of Bermuda Run, King and portions of Stokes, Davie and Davidson Counties. The projects were evaluated based on their benefits in improving air quality, congestion reduction, safety benefit and transportation benefits to the community.

Comprehensive Bicycle Master Plan

The Comprehensive Bicycle Master Plan is intended to improve the safety, efficiency, and convenience of the area's bicycle network. The Master Plan has been developed to provide the necessary updates to the original bike route map and to support the integration of bicycle planning into the long-range growth management efforts of the community.

Greenway Plan

The Greenway Plan provides a prioritized system of proposed greenways for construction over the next ten to fifteen years. Connectivity, constructability, and evidence of public support were used to prioritize proposed greenways for future construction. Utilization of these three key ideas aids in the implementation of the goals and objectives of the Greenway Plan.

Smith Reynolds Airport Master Plan

The purpose of the Master Plan is to identify improvements over a 20 year planning period that will improve safety, increase operational efficiency, or increase capacity. The proposed improvements consider several factors including environmental and community impacts along with the anticipated availability of future grant funding.

Schedule and Public Outreach

The MPO will announce two (2) 30-day project point assignment comment periods to all member governments and interested persons. The Regional Impact local input point assignment comment period will begin on April 1, 2018 and the Division Needs local input point assignment comment period will begin on September 1, 2018. The qualitative and quantitative analysis of each project will be placed on the WSDOT webpage for the duration of the comment period. The MPO will also issue press releases in newspapers of general circulation in the MPO and advertise through the MPO website. Once the information is available, the TAC committee will consider the public comments in making points assignments for each project. The comments will be presented and discussed before the TAC has a final vote to approve or not approve the project point assignments.

Project evaluations will be posted on the City of Winston-Salem Department of Transportation (WSDOT) STI webpage. Interested parties will have access to project criteria data, meeting minutes, updates, and other useful information throughout the entire process.

The URL link is <http://www.cityofws.org/departments/transportation/planning/sti-spot-prioritization>

WSMPO P5.0 Schedule

- TAC review of P5.0 Local Point Assignment Methodology – **February 15, 2018**
- TAC Approval of P5.0 Local Point Assignment Methodology – **March 15, 2018**
- NCDOT releases Draft list of Programmed Statewide Mobility Projects – **End of March 2018**
- NCDOT Deadline for Approval of Local Input Point Assignment Methodologies – **April 1, 2018**
- Regional Local Point Assignment Public Review Period – **April 1, 2018 - April 30, 2018**
- Draft Regional Point Assignment List emailed to TAC/TCC members — **April 2, 2018**
- Draft Regional Point Assignment List with any recommended changes and Public Comments emailed to TAC/TCC members — **May 3, 2018**
- TAC Review and Approval of P5.0 Regional Local Point Assignments – **May 17, 2018**
- Regional Impact Local Input Point Window – **April 01, 2018 - June 30, 2018**
- NCDOT releases Draft list of Programmed Regional Impact Projects – **End of August 2018**
- Draft Division Local Point Assignment List emailed to TAC/TCC members — **August 30, 2018**
- Division Local Point Assignment Public Review Period – **September 1, 2018 - September 30, 2018**
- Draft Division Local Point Assignment List with any recommended changes and Public Comments emailed to TAC/TCC members — **October 4, 2018**
- TAC Review and Approval of P5.0 Divisional Local Point Assignments – **October 18, 2018 ***Special Meeting*****
- Division Needs Local Input Point Window – **September 01, 2018 - October 31, 2018**
- 2020-2029 Draft STIP Released – **Beginning of January 2019**

***Note:** All dates subject to change

**Description of Criteria and Weights:
Regional Impact and Division Needs Qualitative and Quantitative Criteria for
Aviation, Highway, and Public Transit Projects**

Congestion (Applies only to Highway):

Project intends to relieve congestion. This criteria is determined using the Scaled Volume to Capacity Ratio (V/C) calculated by the Strategic Prioritization Office of Transportation (SPOT) as part of the P5.0 quantitative scoring process. The project will receive a maximum of **10 points** based on V/C ratio.

Safety Objective (Applies only to Highway):

Accident history will be an indicator of a safety deficiency in an existing road and the project evaluation will be based on the crash data. The project will receive a maximum of **10 points** based on the safety score calculated by the Strategic Prioritization Office of Transportation (SPOT) as part of the P5.0 quantitative scoring process.

Freight:

Improves access to airports, freight distribution facilities, or major commercial/industrial districts. Improves access and/or enhances freight movement to regional and national economic centers. Maximum score of **10 points** See attached matrix.

Multimodal:

Project provides access to and/or accommodates various modes of travel: Bicycle & Pedestrian, transit, rail, and air. Provides transit stops with sidewalks within ½ mile radius. Maximum score of **10 points** See attached Matrix

Environmental Justice Objective:

New facilities or facility improvements will be considered a benefit to Minority and Low-Income (MLI) populations by providing greater choice and availability of transportation options, stimulating economic development or redevelopment investments, and/or has little or no impact to existing homes and businesses. Maximum score of **10 points**

Economic Development Objective:

Improves access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment. Maximum score of **10 points**

MPO Qualitative Objective:

It is difficult to fully assess the need of a project based solely on quantitative criteria. The MPO will have the option of assigning **40 points** to any given project in an attempt to ensure that each member jurisdiction has a viable project. The point assignment must be based on a qualitative factors that include (but not limited to) the following: public input, consistency with planned growth and development areas, adherence to Complete Streets Policy, promotion of community goals and objectives to further adopted comprehensive plans, Environmental Justice, and projects with existing local commitment to funding. An MPO member must identify at least one factor as the basis for the point assignment. WSMPO will provide a form listing all the qualitative factors while also allowing the MPO voting members to provide staff with other relevant factors for their community to justify the 40 point assignment. As a result of the point assignment Highway and Bicycle and Pedestrian projects can obtain a maximum of 100 points and the remaining mode can obtain a maximum of 80 points

The TAC voting structure will be used to determine how many projects from each MPO partner would be eligible to receive the remaining 40 points: Three (3) projects from the City of Winston-Salem, Two (2) projects from the Forsyth County Board of Commissioners, and one (1) project from each of the remaining MPO partners (Town of Bermuda Run, Town of Bethania, Village of Clemmons, City of King, Town of Kernersville, Town of Lewisville, Town of Midway, Town of Rural Hall, Village of Tobaccoville, Town of Walkertown, Town of Wallburg, Davidson County, Davie County, Stokes County, North Carolina Department of Transportation, and the Winston-Salem Transit Authority (WSTA)).

The assignment of 40 points qualitative score to a single project by each TAC voting member is a method to identify the priority projects during the ranking process. The quantitative data (60 points or 40 points) along with the 40 points qualitative score will differentiate what is important to the MPO communities when assigning the local input points.

Regional Impact and Division Needs Qualitative and Quantitative Criteria for Highway Projects

Qualitative and Quantitative Criteria					
Points	0 points	1 point	5 points	10 points	40 points
Congestion (10 Max)	Volume to capacity less than 0.5	Volume to capacity btw 0.5 and 0.75	Volume to capacity btw 0.751 and 0.9	Volume to capacity greater than 0.9	
Multimodal (10 Max)	Project doesn't provide access to or accommodate various modes of travel. Project doesn't provide transit stops with sidewalks within ½ mile radius.		Project provides access to and/or accommodates various modes of travel: bicycle & pedestrian, transit, rail, and air OR provides transit stops with sidewalks within ½ mile radius.	Project provides access to and/or accommodates various modes of travel: bicycle & pedestrian, transit, rail, and air AND provides transit stops with sidewalks within ½ mile radius.	
Freight (10 Max)	Doesn't Improve access to airports, freight distribution facilities, or major commercial/industrial districts OR access and/or enhances freight movement to economic centers.		Improves access to airports, freight distribution facilities, or major commercial/industrial districts OR Improves access and/or enhances freight movement to economic centers.	Improves access to airports, freight distribution facilities, or major commercial/industrial districts AND Improves access and/or enhances freight movement to economic centers.	
Economic Development (10 Max)	Doesn't Improve access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment.			Improves access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment.	
Environmental Justice (10 Max)	Project is not a benefit to Minority and Low-Income (MLI) populations and impacts existing homes and businesses.	Project has little or no impact to existing homes and businesses.	Project is a benefit to Minority and Low-Income (MLI) populations and has little or no impact to existing homes and businesses.	Project is a significant benefit to Minority and Low-Income (MLI) populations and has no impact to existing homes and businesses.	
Safety (10 Max)	Safety points less than 30	Safety points btw 30-50	safety points btw 51-65	Safety points greater than 65	
MPO Qualitative Score (40 Max)					Each MPO partner may assign 40 points to a project based on qualitative criteria. The number of projects per MPO partner is determined by TAC voting structure.

Regional Impact and Division Needs Qualitative and Quantitative Criteria for Aviation Projects

Qualitative and Quantitative Criteria					
Points	0 points	1 point	5 points	10 points	40 points
Congestion (N/A)					
Multimodal (10 Max)	Project doesn't provide access to or accommodate various modes of travel. Project doesn't provide transit stops with sidewalks within ½ mile radius.		Project provides access to and/or accommodates various modes of travel: bicycle & pedestrian, transit, rail, and air OR provides transit stops with sidewalks within ½ mile radius.	Project provides access to and/or accommodates various modes of travel: bicycle & pedestrian, transit, rail, and air AND provides transit stops with sidewalks within ½ mile radius.	
Freight (10 Max)	Doesn't Improve access to airports, freight distribution facilities, or major commercial/industrial districts OR access and/or enhances freight movement to economic centers.		Improves access to airports, freight distribution facilities, or major commercial/industrial districts OR Improves access and/or enhances freight movement to economic centers.	Improves access to airports, freight distribution facilities, or major commercial/industrial districts AND Improves access and/or enhances freight movement to economic centers.	
Economic Development (10 Max)	Doesn't Improve access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment.			Improves access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment.	
Environmental Justice (10 Max)	Project is not a benefit to Minority and Low-Income (MLI) populations and impacts existing homes and businesses.	Project has little or no impact to existing homes and businesses.	Project is a benefit to Minority and Low-Income (MLI) populations and has little or no impact to existing homes and businesses.	Project is a significant benefit to Minority and Low-Income (MLI) populations and has no impact to existing homes and businesses.	
Safety (N/A)					
MPO Qualitative Score (40 Max)					Each MPO partner may assign 40 points to a project based on qualitative criteria. The number of projects per MPO partner is determined by TAC voting structure.

**Regional Impact and Division Needs Qualitative and Quantitative Criteria for
 Transit Projects**

Qualitative and Quantitative Criteria					
Points	0 points	1 point	5 points	10 points	40 points
Congestion (N/A)					
Multimodal (10 Max)	Project doesn't provide access to or accommodate various modes of travel. Project doesn't provide transit stops with sidewalks within ½ mile radius.		Project provides access to and/or accommodates various modes of travel: bicycle & pedestrian, transit, rail, and air OR provides transit stops with sidewalks within ½ mile radius.	Project provides access to and/or accommodates various modes of travel: bicycle & pedestrian, transit, rail, and air AND provides transit stops with sidewalks within ½ mile radius.	
Freight (10 Max)	Doesn't Improve access to airports, freight distribution facilities, or major commercial/industrial districts OR access and/or enhances freight movement to economic centers.		Improves access to airports, freight distribution facilities, or major commercial/industrial districts OR Improves access and/or enhances freight movement to economic centers.	Improves access to airports, freight distribution facilities, or major commercial/industrial districts AND Improves access and/or enhances freight movement to economic centers.	
Economic Development (10 Max)	Doesn't Improve access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment.			Improves access to existing employment centers or opens access to land zoned, or identified in development guides, for future employment.	
Environmental Justice (10 Max)	Project is not a benefit to Minority and Low-Income (MLI) populations and impacts existing homes and businesses.	Project has little or no impact to existing homes and businesses.	Project is a benefit to Minority and Low-Income (MLI) populations and has little or no impact to existing homes and businesses.	Project is a significant benefit to Minority and Low-Income (MLI) populations and has no impact to existing homes and businesses.	
Safety (N/A)					
MPO Qualitative Score (40 Max)					Each MPO partner may assign 40 points to a project based on qualitative criteria. The number of projects per MPO partner is determined by TAC voting structure.

Division Needs Bicycle & Pedestrian Qualitative and Quantitative Criteria

Access Objective:

One of the primary objectives of bicycle and pedestrian projects is to ensure that they provide active transportation options for residents of all ages. To ensure that proposed projects are providing connections to important locations, points will be assigned to projects based on the number of destinations they serve. Points will be awarded to projects that provide connections to high-density residential areas, transit stations, employment centers, schools, parks, retail centers, and libraries as determined by the local municipality and the evaluation table below. Maximum score: **20** points.

Safety Objective:

Bicycle and pedestrian crash history will be an indicator of a safety deficiency and half of the safety objective evaluation will be based on the crash data. The project will receive a maximum of eight (8) points based on the number crashes on the adjacent roadway. The other half of the safety objective will address the speed limit on the adjacent roadway, as speed differential is a major concern for cyclists and pedestrians. The project will receive a maximum of 8 points based on the speed limit on the adjacent roadway. Maximum score: **16** points.

Connectivity Objective:

Building a well-connected network of bicycle and pedestrian facilities is crucial for cyclists and pedestrians, as gaps in the network can present serious challenges to active transportation. Projects will be awarded points based on the number of connections they provide to existing bicycle and pedestrian facilities. Maximum score: **16** points.

Constructability Objective:

Proposed projects should have a certain level of planning completed and some right-of-way acquired to ensure that they can be built in a timely manner. Proposed projects will be awarded points based on whether a feasibility study has been performed and what percentage of right-of-way has been acquired. Maximum score: **8** points

MPO Qualitative Objective:

It is difficult to fully assess the need of a project based solely on quantitative criteria. The MPO will have the option of assigning **40** points to any given project in an attempt to ensure that each member jurisdiction has a viable project. The point assignment must be based on a qualitative factors that include (but not limited to) the following: public input, consistency with planned growth and development areas, adherence to Complete Streets Policy, promotion of community goals and objectives to further adopted comprehensive plans, and projects with existing local commitment to funding. An MPO member must identify at least one factor as the basis for the point assignment. WSMPO will provide a form listing all the qualitative factors while also allowing the MPO voting members to provide staff with other relevant factors for their community to justify the 40 point assignment.

The TAC voting structure will be used to determine how many projects from each MPO partner would be eligible to receive 40 points: three (3) projects from the City of Winston-Salem, two (2) projects from Forsyth County, and one (1) project from each of the remaining MPO partners (Town of Bermuda Run, Town of Bethania, Village of Clemmons, City of King, Town of Kernersville, Town of Lewisville, Town of Midway, Town of Rural Hall, Village of Tobaccoville, Town of Walkertown, Town of Wallburg, Davidson County, Davie County, Stokes County, North Carolina Department of Transportation, and the Winston-Salem Transit Authority (WSTA)).

The assignment of 40 qualitative points to a single project by each TAC voting member is a method to identify the priority projects during the ranking process. The quantitative data along with the 40 qualitative points will differentiate what is important to the MPO communities when assigning the local input points.

Winston-Salem Urban Area Metropolitan Planning Organization (WSMPO)
 Prioritization 5.0 Evaluation Criteria and Point Assignment Process

Division Needs Bicycle & Pedestrian Qualitative and Quantitative Criteria

Access: <i>(Within .5 miles of pedestrian facility / within 1.5 miles of bicycle facility; Choose all that apply)</i>		
High-Density Residential Areas (at least 12 Units/acre)	3	_____
Transit Station	3	_____
Major Employment Center (Activity Centers as defined in Legacy 2030 Update)	3	_____
School	3	_____
<input type="checkbox"/> K-8 <input type="checkbox"/> 9-12 <input type="checkbox"/> College/University		
Cultural Attraction (museum, stadium, theater, etc.)	2	_____
Park/Playground/Recreation Center	2	_____
Shopping/Retail & Services	2	_____
Library	2	_____
MAXIMUM POINTS – 20		Total _____
Constructability:		
ROW Acquired		
50-100%	4	_____
25-50%	2	_____
0-25%	1	_____
Has the project been studied through a planning or preliminary engineering process?		
<input type="checkbox"/> Yes	4	_____
<input type="checkbox"/> No		
MAXIMUM POINTS – 8		Total _____
Safety:		
Crashes		
5 or more	8	_____
4	6	_____
3	4	_____
2	2	_____
1	1	_____
Posted Speed Limit		
55 and over	8	_____
40 to 50	6	_____
30 to 40	4	_____
25	2	_____
MAXIMUM POINTS – 16		Total _____
Connections: <i>(Connections to existing or funded Sidewalk/Greenway/Bike/Transit Facilities)</i>		
3, or more, connections	16	_____
2 connections	8	_____
1 connection	4	_____
MAXIMUM POINTS – 16		Total _____
MPO Qualitative Score (40 Max):		
Each MPO partner may assign 40 points to a project based on qualitative criteria. The number of projects per MPO partner is determined by TAC voting structure.		
MAXIMUM POINTS – 40		Total _____

**MPO Qualitative Objective
Project Point Assignment Form
Aviation, Bicycle & Pedestrian, Highway, and Public Transit Projects**

Project Name: _____

Project SPOT ID: _____

The point assignment must be based on documented qualitative factors.
Please select at least one of the following and provide supporting documentation:

- Public Input
- Consistency with Planned Growth and Development Areas
- Adherence to Complete Streets Policy
- Promotion of Community Goals and Objectives to Further Adopted Comprehensive Plans
- Existing Local Commitment to Funding
- Other Relevant Factor(s)

Each TAC voting member has at least **40** points that may be applied to any given project.

A project will either receive 40 points or 0 points.

The TAC voting structure will be used to determine how many projects from each MPO partner would be eligible to receive 40 points: three (3) projects from the City of Winston-Salem, two (2) projects from Forsyth County, and one (1) project from each of the remaining MPO partners (Town of Bermuda Run, Town of Bethania, Village of Clemmons, City of King, Town of Kernersville, Town of Lewisville, Town of Midway, Town of Rural Hall, Village of Tobaccoville, Town of Walkertown, Town of Wallburg, Davidson County, Davie County, Stokes County, North Carolina Department of Transportation, and the Winston-Salem Transit Authority (WSTA).

Total Score and Project Ranking Approach

Local Points Assignment

Regional Impact projects have a pool of 1800 points and Division Needs projects have a pool of 1800 points. The maximum number of points that can be applied to a project at each level is 100. Some projects will be eligible for Local Input Points in both levels, while some will only be eligible at the division level. The MPO intends to assign the maximum allowed points (100) to 18 projects in the Regional and Division levels based on rankings created through the processes described in this document.

Point Assignment Process

Local Input Point Assignment Procedures

1. WSDOT staff will score/rank all Projects (Bicycle & Pedestrian/Highway/Public Transit/Aviation) according to the MPO approved Qualitative and Quantitative criteria.
2. The highest ranked project in each mode (Aviation/Bicycle & Pedestrian/Highway/Public Transit) will receive the maximum allowance of Local Input Points (100 points).
3. The WSMPO and the NCDOT Division 9 Office will coordinate and strategically assign the remaining local input points to projects. The ranking serves as the foundation for this collaboration since it helps determine the need for this project by the member jurisdiction and establishes the projects merit. Where this coordination results in point assignments which deviate from the ranking, the rationale for the deviations will be fully documented and provided for review and comments to the public prior to the approval by the TAC. All projects, rankings, and local point assignments will be published on the MPO's STI webpage.

Note: Public comments, final point assignments, and any justification/rationale for point assignment which deviates from this Local Methodology will be placed on the MPO's STI website.

Material Sharing

<http://www.cityofws.org/departments/transportation/planning/sti-spot-prioritization>