

# UPPER COASTAL PLAIN RURAL PLANNING ORGANIZATION

March 7, 2017  
TCC: 10:30 a.m.  
Wilson Operations Center  
1800 Herring Ave.  
Wilson, NC 27893  
252-296-3341

## RPO Transportation Coordinating Committee Agenda

1. Welcome & Introductions – Bill Bass – TCC Chair
2. Additions or corrections to Agenda
3. Approval of Minutes January 31, 2017

### Action Items

4. Adoption\Approval of FY1718 Planning Work Program (PWP) and 5-Year Planning Calendar

### Old Business

5. STI Project Prioritization – Review Schedule – Identify new projects – P4 Statistics
6. CMAQ Project Submittal Deadline March 10, 2017

### New Business

7. New Chair/Vice Chair Nominations for FY1718

### Other Business

8. TCC Member Comments

### Reports

9. Southeast Area Study–<http://southeastareastudy.com>
10. Reminder to TAC of State Ethics Filing Requirements – Due April 15, 2017
11. US 70 Commission – FS-1604A Feasibility Study (late April design review meeting)
12. Hwy 17/64 Association – FS-1504A Feasibility Study
13. CCX Rocky Mount Master Plan
14. Legislative/STIP Update
15. NCDOT Division 4
16. NCDOT Planning Branch

### Public Comment

17. Public Comment

### Dates of future meetings:

May 2, 2017

July 11, 2017

September 5, 2017

November 7, 2017

### Attachments:

1. TCC January 31, 2017 Minutes
2. UCPRPO PWP Draft – FY 1718
3. UCPRPO Draft 5 Year Calendar
4. UCPRPO STI P5 Schedule.pdf
5. UCPRPO SPOT P5 Projects List 013017\_with\_map.pdf
6. STI P4 Statistics

# UPPER COASTAL PLAIN RURAL PLANNING ORGANIZATION

January 31, 2017

## RPO Transportation Coordinating Committee Minutes

### Attendance

#### TCC

Gronna Jones, City of Wilson  
Cynthia Jenkins, Edgecombe  
Berry Gray, Johnston  
Jae Kim, Spring Hope  
Paul Ember, Smithfield  
Alicia Gregory, Wilson's Mills  
Bill Bass, City of Wilson  
J. P. Duncan, Wilson  
Nancy Nixon, Nash  
Mark Johnson, Wilson  
Paul Ember, Smithfield

#### NCDOT

Jimmy Eatmon, NCDOT-Division 4  
Terry Ellis, NCDOT – Division 4  
Carlos Moya, TPB  
Earlene Thomas, TPB  
Eddie McFalls, NCDOT Rail

#### Other

Bob League, Rocky Mount MPO  
Neal Davis, JCATS  
Dion Viventi, Rocky Mount-Wilson Airport

#### UCPRPO

James Salmons

### Introduction

#### 1. *Welcome & Introductions – Bill Bass – TCC Chair*

Mr. Bill Bass welcomed everyone and asked everyone to introduce themselves to the members and then called the meeting to order.

#### 2. *Approval of Agenda*

Mr. Bill Bass asked if everyone had an opportunity to review the agenda and asked if anyone had any modifications. With none being stated the agenda was approved. **UPON A MOTION** by Nancy Nixon (Nash), second by Berry Gray (Johnston) the minutes were both unanimously approved.

### Action Items

#### 3. *Minutes – November 1, 2016*

After reviewing the Minutes for the November 1, 2016 meeting and **UPON A MOTION** by Berry Gray (Johnston), second by Cynthia Jenkins (Edgecombe) the minutes were both unanimously approved.

### New Business

#### 4. *UCPRPO STI Projects*

Members were provided a quick update on the draft STIP FY1822. Included was a list of projects currently on the UCPRPO STI list indicating which projects were funded and which projects remained within STI P5.0 based on being within the draft STIP and/or being sibling projects of other current ongoing projects. The Agenda packet included the full schedule for the STI P5.0 prioritization. It was reported that based on population the UCPRPO is eligible to have a maximum of 23 projects to be prioritized in P5. Members were asked to review the list and start considering which projects were priorities and/or if there were any new projects to be considered. The goal is to establish the list of 23 projects to be considered for P5 by mid-summer (mid-August) to recommend to the TAC for adoption.

# UPPER COASTAL PLAIN

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## RURAL PLANNING ORGANIZATION

5. *Consider upcoming FY1617 CTP needs*

Members were asked if there were any needs to perform minor updates to current County Comprehensive Transportation Plans. Bill Bass (City of Wilson) stated there may be an interest to update the Wilson County CTP. There were no other requests for CTP updates.

6. *CXX Multi-Modal Facility Master Plan Update*

Mr. Eddie McFalls provided a brief update on the CXX Multi-Modal Facility Master Plan. Mr. McFalls stated the goal of the multi-modal project was to convert long haul truck trips into short haul truck trips and rail trips. The project is identified within the draft STIP as project P-5711. The facility will provide Eastern North Carolina a connection to all other CSX Rail connected facilities across the country providing access to their entire network. The project will consist of 3 phases (A, B, and C). The first phase A is constructing the facility terminal itself. The second phase B will be to construct "line of road" improvements which are actual rail line improvements which will include a double track to the north of the facility up to Battleboro and into the County. The third phase C will be look at some immediate highway improvements around the facility. The project is expected to provide a \$1.8 billion public benefit to the Country and \$310 million public benefit to the State of North Carolina. Construction is expected to begin next year in 2017 with the facility moving boxes by year 2020.

Mr. McFalls state the primary access will be NC 4. There may be intersection improvements along NC 4 to accommodate the new facility. There is currently a traffic study ongoing to see what impact the facility will have on the current transportation network. In addition, there is a Facility Master Plan study that is getting ready to begin and some members may be contacted as stakeholders to serve on the studies advisory group to help determine what improvements may be needed. The purpose of the plan is to identify any new projects to recommend to adding to the STI process.

7. *Draft FY1718 Planning Work Program (PWP) review*

Members were provided with the draft PWP and 5 year calendar and asked to provide any comments. They were asked to review the draft provide any comments or recommended changes to the PWP by February 15, 2017. The final PWP will be presented for adoption on March 7, 2017 and recommended to the TAC for adoption at their next meeting on March 8, 2017.

8. *CMAQ Project Application Deadline – March 10, 2017*

It was reported to members the deadline to submit CMAQ projects is March 10, 2017. A brief CMAQ 101 video was displayed showing basic information about CMAQ projects. Mr. Salmons reported that he was able to coordinate with CAMPO to join them in a training on Locally Administered Projects on March 1, 2017.

### **Other Business**

9. *TCC Member Comments*

Ms. Nancy Nixon stated due to the complicated nature of the STI process she had an interest in modifying the MOU to allow for longer term limits for TAC members (currently 1 year terms) and asked other members if they agreed. It was recommended that some TAC members receive one on one training on the basics of the role of the UCPRPO and the duties of TAC members. Mr. James Salmons stated he was available to meet with individual members to help educate TAC members.

# UPPER COASTAL PLAIN RURAL PLANNING ORGANIZATION

## Reports

**10. Southeast Area Study** – <http://southeastareastudy.com>

Mr. James Salmons reported that there was another Public Symposium held on January 12, 2017 with good turnout of about 150 individuals. In addition there was a SOT meeting held the previous Thursday to wrap up the final recommendations. He added that the study is nearing the final stages and soon would be presented to boards for adoption consideration.

**11. US 70 Commission**

Mr. Salmons reported that the US 70 to Interstate Feasibility Study was continuing to move forward and the study team had reported they were working through the conceptual designs and there will be a review meeting with NCDOT in late April. The team expects to have something to report back to the TAC at their May 10<sup>th</sup> meeting.

**12. NCDOT Division 4**

Mr. Jimmy Eatmon reported to the members that the Division is continuing with repairs due to Hurricane Matthew. He also reported that there would be continuing re-paving along I-95 during the evening hours and to use caution when traveling the Highway.

**13. NCDOT Planning Branch**

Mr. Carlos Mayo introduced himself as the new UCPRPO NCDOT coordinator. He reported that the Rocky Mount CTP had been adopted and that the department was working on completing the document. The Nash County CTP has also been adopted and staff are working on completing the document. He stated he was available to answer any questions members may have at any time.

**14. Hwy 17/64 Association**

It was reported that the upgrade US 64 to Interstate Feasibility Study was continuing. He also reported that the bridge replacement at US 64 Alt and Neuse River in Spring Hope remained in the draft STIP.

**15. Ethics Reminder for TAC Members**

Members were asked to remind their TAC members of the required Ethics requirements due April 15, 2017.

**16. Legislative Update**

Mr. Salmons reported the House Select Committee on Transportation had a proposal to create a “mega-projects” (like I-95) committee to consider large dollar projects and a proposal to modify the weights given to local input between the Divisions and MPO’s/RPO’s.

## Public Comments

There was no public comment.

## Upcoming meeting:

The next meeting is tentatively scheduled for March 7, 2017.

**UPON A MOTION** from Ms. Nancy Nixon (Nash) was made to adjourn and a second motion was made by Mr. Paul Embler (Smithfield) and the meeting was adjourned.

Respectfully submitted,

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Bill Bass, TCC Chair

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James M. Salmons, UCPRPO

**FY 2017-2018**  
**PLANNING WORK PROGRAM**  
**ANNUAL PROPOSED FUNDING SOURCES TABLE**  
**Upper Coastal Plain Rural Planning Organization**

TASK CODE	TASK CODE/ WORK PRODUCT DESCRIPTION	WORK PRODUCT FORMAT	GEOGRAPHY	PRIMARY PRODUCT # (IF APPLICABLE) <b>FY1718</b>	RPO PROGRAM FUNDS		
					HIGHWAY/TRANSIT		TOTAL
					LOCAL 20%	STATE 80%	
<b>I. DATA COLLECTION AND ASSESSMENT</b>							
I-1	<b>DATA COLLECTION AND ASSESSMENT</b>				\$ 4,600.20	\$ 18,400.80	\$ 23,001.00
I-1.1	CTP Inventory and Assessment						
	Annual list of prioritized CTP needs	Excel Spreadsheet	UCPRPO	0000-00			
I-1.2	Bicycle and Pedestrian Inventory and Assessment						
	GIS layers for existing and proposed ped facilities	GIS Data	Tarboro	0708-001			
	Pedestrian Report Development	Plan Document Development	Tarboro	0708-001			
I-1.3	Parking Inventories						
I-1.4	Vehicle Occupancy Rates (VOR) Counts and Assessment						
I-1.5	Traffic Volume Counts and Assessment						
I-1.6	Crash Data and Assessment						
I-1.7	Public Transportation Service Data and Assessment						
	Fixed Route Study - City of Wilson	Meetings	UCPRPO	1718-001			
	Participate JCATS Facilities Feasibility Study Committee	Meetings	UCPRPO	1617-001			
I-1.8	Multimodal Data Collection and Assessment						
I-1.9	Freight Data Collection and Assessment						
I-1.10	Socioeconomic Data Inventory						
I-1.11	Environmental and Land use Data Inventory and Assessment						
	Updated parcel and centerline data	GIS Data	Edgecombe	0809-001			
	Updated parcel and centerline data	GIS Data	Johnston	0809-001			
	Updated parcel and centerline data	GIS Data	Nash	0809-001			
	Updated parcel and centerline data	GIS Data	Wilson	0809-001			
I-1.12	Demographic Data Collection and Assessment						
<b>II. TRANSPORTATION PLANNING</b>							
II-1	<b>COMPREHENSIVE TRANSPORTATION PLAN (CTP) DEVELOPMENT</b>				\$ 4,053.60	\$ 16,214.40	\$ 20,268.00
II-1.1	<b>Develop CTP Vision</b>						
II-1.1.a	CTP Study Setup						
	Local CTP Vision						
II-1.2	<b>Conduct CTP Needs Assessment</b>						
II-1.2.a	Data Collection and Assessment						
	Review current County CTP's and Evaluate for updates			1718-002			
II-1.2.b	Current and Future Year Data Endorsements						
II-1.2.c	Deficiency Assessment						
II-1.3	<b>Analyze Alternatives and Environmental Screening</b>						
II-1.3.a	Alternatives Assessment						
II-1.3.b	Local Alternative Consensus						
II-1.4	<b>Develop Final Plan</b>						
II-1.4.a	Develop CTP Maps						
	Combine Regional CTP Maps with all modes	Map		1415-019			
	Generate GIS Data Layer with CTP Inventory and Attributes for Consistency	GIS Data		1415-020			
	CTP 2.0 Map Committee	Meetings		1617-002			
II-1.4.b	Local Endorsement						
II-1.4.c	Adopt Plan						
II-1.4.d	CTP Document						
II-1.4.e	CTP and Local Land Use Revisions						
	Update Wilson County CTP		UCPRPO	1718-017			
II-1.4.f	Development of Local Implementation Strategies						
	Coordinate with Counties to provide CTP Local Implementation Strategies	Meeting Participation/Administration	UCPRPO	1718-003			
II-2	<b>PRIORITIZATION AND PROGRAM DEVELOPMENT</b>				\$ 4,000.00	\$ 16,000.00	\$ 20,000.00
II-2.1	<b>Local Project Prioritization</b>						
II-2.1.a	Local Project Prioritization						
	SPOT P5 2018 Project Prioritization	Meeting Participation/Prioritization	UCPRPO	1718-004			
II-2.1.b	Project Entry and SPOT Prioritization Process						
	Maintain SPOT P5 2018 Project List	Administrative	UCPRPO	1718-005			
II-2.2	<b>STIP Participation</b>						
II-2.2.a	STIP Participation						
II-3	<b>PROJECT DEVELOPMENT</b>				\$ 400.00	\$ 1,600.00	\$ 2,000.00
II-3.1	<b>Problem Statement and Purpose and Need</b>						
II-3.1.a	Purpose and Need Data						
II-3.1.b	Public Involvement Strategies						
II-3.2	<b>Merger Process</b>						
II-3.2.a	Meeting Attendance						
	Participate in Merger Meetings as needed	Meeting Participation	UCPRPO	1718-006			
II-3.2.b	Review and Comment						
II-3.3	<b>Indirect and Cumulative Effects</b>						
II-3.3.a	ICE Assessment of Probable Growth						
II-4	<b>GENERAL TRANSPORTATION PLANNING</b>				\$ 7,016.00	\$ 28,064.00	\$ 35,080.00
II-4.1	<b>General Transportation Planning Tasks</b>						
II-4.1.a	Regional or Statewide Planning						
	Attendance at NCARPO/NCAMPO and other meetings	Meeting Participation	UCPRPO	1718-007			
	GIS data translator	GIS Data	NC State	1718-008			
	CSX-CXX Advisory Group	Meeting Participation	Eastern NC	1718-009			
	Highway 70 Commission	Meeting Participation	Eastern NC	1718-011			
	Rocky Mount MPO Meetings	Meeting Participation	UCPRPO	1718-012			
	CAMPO Southeast Area Study	Meeting Participation/Preparation	UCPRPO	1718-013			
	HWY 17/64 Association	Meeting Participation	Eastern NC	1718-014			
II-4.1.b	Special Studies and Projects						
	UCPRPO Flex Site Maintenance	Website	UCPRPO	1112-003			

SPENDING DETAILS PER LINE ITEM ARE REQUIRED EACH QUARTER.

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TASK CODE	TASK CODE/ WORK PRODUCT DESCRIPTION	WORK PRODUCT FORMAT	GEOGRAPHY	PRIMARY PRODUCT # (IF APPLICABLE)	RPO PROGRAM FUNDS		
					HIGHWAY/TRANSIT		TOTAL
					LOCAL	STATE	
	Tarboro Historical District App Development	Mobile App	UCPRPO	FY1718 1516-010			
II-4.1.c	CMAQ Planning						
II-4.1.d	Air Quality Assessment						
II-4.1.e	Alternative Funding						
II-4.1.f	Training and Certification						
	Participate in training as applicable	Meeting Participation	UCPRPO	1617-015			
	Managing Locally Administered Project Training	Meeting Participation	UCPRPO	1617-018			
II-4.2	Title VI						
II-4.2.a	RPO Affirmation of Title VI Compliance						
II-4.2.b	Transportation Initiatives and ADA Compliance						
II-4.2.c	Environmental Justice Assessment						
II-4.2.d	Limited English Proficiency (LEP) Assessment						
<b>III. ADMINISTRATION OF TRANSPORTATION PLANNING AND POLICIES</b>							
III-1	ADMINISTRATIVE DOCUMENTS AND PUBLIC INVOLVEMENT				\$ 7,940.00	\$ 31,760.00	\$ 39,700.00
III-1.1	Administrative						
III-1.1.a	Planning Work Program						
	Prepare and update PWP for FY 2018-2019	Administrative	UCPRPO	1718-000			
III-1.1.b	5-Year Planning Calendar						
	Prepare 5 year planning calendar for FY 2018-2023	Administrative	UCPRPO	1718-000			
III-1.1.c	Quarterly Invoice and Progress Reports						
	Prepare quarterly invoice and progress report for FY 2017-2018	Administrative	UCPRPO	1718-000			
III-1.1.d	TCC/TAC Work Facilitation						
	Prepare minutes and agenda and host UCPRPO TAC and TCC meetings	Administrative	UCPRPO	1718-000			
III-1.1.e	Regulatory Documents						
III-1.1.f	Miscellaneous Expenses						
	Respond to member requests	Administrative	UCPRPO	1718-000			
III-1.2	Public Involvement						
III-1.2.a	Public Involvement Plan (PIP)						
III-1.2.b	Documentation of Public Input						
	Update UCPRPO website as needed	Other	UCPRPO	1718-016			
	List of Public Workshop attendees and comments	Meeting Participation	Tarboro	1617-017			
	List of Public Workshop attendees and comments	Meeting Participation	UCPRPO	1617-017			
<b>TOTAL</b>					\$ 28,010	\$ 112,039	\$ 140,049

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\_\_\_\_\_, 2017.  
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 Signature, TAC Chairman  
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 Signature, RPO Secretary

**Cost Share Differences with new funds allocation from \$121,781 to \$140,049**

County	FY1516 Actual Expenditures of \$93,264.92	Original \$ Allocation \$121,781	New \$ Allocation \$140,049
Edgecombe	\$2,513.38	\$3,281.85	\$3,774.15
Johnston	\$8,156.17	\$10,649.94	\$12,247.51
Nash	\$4,295.57	\$5,608.95	\$6,450.34
Wilson	\$3,687.87	\$4,815.45	\$5,537.80

\*Based on Population from the North Carolina Office of State Budget and Management Most Current Provisional Certified 2014 Estimates

**UCPRPO**

**Five-year Planning Calendar, 2017-2022**

Year	Planning Product			Planning Task			
	Planning Work Program	Long-Range Transportation Planning (CTP)	State STI	Data Inventory	GIS Development	Special Studies	Regulatory Requirements
FY 17-18	Final March 2018	Continue to Develop Local CTP Implementation Strategies	STI Prioritization Project Development	Tarboro Pedestrian Inventory. Regional Data Inventory Map.	Tarboro Historical District GIS Layer	Maintain Economic Development site with updated layers and data. Develop Pedestrian Historical App for Tarboro. CAMPO Southeast Area Transportation Study. CXX Advisory Group Study.	Review Public Participation Plan
FY 18-19	Final March 2019	CTP Review and Implementation – Edgecombe County	STI Prioritization Adoption	Regional Data Inventory Map,	Create Crash Data for Johnston County.	Maintain Economic Development site with updated layers and data. CXX Advisory Group Study.	None Planned
FY 19-20	Final March 2020	CTP Review and Implementation – Wilson County	STI Prioritization Project Development	Castalia Pedestrian Inventory. Regional Data Inventory Map.	Nash County Pedestrian GIS Layer	Maintain Economic Development site with updated layers and data.	Review Public Participation Plan
FY 20-21	Final March 2021	CTP Review and Implementation – Johnston County	STI Prioritization Adoption	Nash County Pedestrian Inventory. Regional Data Inventory Map.	Create Crash Data for Nash County.	Maintain Economic Development site with updated layers and data.	None Planned
FY 21-22	Final March 2022	CTP Integration with Land Use and Implementation – Nash County	STI Prioritization Project Development	Regional Data Inventory Map.	Create Crash Data for Johnston County.	Maintain Economic Development site with updated layers and data.	Review Public Participation Plan

Cheryl Oliver, Chair, TAC

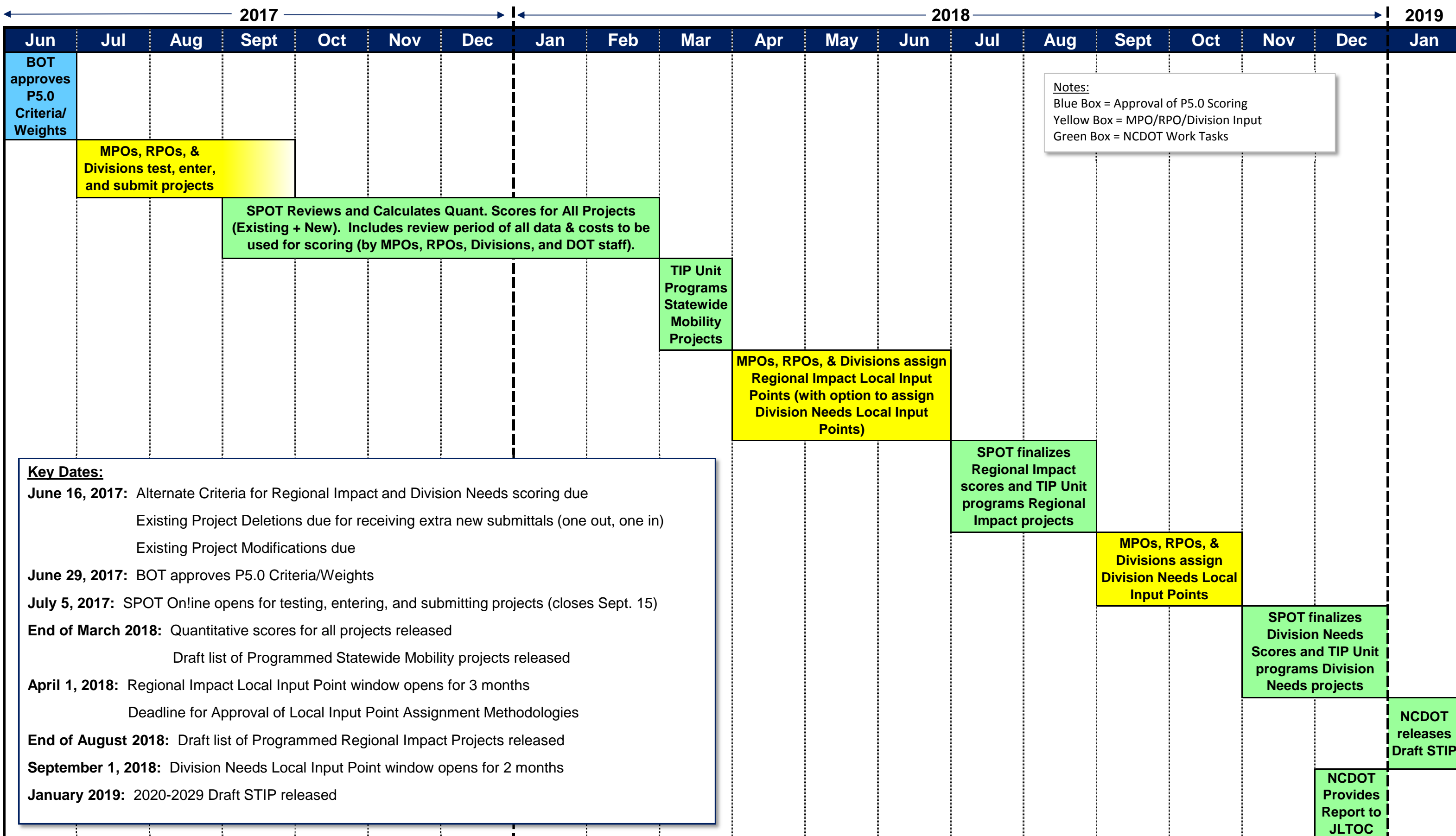
Date

James Salmons, UCPRPO

Date

# Prioritization 5.0 Schedule

November 14, 2016





# UCRPO STI P5.0 REGIONAL Highway Projects DRAFT List

Version 1/30/17

SPOT ID	Mode	Project Category	TP#	Route / Facility Name	From / Cross Street	To	Description	Specific Improvement Type	All Divisions	All Counties	P3 Region Score	P4 Division Score	Cost	Status
H150462	Highway	Regional Impact		US 301	Black Creek Rd	Upcomb Rd	Upgrade this facility to a four-lane divided boulevard with a 23-foot raised landscaped median, sidewalks, and wide outside lanes with accommodations for bikes.	11 - Access Management	04,,	Wilson,,	47.92	35.23	\$4,752,000.00	Funded
H150462	Highway	Regional Impact		NC 210	SR 1162 (Black Creek Rd)		Add turn lanes on NC 210 and realign the intersection of SR 1162 (Black Creek Rd)	10 - Improve Intersection	04,,	Johnston,,	33.15	24.00	\$465,000.00	Funded
H150667	Highway	Statewide Mobility		US 70 Bus	I-95		Improve interchange widening bridge and constructing diamond interchange.	Interchange Improvement	04,,	Johnston,,	40.46	29.62	\$9,016,000.00	Funded
H090224A	Highway	Regional Impact		NC 33	US 64 in Taboro	NC 42 at Scott's Crossroads	Widen to Multi-Lanes	1 - Widen Existing Roadway	04,,	Edgecombe,,	25.56	19.28	\$32,069,000.00	NEMA Completed 3/31/10
H090224B	Highway	Regional Impact		NC 33	NC 42 at Scott's Crossroads	NC 222 at Behlor Crossroads	Widen to Multi-Lanes	1 - Widen Existing Roadway	02, 04,,	Pitt, Edgecombe,,	21.87	16.55	\$43,200,000.00	NEMA Completed 3/31/10
H090396C	Highway	Regional Impact		NC 43	SR 1613 (Woodruff Avenue)	I-95	SR 1613 (Country Club Road) to I-95. Widen to Multi-Lanes with Curb and Gutter. Section C. SR 1613 (Woodruff Avenue) to I-95.	1 - Widen Existing Roadway	04,,	Nash,,,	25.82	18.94	\$18,584,000.00	In STIP
H090470	Highway	Regional Impact		NC 111 Wilson Street	US 64 Alternate (Western Boulevard)	NC 122 (Mconar Road)	Widen to Three Lanes	1 - Widen Existing Roadway	04,,	Edgecombe,,	30.60	23.60	\$9,900,000.00	In STIP
H111270	Highway	Regional Impact		NC 38	NC 42/Ward Blvd. (SR 1516)	Forest Hills Rd. (SR 1165)	Upgrading NC 38 between NC 42/Ward Blvd. (SR 1516) and Forest Hills Rd. (SR 1165) to a Five-Lane Facility with Sidewalks and to Provide Accommodations For Bikes to Correspond to Proposed Bicycle and Pedestrian Improvements.	1 - Widen Existing Roadway	04,,	Wilson,,	26.90	21.29	\$1,003,000.00	In STIP
H111279	Highway	Regional Impact		US 70	US 301	I-95	Provide a 4-Lane Divided Cross Section for This Facility. The Addition of a Median Will Allow For Better Access Control, thereby Providing Higher Mobility for the Facility.	11 - Access Management	04,,	Johnston,,	42.92	35.23	\$8,775,000.00	In STIP
H111282	Highway	Regional Impact		Wilson Signal System	Wilson City Limits	Wilson City Limits	Construct (Wide) Signal System in City of Wilson	13 - Chwilde Signal System	04,,	Wilson,,,	69.73	28.93	\$5,000,000.00	In STIP
H140389	Highway	Regional Impact		US 5726	Booker Dairy Rd	Ricks Rd	This road is currently serving capacity. The addition of a median will allow for better controlled access which will provide more mobility. Converting the road to 4 lanes with median and sidewalks will also provide safe routes for pedestrians that currently are creating trails along side the road.	4 - Upgrade Arterial to Superstreet	04,,	Johnston,,	36.41	27.08	\$13,317,000.00	In STIP
H141838	Highway	Regional Impact		NC 42	SR 1003 (Buffalo Road)	GAAP/Jupper Coastal Trail	Modernize roadway and operational improvements including widening lanes, improving shoulders, passing lanes, turning lanes, and intersection improvements. (Moving Ahead Project)	16 - Modernize Roadway	04,,	Johnston,,	32.05	24.88	\$12,295,000.00	In STIP
H150256	Highway	Statewide Mobility		I-95	I-95	US 701/NC 96	Construct diamond with one loop interchange allowing for future widening of I-95 retaining multiple routes as necessary to conduct interchange to current standards	Interchange Improvement	04,,	Johnston,,	35.06	25.28	\$10,912,000.00	In STIP
H090617	Highway	Regional Impact		US 364	NC 96	SR 1007 (Bogden Road)	NC 96 to SR 1007 (Bogden Road). Widen to Multi-Lanes.	1 - Widen Existing Roadway	04,,	Johnston,,	25.72	18.94	\$31,956,000.00	UCRPO P4 Points Applied
H111266	Highway	Regional Impact		US 564	US 264	US 264 Alt./NC 42/Ward Blvd.	Upgrading US 264 Alt. from Airport Blvd. (SR 1320) to US 264 Alt./NC 42/Ward Blvd. (SR 1516) to a Four-Lane Divided Boulevard with 23 Foot Raised Landscaped Median, Sidewalks, and Wide Outside Lanes with Accommodations For Bikes. The Project Proposal for US 264 Alt. from US 264 Bypass to Airport Blvd. (SR 1320) includes Measure to Limit Access. Such As: Signalized Design with Single Phase Lights For Protected Left Turns, Right-Turns, Right-Cuts, and Limited Diveways	4 - Upgrade Arterial to Superstreet	04,,	Wilson,,	37.32	27.33	\$18,126,000.00	UCRPO P4 Points Applied
H111268	Highway	Regional Impact		NC 38	SR 1320 (Airport Blvd)	NC 42/Ward Blvd. (SR 1516)	Upgrading NC 38 between Airport Blvd. (SR 1320) and NC 42/Ward Blvd. (SR 1516) to a four-lane Divided Boulevard with a raised 23-	11 - Access Management	04,,	Wilson,,	26.32	18.08	\$18,126,000.00	UCRPO P4 Points Applied
H090182	Highway	Regional Impact		R-2700	US 64 Relocation North of Bethel	NC 303	Widen to Four Lanes with a Bypass of Oak City on New Location.	6 - Widen Existing Roadway and Construct Part on New Location	01, 04,,	Martin, Edgecombe,,	16.60	11.80	\$16,077,000.00	UCRPO P4 Points Applied
H111275	Highway	Regional Impact		NC 42	US 264 / 795	Forest Hills Rd. (SR 1165)	Upgrade This Corridor to a Four-Lane Divided Boulevard with a Raised 23-Foot Median with Bicycle and Pedestrian Lanes, and Curb and Gutter. Realignment is Proposed. As Part of This Project at NC 42 / Old Raleigh Rd. (SR 1136) and Airport Blvd. (SR 1136) Due to the Proximity of This Intersection to Several Schools in the Area.	11 - Access Management	04,,	Wilson,,	25.49	18.07	\$14,579,000.00	In STIP
H111281	Highway	Regional Impact		US 301	US 264 Alt. - Milk Parkway	Upsonch Rd	Upgrade This Facility to a Four-Lane Divided Boulevard with a 23 Foot Raised Landscaped Median, Sidewalks, and Wide Outside Lanes with Accommodations For Bikes.	11 - Access Management	04,,	Wilson,,	47.92	35.23	\$53,507,000.00	In STIP
H12300G	Highway	Statewide Mobility		I-95	SR 1002 (Long Branch Road)	I-40	Widen Roadway to 8 Lanes.	1 - Widen Existing Roadway	06, 04,,	Harnett, Johnston,,	36.66	25.23	\$143,388,000.00	In STIP
H12303A	Highway	Statewide Mobility		I-95	North SR 1001	South of SR 1604	Widen Roadway to 6 Lanes.	1 - Widen Existing Roadway	04,,	Nash, Halifax,,	29.37	19.73	\$444,862,000.00	In STIP
H12303S	Highway	Statewide Mobility		I-95	South of SR 1604	North of NC 481	Widen Roadway to 6 Lanes.	1 - Widen Existing Roadway	04,,	Nash, Halifax,,	32.03	22.05	\$348,801,000.00	In STIP
H140979	Highway	Regional Impact		NC 242	US 301	I-40	Widen to 4 lane highway with median and sidewalks (4S Section). Provide a four lane divided cross section for NC 242 North from its junction with US 301 Hwy to its intersection with interstate 40. The addition of a median will allow for better controlled access which will provide more mobility as the corridor develops in the near future. Recent development and proposed new development in the near future means an increase in ADOT thereby creating the need for controlled access for safer mobility.	1 - Widen Existing Roadway	04,,	Johnston,,	24.18	19.39	\$23,603,000.00	In STIP
H14130S	Highway	Statewide Mobility		US 64	SR 1003 (Rollsville Rd) at Knightdale Bypass	Marsh County Line	Upgrade US 64 to Interstate Standards	17 - Upgrade Freeway to Interstate Standards	04, 05,,	Edgecombe, Nash, Wake, Franklin	34.21	22.81	\$133,958,000.00	In STIP
H150181	Highway	Statewide Mobility		NC 11	US 264 Byp	US 64	Upgrade roadway to Interstate Standards (Note: Only 4.388 is within UCRPO boundary)	2 - Upgrade Arterial to Freeway/Expressway	04,,	Pitt, Edgecombe	38.11	17.81	\$144,237,000.00	In STIP

ALL OTHER PROJECTS ARE CURRENTLY NOT ON THE LIST FOR PRIORITIZATION - UCRPO IS ALLOCATED A TOTAL OF 23 PROJECTS TO BE PRIORITIZED IN "P5"

= Funded or "Committee" Project  
 = Project in STIP but not funded and requires re-prioritization in P5  
 = Project that NEMA work completed

UCPRPO STI P5.0 DIVISIONAL Highway Projects DRAFT List

version 1/11/17

SPOT ID	Mode	Project Category	TIP#	Route / Facility Name	From / Cross Street	To	Description	Specific Improvement Type	All Divisions	All MPOs/RPOs	All Counties	P4 Division Score	Cost	Status
H150519	Highway	Division Needs		Kellie Dr	680 feet north of SR 1923 (Booker Dairy Road)	SR 1003 (Buffalo Road)	Construct 2 lane roadway (37 feet back of curb and gutter to back of curb and gutter) on new location from the end of existing Kellie Dr to SR 1003 (Buffalo Road)	11 - Access Management	04,,	Upper Coastal Plain RPO,,	Johnston,,	18.07	\$5,085,000.00	Funded
H090882	Highway	Division Needs		SR-1207 McVair Road	US 64	US 64 Alternate	Widen McVair Road to Three (3) Lanes from US64 to US 64 Alternate in Edgecombe County.	1 - Widen Existing Roadway	04,,	Upper Coastal Plain RPO,,	Edgecombe,,	6.16	\$16,077,000.00	UCPRPO P4 Points Applied
H090895	Highway	Division Needs		SR-1900 Noble Street	SR 1003 (Buffalo Road)	US 301	Expand to Three(3) Lanes from SR 1003 to US 301	1 - Widen Existing Roadway	04,,	Upper Coastal Plain RPO,,	Johnston,,	10.16	\$8,609,000.00	UCPRPO P4 Points Applied
H090421	Highway	Division Needs	U-3471	SR-1606 Black Creek Road	US 264 Bypass	US 301/264 Alternate (Ward Boulevard)	US 264 Bypass to US 301/264 Alternate (Ward Boulevard). Widen to Multi-Lanes.	1 - Widen Existing Roadway	04,,	Upper Coastal Plain RPO,,	Wilson,,	14.76	\$18,080,000.00	
H090468	Highway	Division Needs	U-4419	- New Route - SR 2403 (Component Drive) Extension	Peeden Street	US 301 (Bright Leaf Boulevard)	Peeden Street to US 301 (Bright Leaf Boulevard). Construct Two Lanes on Multi-Lane Right of Way, New Location.	5 - Construct Roadway on New Location	04,,	Upper Coastal Plain RPO,,	Johnston,,	6.44	\$9,680,000.00	
H090879	Highway	Division Needs		SR-1124 Massey Road	US 264		Interchange Development at US 264 and Massey Road in Nash County	9 - Convert Grade Separation to Interchange	04,,	Upper Coastal Plain RPO,,	Nash,,	3.66	\$11,190,000.00	
H090891	Highway	Division Needs		SR-1927 East Anderson Street	Webb Road	I-95	Widen to Three (3) Lanes from I-95 to Webb Street in Johnston County	1 - Widen Existing Roadway	04,,	Upper Coastal Plain RPO,,	Johnston,,	13.48	\$5,234,000.00	
H140772	Highway	Division Needs		East Railroad St	Tobacco St	Rock Quarry Rd	Extend Roadway on New Location (Note: Only .32% within Upper Coastal RPO boundary)	5 - Construct Roadway on New Location	04,,	Rocky Mount MPO, Upper Coastal RPO	Wilson,,	8.24	\$3,317,000.00	
H150459	Highway	Division Needs		SR-1323 - Tilghman Rd	Ward Blvd	SR-1332 - Lake Wilson Rd	Widen from two 10' lanes to a two 14' lane facility with 11' turn lane, curb and gutter, and 2' paved shoulders with bike lanes and sidewalks. (Cross Section 3B)	1 - Widen Existing Roadway	04,,	Upper Coastal Plain RPO,,	Wilson,,	12.45	\$17,551,000.00	
H150474	Highway	Division Needs		Pelt Rd - SR 1632	NC 222	Saint James Church Rd - SR 1631	Raise section of highway out of flood way to help prevent flooding.	11 - Access Management	04,,	Upper Coastal Plain RPO,,	Wilson,,	6.71	\$750,000.00	
H150636	Highway	Division Needs	U-3470	- New Route - Northern Loop	NC 58 (Nash Street)	US 301 interchange at SR 1436 (Rosebud Church Road)	NC 58 (Nash Street) to US 301 interchange at SR 1426 (Rosebud Church Road). Multi-Lanes on New Location.	5 - Construct Roadway on New Location	04,,	Upper Coastal Plain RPO,,	Wilson,,	12.90	\$66,433,000.00	
H150646	Highway	Division Needs		SR-1501 - Swift Creek Parkway Improvements	South end entrance of Johnston County airport	North end entrance of Johnston County airport	Add turning lanes into the Johnston County airport and into the existing Industrial park. Approximately 2,000 if of road widening to add a central turn lane to 2 airport driveways and the neighboring Industrial park.	1 - Widen Existing Roadway	04,,	Upper Coastal Plain RPO,,	Johnston,,	12.87	\$990,000.00	
H150661	Highway	Division Needs		New Route - Proposed Service Road	US 70 - Mallard Rd	Yewerton Grove Rd	Add new service road parallel to I-95. Approximately 1 mile service road to aid in economic development.	5 - Construct Roadway on New Location	04,,	Upper Coastal Plain RPO,,	Johnston,,	1.81	\$6,938,000.00	

= Funded or "Committed" Project

ALL OTHER PROJECTS ARE CURRENTLY NOT ON THE LIST FOR PRIORITIZATION - UCPRPO IS ALLOCATED A TOTAL OF 23 PROJECTS TO BE PRIORITIZED IN "P5"

**"UCPRPO"  
"DRAFT PA.0 Projects"  
HIGHWAY**

UCPRPO SPOT PA Project Points  
TIER

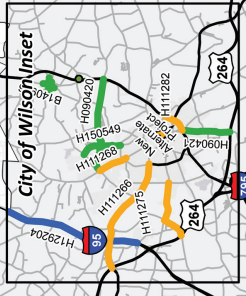
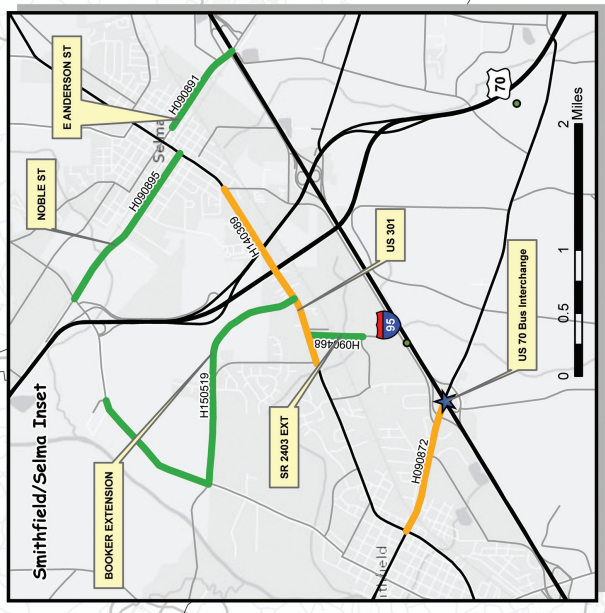
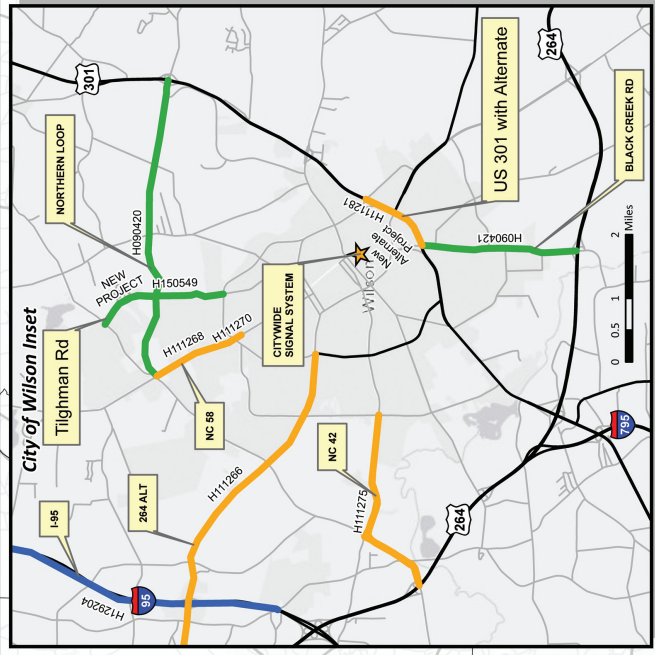
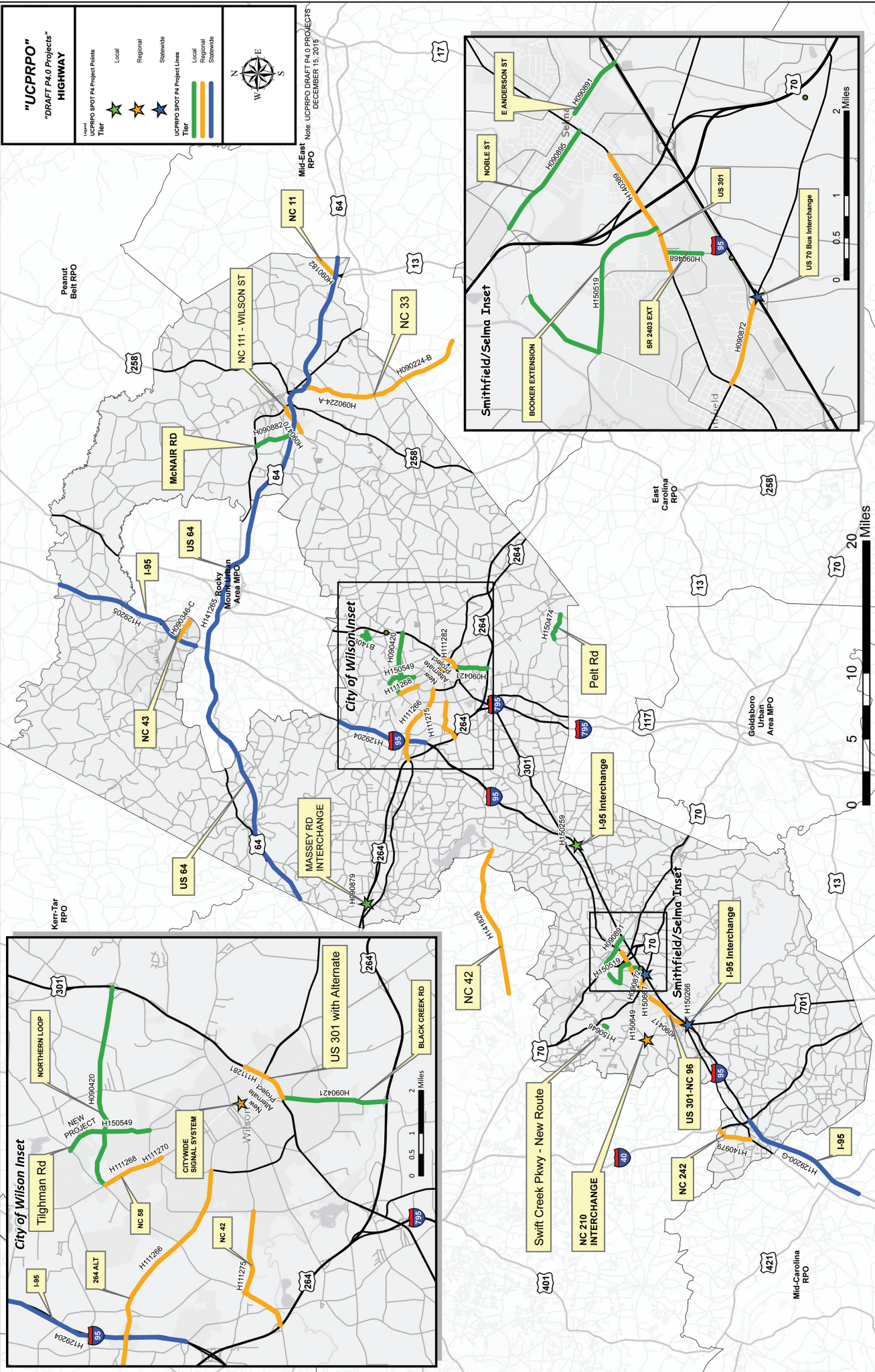
- Local
- Regional
- Statewide

UCPRPO SPOT PA Project Lines  
TIER

- Local
- Regional
- Statewide



Mid-East RPO Note: UCPRPO DRAFT PA.0 PROJECTS  
RPO DECEMBER 15, 2015



# Transportation Needs 2017



- Not every transportation problem is a congestion problem (for example, safety, modernization, connecting corridors, and operational improvements).
- Reinstate the ability to use state funds to match 80% federal funds for Bike/Pedestrian projects. Current 20% local government match requirements create a high hurdle for projects in smaller and less-affluent communities.
- Congestion is over-represented in STI. Many of the STI criteria rely on some form of congestion calculation as a part of its formula.
- There are many rural roads that are below design standard in NC. Getting these up to standard cannot be addressed wholly through present maintenance funding.
- Increased safety on our roadways is a state and federal priority and is under-represented in the STI formula.



45,234 Road Miles or

**56.91%**

Of NC's Total Road  
Miles in 2015



**RURAL, NC**

**3,020,628**

Individuals in 2010  
32% of NC Population



HIGHWAY PROJECTS	Funded Statewide		Funded Regional		Funded Division		Total Funded	
	# of Projects	% of Total	# of Projects	% of Total	# of Projects	% of Total	# of Projects	% of Total
MPO Totals	55	100.00%	84	67.20%	95	55.88%	234	66.86%
RPO Totals	0	0.00%	41	32.80%	75	44.12%	116	33.14%

HIGHWAY PROJECTS	Funded Statewide		Funded Regional		Funded Division		Total Funded		
	Programmed Amount	% of Total	Programmed Amount	% of Total	Programmed Amount	% of Total	Programmed Amount	% of Total	Average \$ Per Capita
MPO Totals	\$3,072,159,000	100.00%	\$1,982,860,000	69.16%	\$1,738,096,000	54.58%	\$6,793,115,000	74.45%	\$953
RPO Totals	\$0	0.00%	\$884,161,000	30.84%	\$1,446,584,000	45.42%	\$2,330,745,000	25.55%	\$790

ALL MODES	Funded Statewide		Funded Regional		Funded Division		Total Funded	
	# of Projects	% of Total	# of Projects	% of Total	# of Projects	% of Total	# of Projects	% of Total
MPO Totals	67	100.00%	115	72.33%	163	53.27%	345	64.85%
RPO Totals	0	0.00%	44	27.67%	143	46.73%	187	35.15%

ALL MODES	Funded Statewide		Funded Regional		Funded Division		Total Funded		
	Programmed Amount	% of Total	Programmed Amount	% of Total	Programmed Amount	% of Total	Programmed Amount	% of Total	Average \$ Per Capita
MPO Totals	\$3,198,744,000	100.00%	\$2,183,248,000	71.18%	\$1,836,827,986	54.11%	\$7,218,819,986	74.72%	\$1,058
RPO Totals	\$0	0.00%	\$884,180,000	28.82%	\$1,557,738,600	45.89%	\$2,441,918,600	25.28%	\$827

# Strategic Prioritization Process Annual Report

December 1, 2016

## EXECUTIVE SUMMARY

In accordance with the Strategic Transportation Investment (STI) law, *“Beginning December 1, 2016, the Department shall report annually to the Joint Legislative Transportation Oversight Committee on any changes made to the highway or non-highway prioritization process and the resulting impact to the State Transportation Improvement Program”* (G.S. 136-189.11(h)). This report provides an update on the implementation of the Department’s Strategic Prioritization Process in accordance with the STI law for the period of 2014-2016. This is the first such report and covers the results of the first implementation of the Strategic Prioritization Process in accordance with the STI law in 2014, as well as changes made with the implementation of the second cycle in 2015 and 2016.

The Strategic Transportation Investments law was passed in June 2013. This landmark legislation fundamentally changed how capital transportation projects were selected and funded in North Carolina. Projects are selected based on a systematic evaluation and ranking, using a combination of data and local priorities. Funding is applied to projects with the highest scores.

Prioritization 3.0, also known as P3.0, was the third generation of the Department’s Strategic Prioritization Process for evaluating and ranking projects using a systematic, data-driven approach in conjunction with local input. P3.0, implemented in 2013-2014, was the first cycle of the prioritization process that was executed following the passage of the STI legislation. During P3.0, the Department evaluated nearly 3,000 projects across all six modes, totaling \$70 billion. Of these projects, approximately 650 were funded in the 2016-2025 STIP with an estimated total cost of nearly \$16 billion (these numbers account for additional revenue from the Appropriations Act of 2015).

Building off the success of P3.0, the Department developed P4.0 in 2014-2015. As in P3.0, the Department employed *“the use of a workgroup process to develop improvements to the prioritization process.”* Changes were made to *“continually improve the methodology and criteria used to score highway and non-highway projects pursuant to [the STI law], including the use of normalization techniques, and methods to strengthen the data collection process”* (G.S. 136-189.11(h)). As part of the P4.0 update, the Department hired Cambridge Systematics consulting firm to provide an independent review and statistical analysis of the scoring and data used in P3.0. Overall, Cambridge indicated that P3.0 represents a mature prioritization process that reflects numerous best practices and is viewed nationally as one of the most comprehensive State DOT prioritization processes. To continually improve the prioritization process, Cambridge recommended both global improvements (across all 6 modes) and mode-specific improvements.

The P4.0 Workgroup met 17 times over a 12 month period and made recommendations to enhance the scoring process, many of which were suggested by Cambridge. The Workgroup recommended the following changes for P4.0:

### Global Changes

- Scale all criteria on a relative basis within each mode to provide a better distribution of scores
- Continue to use Normalization approach from P3.0

### Highway Scoring Changes

- Incorporate the use of Peak Average Daily Traffic to account for seasonal traffic volumes
- Provide additional points to areas that contribute local dollars or tolls towards the project costs
- Include safety benefits when calculating the overall benefits of a project
- Incorporate the Department's new Statewide Travel Demand Model for generating travel time savings
- Update the Economic Competitiveness criteria to analyze the project's economic impact at the county level
- Enhance the Accessibility/Connectivity criteria to improve access to opportunity in rural and less affluent areas and improve interconnectivity of the transportation network
- Split the previously combined Multimodal and Freight criteria into two separate criteria and include measures that evaluate the proximity of the project to the nearest transportation terminal

### Non-Highway Mode Scoring Changes

- Combine Aviation criteria of Local and Federal contribution into single criteria measuring all non-state contribution
- New Aviation criteria measuring the benefit of flight operations and economic data compared to the project cost
- Update the definition of eligible Aviation projects to only consider projects that exceed the system objectives or regulatory requirements for the airport's infrastructure
- New Bicycle and Pedestrian criteria focusing on bicycle/pedestrian network connectivity
- Revised all Public Transportation criteria and weights for vehicle and facility project types, to improve scoring process and allow for higher quality of project data (fixed guideway criteria were not revised)
- Revised all Rail criteria and weights, to improve scoring process and efficiency
- Revised and simplified all Rail project types

### Other Changes

- Define committed projects as those funded for right-of-way or construction in the first five years of the STIP (projects funded in the last five years are subject to rescoring in P4.0)
- Use similar approaches as those used in P3.0 in determining the number of project submittals and local input points

All Workgroup recommendations were approved by the Board of Transportation for P4.0 on July 9, 2015.

In P4.0, which was implemented in 2015-2016, the Department evaluated nearly 2,000 projects across all six modes, totaling \$57 billion. At the time of writing of this report, the Draft 2018-2027 STIP is currently being developed, therefore the number of funded projects is currently not known. The Department anticipates updating this document by March 31, 2017 with the full results from P4.0 and the subsequent impact to 2018-2027 Draft STIP.



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## LIST OF FIGURES

No table of figures entries found.

## INTRODUCTION

In accordance with the Strategic Transportation Investment (STI) law, *“Beginning December 1, 2016, the Department shall report annually to the Joint Legislative Transportation Oversight Committee on any changes made to the highway or non-highway prioritization process and the resulting impact to the State Transportation Improvement Program”* (G.S. 136-189.11(h)). This report provides an update on the implementation of the Department’s Strategic Prioritization Process in accordance with the STI law for the period of 2014-2016. This is the first such report and covers the results of the first implementation of the Strategic Prioritization Process in accordance with the STI law in 2014, as well as changes made with the implementation of the second cycle in 2015 and 2016.

The Strategic Transportation Investments law was passed in June 2013. This landmark legislation fundamentally changed how capital transportation projects were selected and funded in North Carolina. Projects are selected based on a systematic evaluation and ranking using a combination of data and local priorities. Funding is applied to projects with the highest scores.

Prior to the enactment of the STI law, funding was distributed to NCDOT’s 14 Transportation Divisions using a geographic equity law. Funding for each Division was based on a combination of population (50%), equal share (25%), and miles to complete the state’s former intrastate system (25%), which was a system of approximately 3600 miles of four-lane or greater highways within 10 miles of 90% of the state’s population. The results of the Strategic Prioritization Process were used to guide project selection, but did not always result in the funding of highest scoring projects due to funding availability. In addition, projects were not required to be funded based on the prioritization score.

Prioritization 3.0, also known as P3.0, was the third generation of the Department’s Strategic Prioritization Process for evaluating and ranking projects using a systematic, data-driven approach in conjunction with local input. P3.0, implemented in 2013-2014, was the first cycle of the prioritization process that was executed following the passage of the STI legislation. Prioritization 4.0 (P4.0), was implemented two years later in 2015-2016, building off of the success of P3.0. Changes were made to *“continually improve the methodology and criteria used to score highway and non-highway projects pursuant to [the STI law], including the use of normalization techniques, and methods to strengthen the data collection process”* (G.S. 136-189.11(h)). This report describes the results of STI under P3.0, changes made to P4.0, and the expected results. The initial development of STI under P3.0, submitted on December 31, 2013, can be found on the Joint Legislative Transportation Oversight Committee (JLTOC) website at [http://www.ncleg.net/documentsites/committees/JLTOC/2013-14\\_Biennium/2.7.14\\_Meeting/STI%20Implementation%20Final%20Report%20123113.pdf](http://www.ncleg.net/documentsites/committees/JLTOC/2013-14_Biennium/2.7.14_Meeting/STI%20Implementation%20Final%20Report%20123113.pdf).

The STI law officially established the use of a Prioritization Workgroup process to provide recommendations to the Department on the scoring of capital projects subject to STI. This includes recommendations on the criteria and measures used to evaluate projects, the weights associated with each criteria, and the process submitting and evaluating projects, including the use of local input points. Local input points are most often used to indicate a local area’s priority for transportation projects. G.S. 136-189.11(h) officially lists Workgroup participants.

## **PRIORITIZATION 3.0 IMPLEMENTATION**

Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs), and NCDOT Divisions submitted candidate projects for P3.0 for all six modes (Aviation, Bicycle & Pedestrian, Ferry, Highway, Public Transportation, and Rail) during the period of January 27<sup>th</sup> through March 3<sup>rd</sup>, 2014, using the Department's newly created SPOT Online tool. This tool, developed by NCDOT in partnership with ESRI, captures user-entered project information and derives data from Geographic Information Systems (GIS) to score projects. Users were provided preliminary scores for highway and bicycle/pedestrian projects after each project was submitted. Following the submittal of projects, the Prioritization Office, in coordination with several other business units, reviewed and updated the data associated with each project to ensure it was as accurate as possible. Project submitters (MPOs, RPOs, and Divisions) had an opportunity to review all data as well. Once the data was considered accurate, scores were updated as needed. All projects were scored using the criteria and weights approved by the Board of Transportation (BOT) in November 2013 (see Appendix A). The quantitative scores for all projects and the top-scoring projects that were funded in the Statewide Mobility category were released on May 14, 2014 in user-friendly spreadsheets.

In P3.0, each MPO, RPO, and Division had a single 90 day period to assign their Regional Impact and Division Needs local input points to eligible projects. Each entity was to assign these points based on their approved local input point methodology. MPOs and RPOs are required by statute (GS 136-18.42) to have an NCDOT-approved process for assigning local input points. The NCDOT Division Engineers have a formal process as well. This 90 day period provided ample opportunity for each entity to receive public input, following their approved methodology on the assignment of local input points. Once points were finalized and approved by their board (for MPOs and RPOs), each entity submitted the points assigned to each project in SPOT Online. Following the closure of the local input point window, the Prioritization Office calculated the total scores for each project. These final scores were released on September 24, 2014.

During the months of September, October, and November 2014, the Department's TIP Unit developed the Draft STIP using the prioritization results as the primary input. Other factors considered were:

- Normalization approach for allocating funds between highway and non-highway projects
- Funds allocated to transition projects (projects let between October 1, 2013 and July 1, 2015, per the STI law)
- Provisions in the STI law such as corridor caps and caps affecting non-highway projects
- Project delivery time
- Funding availability for each STI category

## PRIORITIZATION 3.0 RESULTS

The first Draft STIP based on STI was released on December 4, 2014. Following public comment meetings, the Final 2016-2025 STIP was approved by the BOT on June 4, 2015. In September 2015, the 2015 Current Operations and Capital Improvements Appropriations Act of 2015 (Session Law 2015-241, House Bill 97) was passed by the Legislature and signed by the Governor, providing an additional \$1.7 billion dollars over the 2016-2025 period. Due to the significant increase in revenue, the STIP was amended in January 2016 by the BOT to account for the acceleration of many projects as well as the addition of numerous projects to the 10 year program.

A total of nearly 3,000 projects at a cost to NCDOT of almost \$70 billion were evaluated in P3.0. The breakdown by mode is shown below in Figure 1.

Figure 1: P3.0 Projects Evaluated by Mode with 2016-2025 STIP Programmed Amounts

Mode	Total Projects Evaluated	Cost to NCDOT (\$million)	Total Projects Programmed in 2016-2025 STIP*	Amount Programmed in 2016-2025* (\$million)
Highway	1,731	\$66,288	511	\$15,237
Aviation	495	\$731	36	\$280
Bicycle & Pedestrian	461	\$409	80	\$80
Ferry	16	\$131	1	\$12
Public Transportation	221	\$471	7	\$22
Rail	32	\$1,110	6	\$34
<b>Total</b>	<b>2,956</b>	<b>\$69,140</b>	<b>641</b>	<b>\$15,665</b>

\*Based on the amended STIP in January 2016

Note that in the table above, the numbers of projects are based on those individually evaluated in P3.0. In developing the STIP, some of the funded projects were combined into a single project.

## **PRIORITIZATION 4.0 WORKGROUP PROCESS**

The prioritization process typically occurs every two years. Prioritization 4.0 officially kicked off on September 22, 2014 with the first meeting of the P4.0 Workgroup. See Appendix B for a listing of P4.0 Workgroup members. The Workgroup met 17 times between September 2014 and August 2015, discussing many topics, while reaching consensus on over 100 items with no votes taken. See Appendix C for a full listing of the items for which consensus was reached.

As part of the update of the prioritization process for P4.0, the Department hired Cambridge Systematics to conduct an independent, statistical analysis of the scoring and data used in P3.0. The objective of this assessment was to:

- Review the results, criteria, and methodologies from P3.0 (the assignment of local input points was not included)
- Identify strengths and weaknesses of the process
- Recommend enhancements for implementation in P4.0 and beyond

Overall, Cambridge indicated that P3.0 represented a mature prioritization process that reflected numerous best practices and is viewed nationally as one of the most comprehensive State DOT prioritization processes. To continually improve the prioritization process, Cambridge recommended both global improvements (across all 6 modes) and mode-specific improvements. For more details on the Cambridge Analysis and Recommendations, please visit [http://www.ncleg.net/documentsites/committees/JointAppropriationsTransportation/2015\\_Session/3.0.5.15/2.Cambridge\\_Report\\_FINAL.PDF](http://www.ncleg.net/documentsites/committees/JointAppropriationsTransportation/2015_Session/3.0.5.15/2.Cambridge_Report_FINAL.PDF)

Cambridge presented their findings and recommendations to the Workgroup at several meetings. The Workgroup considered the recommendations as they updated the scoring for P4.0. Ultimately, the Workgroup recommended the following changes:

### **Global Scoring Changes (applies to all 6 modes)**

**Scale all criteria on a relative basis within each mode** – Cambridge noted that the biggest statistical issues with P3.0 were small ranges of values, groupings of low or high values, and criteria that had a disproportional impact on the total score. The main cause of these statistical issues was the use of inconsistent factoring approaches to reach 0-100 point values. The implementation of scaling would provide a better distribution of scores.

**Continue to use Normalization approach from P3.0** – The Workgroup discussed at length the potential use of cross-modal scoring where the same criteria would be used to evaluate projects across all six modes. This included participating in a USDOT-sponsored Peer Exchange in December 2014 to see if other states have used such a process. The use of mode-specific criteria, while ideal, presents several significant challenges, including different purposes and benefits, and the availability of adequate data

for all six modes. Cambridge and the Workgroup recommended to continue allocating funds between Highway and Non-Highway projects in a transparent manner as in P3.0. Therefore, the following approach was used:

- **Statewide Mobility** – Available funds were allocated to the highest scoring eligible projects, regardless of mode (only certain highway, rail, and aviation projects are eligible in this category)
- **Regional Impact** – A minimum of 4% of available funds were allocated to the highest scoring eligible non-highway projects, a minimum of 90% of available funds were allocated to the highest scoring eligible highway projects, and the remaining 6% of available funds were allocated to the remaining highest scoring projects regardless of mode
- **Division Needs** – A minimum of 4% of available funds were allocated to the highest scoring eligible non-highway projects, a minimum of 90% of available funds were allocated to the highest scoring eligible highway projects, and the remaining 6% of available funds were allocated to the remaining highest scoring projects regardless of mode

### Highway Scoring Changes

**Peak ADT** – The Workgroup recommended the use of Peak Average Daily Traffic (Peak ADT or PADT) instead of Average Annual Daily Traffic (AADT) in order to account for seasonal variations in traffic throughout the state. The Peak ADT volumes were based on the highest month of the year for each roadway. For example, the Peak ADT volumes for several roadways at the beach are from July, while the Peak volumes for several roads in the mountains are from October. Peak ADT was used in scoring formulas for Congestion, Freight, and Multimodal criteria where traffic volume was used.

**Local Contribution and Safety Benefits** – there was a concern following P3.0 that scores did not substantially change as a result of areas committing local funding or agreeing to tolls. To entice more areas to commit local funds or tolls to projects, the Workgroup recommended to revise the Benefit/Cost calculation as follows:

$$\left[ \frac{\text{Project Benefits}}{\text{Project Cost to NCDOT}} \right] + \left[ \frac{\text{Other Funds}}{\text{Total Project Cost}} \times 100 \right]$$

The Project Benefits are based on the expected travel time savings and the safety benefits resulting from the project over a 10 year period (previously the time period was 25 years in P3.0). New to P4.0, the Workgroup included safety benefits of projects to better account for the expected safety impacts of the proposed improvement. The safety benefits allowed modernization and similar projects to receive a Benefit/Cost score, even if there was no expected travel time savings associated with the project (in P3.0 these projects received a zero for the Benefit/Cost criteria score). The Project Cost to NCDOT is the total cost of the project minus local funds or expected toll revenue (same as in P3.0). The second half of the equation is new to P4.0 and provides additional points for projects with local funds or tolls (local contribution).

**Statewide Travel Demand Model (NCSTM)** – NCDOT, working with a consultant, has been developing the North Carolina Statewide Travel Demand Model (NCSTM) for the past several years. This computer

model uses existing travel characteristics and existing and future land use to forecast traffic volumes on all of the primary highways throughout the state through the year 2040. The Workgroup discussed the use of NCSTM at several meetings and agreed to use it to generate travel time savings for eligible Statewide Mobility projects over a 10 year period.

**Economic Competitiveness** – The Workgroup continued to support the use of TREDIS in generating the two measures for the Economic Competitiveness criteria: the long-term jobs created, and the percent change in the local economy. However, they recommended two changes for P4.0: change the evaluation period to a 10 year period (from 25 years), and change the analysis region to the county (instead of the Division). The 10 year period matches the 10 year travel time savings results generated by the NCSTM, which is a primary input into TREDIS. By changing analysis regions to the county level, projects which are expected to generate a decent travel time savings will have a much greater impact on the economy in a less affluent area than one with a vibrant economy.

**Accessibility/Connectivity** – The Workgroup discussed enhancing the Accessibility/Connectivity criteria over several meetings. The first challenge was defining the purpose of the criteria, which after much discussion, they agreed to the following: improve access to opportunity in rural and less affluent areas, and improve interconnectivity of the transportation network. To evaluate projects based on this purpose, the Workgroup agreed to use the following two measures, each weighted at 50% of the Accessibility/Connectivity criteria score:

- **County Tier Designation** – Points are based on economic distress indicators from the Department of Commerce (included rankings: property tax base per capita, population growth, median household income, and unemployment rate)
- **Does project upgrade how the roadway functions?** – Points are based on whether the project upgrades the roadway to provide a higher level of mobility by enhancing traffic flow, eliminating/bypassing signalized sections, increasing control of access, and accounting for the travel time savings per user.

**Multimodal & Freight** – In P3.0, these two criteria were combined into a single criteria for project evaluation. In P4.0, the Workgroup recommended separating the two criteria (as listed in the STI law) in order to allow each criteria to focus on different characteristics of the projects.

- **Freight** – The purpose is to measure congestion along routes that provide connection to freight intermodal terminals and routes that have high truck volumes. The criteria is measured by truck volumes, whether the project is along a non-Interstate STRAHNET route or a designated future interstate route (new to P4.0), and the distance to the nearest freight intermodal terminal. Freight terminals were defined as:
  - Public freight intermodal terminals (truck/rail/pipeline)
  - Seaports and inland ports
  - Statewide Mobility eligible airports which handle large movement of freight
  - Major military bases
  - Major ferry terminals



- Large private freight intermodal terminals (truck to rail)

In P3.0, a project was required to directly touch the property line of the terminal to receive points. In P4.0, the Workgroup recommended that projects could receive points as long as they were within 20 miles of the freight terminal, using a graduated point scale based on distance.

- **Multimodal** – The purpose is to measure congestion along routes that provide a connection to multimodal passenger terminals. The criteria is measured by the distance to the nearest multimodal passenger terminals and the congestion along the route. Multimodal passenger terminals were defined as:

- Amtrak stations
- Major transit terminals
- Commercial service airports
- Red & blue general aviation airports (as defined by Division of Aviation)
- Major military bases
- Ferry terminals (all)

In P3.0, a project was required to directly touch the property line of the terminal to receive points. In P4.0, the Workgroup recommended that projects could receive points as long as they were within 5 miles of the multimodal passenger terminal, using a graduated point scale based on distance.

**Other Discussion** – The Workgroup also discussed other potential changes, but ultimately decided not to incorporate into project scoring. This included the following:

- **Hurricane evacuation routes** – On several occasions, the Workgroup discussed awarding points for projects on hurricane evacuation routes. However, there were two challenges with incorporating this measure into scoring. First, this measure would only be applicable for projects in eastern North Carolina. The Workgroup also considered inclusion of Nuclear Evacuation Routes, however this would result in nearly all roadways in the vicinity of a nuclear power plant as eligible. Second, in the STI law, evacuation routes are not an eligible criteria, so there was a challenge to decide which criteria this measure could fit within.
- **Route continuity** – The Workgroup discussed the use of route continuity for scoring projects. The purpose of this measure was to award points to projects that helped eliminate a lane imbalance along adjacent roadway sections, or project sections that completed new location facilities. However, similar to hurricane evacuation routes, there was a challenge to decide which criteria this measure could fit within.

Using the updated criteria and measures, the Workgroup recommended the criteria and weights for scoring highway projects in P4.0, as shown in Figure 3 on page 13, which changed from P3.0. The table includes the P3.0 measures and weights for comparison.

### **Aviation Scoring Changes**

The Division of Aviation recommended replacements for two criteria as well as changes to most of the criteria weights. P3.0 heavily emphasized rating systems used by the Division of Aviation and the Federal Aviation Administration. These criteria continued to be used in P4.0, but with weighting more evenly distributed to other criteria. Two P3.0 criteria measuring local funds and federal funds were combined into a new criteria for P4.0 that emphasizes the combined effect of all non-state fund contributions. A new criteria was also added to measure the benefit of flight operations and economic data compared to the project cost.

The Division of Aviation also recommended a major change to the definition of eligible capital projects that would be eligible for evaluation in P4.0. P3.0 considered all projects that changed the 'footprint' of the airport's infrastructure. However, P4.0 considered only projects that exceed the system objectives or regulatory requirements for the airport's infrastructure.

Using the updated criteria and measures, the Workgroup recommended the criteria and weights for scoring aviation projects in P4.0, as shown in Figure 4 on page 15, which changed from P3.0. The table includes the P3.0 measures and weights for comparison.

### **Bicycle & Pedestrian Scoring Changes**

Four identical criteria were carried forward from P3.0 to P4.0. These criteria measured the same data, while incorporating a new safety benefit, as well as a population factor for unoccupied housing units (second homes) and group housing, excluding prisons. P3.0 criteria measuring project readiness was removed, with its data instead being used as project detail informational inputs. P4.0 added a new Connectivity criteria focusing on bicycle/pedestrian network connectivity, measuring the project's degree of separation from a roadway, ADA compliance, and connectivity to similar or better project type.

Using the update criteria and measures, the Workgroup recommended the criteria and weights for scoring bicycle & pedestrian projects in P4.0, as shown in Figure 5 on page 16, which changed from P3.0. The table includes the P3.0 measures and weights for comparison.

### **Ferry Scoring Changes**

P3.0 criteria underwent very little changes for P4.0, beyond renaming two criteria, tweaking a few data points, and slightly adjusting weights.

Using the updated criteria and measures, the Workgroup recommended the criteria and weights for scoring ferry projects in P4.0, as shown in Figure 6 on page 17, which changed from P3.0. The table includes the P3.0 measures and weights for comparison.

### **Public Transportation Scoring Changes**

P3.0 criteria proved to be more complicated and difficult to accurately measure and score than anticipated. Weights also heavily favored certain criteria, therefore certain types of projects as well. In P4.0, the Public Transportation Division utilized a working group of stakeholders for initial discussion of changes and recommendations to take to the P4.0 Workgroup. The criteria and weights for vehicles and facilities were revised for P4.0, so that final criteria used simpler but more measurable data, and the weights were more evenly distributed across all criteria. Criteria and weights for fixed guideway were mostly unchanged.

Using the updated criteria and measures, the Workgroup recommended the criteria and weights for scoring public transportation projects in P4.0, as shown in Figure 7 on page 18, which changed from P3.0. The table includes the P3.0 measures and weights for comparison.

### **Rail Scoring Changes**

P3.0 scoring was very complicated with 7 criteria, as well as 4 different project types that were each weighted differently within each criteria and each STI category. Some scoring formulas also resulted in criteria that had a disproportional impact compared to the intended weights. P4.0 scoring was revised, reducing to 4 criteria and only 2 overarching project types. Weights were simplified and consolidated across project types.

Using the updated criteria and measures, the Workgroup recommended the criteria and weights for scoring rail projects in P4.0, as shown in Figure 8 on page 21, which changed from P3.0. The table includes the P3.0 measures and weights for comparison.

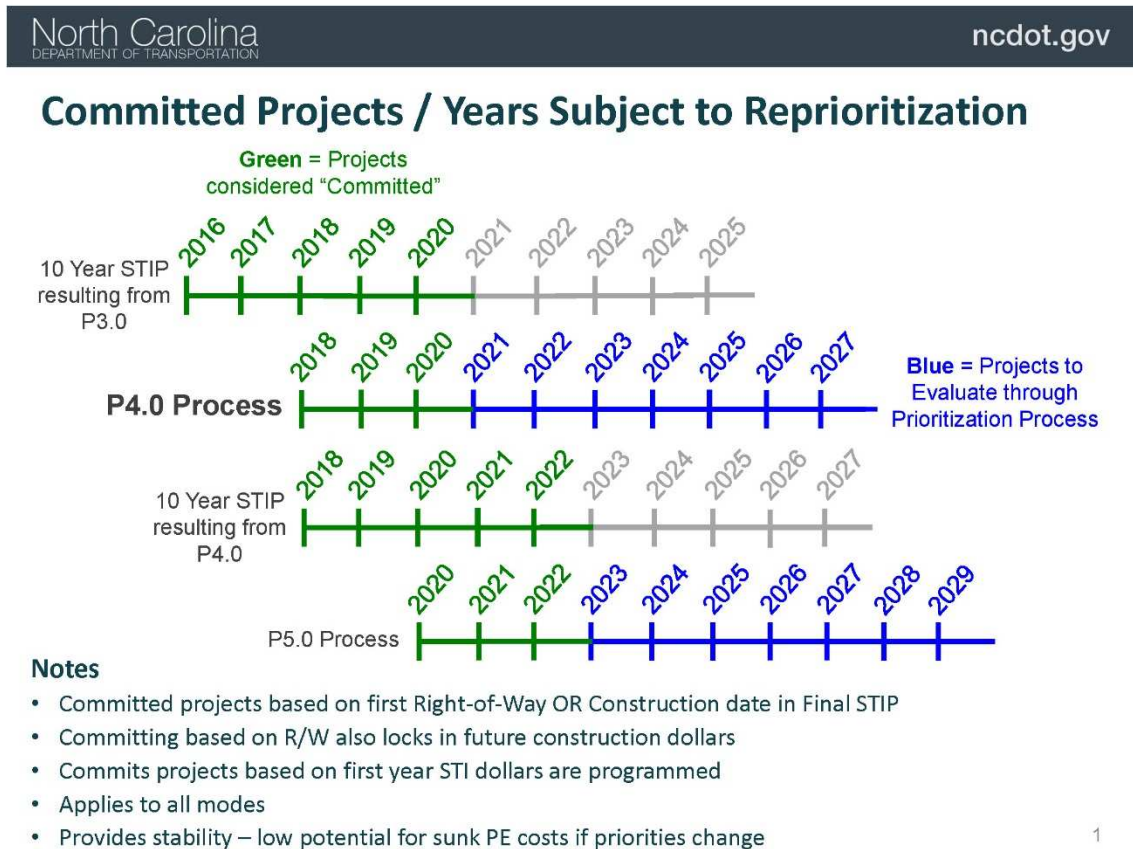
### **Project Database**

In addition to the scoring changes noted above, the Workgroup made the following recommendations for P4.0:

**Committed Projects** – Since P4.0 was the second generation of the Prioritization Process under STI, a decision was needed to determine which projects in the 10 year STIP would be considered “committed” and not be subject to reprioritization and those projects that should be re-evaluated in P4.0 using the updated criteria and weights. The Workgroup recommended that projects in the Final 2016-2025 STIP with Right-of-Way or Construction programmed in state fiscal year 2016-2020 are considered committed and are not subject to re-evaluation in P4.0. These projects are funded in the “Deliverable” portion of the STIP (first five years). This means that projects first funded for Right-of-Way or

Construction in state fiscal year 2021 and later are re-evaluated in P4.0. These projects are funded in the “Developmental” portion of the STIP (last five years). Figure 1 below provides a visual representation of years of the committed projects.

Figure 2: Projects Evaluated in Ten Year Prioritization Timeframe



**Projects to evaluate in P4.0** – There are two types of projects evaluated in P4.0: carryover projects and submittals. The Workgroup recommended the following for each:

**Carryover Projects** – these projects were evaluated in the previously Prioritization cycle and are automatically evaluated in the subsequent cycle:

- Projects programmed first funded in the 2016-2025 STIP for Right-of-Way or Construction in state fiscal year 2021 and later (projects programmed in the last five years of the STIP as noted above).
- Projects with a completed NEPA document, or one where the environmental document is actively begin worked on as of December 31, 2014

- Siblings of programmed projects, where for example, section A of a project is programmed, sections B, C, & D would be considered a carryover project
- Projects that received any amount of local input points in P3.0 (in either the Regional Impact or Division Needs categories)

Modifications of carryover projects were also allowed without counting as a submittal. This provided MPOs, RPOs, and Divisions an opportunity to evaluate different segments or intersections separately from the larger project, as long as there was agreement between the respective MPOs/RPOs and Divisions.

**Submittals** – The Workgroup recommended continuing to use the approach from P3.0 to determine the number of projects each MPO and RPO could submit for P4.0. This approach is based on each MPO and RPO having a minimum of 10 project submittals, plus one additional submittal for every 100,000 people in their geographic area, up to a maximum of 20. The Workgroup recommended a different approach for the number of projects each Division could submit, in order to help limit the number of projects evaluated in P4.0. They recommended that each Division could submit up to seven projects. The number of submittals for MPOs, RPOs, and Divisions was the same for each mode for consistency. In addition, each MPO, RPO, and Division could gain additional submittals for every carryover project removed from the database, as long as both the MPO/RPO and Division agreed on the project removal. Submittals are comprised of both brand new projects that have not previously been evaluated in a prioritization cycle and projects that were previously evaluated but are not considered a carryover project. See Appendix D for the listing of the number of submittals for each MPO, RPO, and Division.

### **Local Input Points**

The Workgroup recommended continuing to use the approach from P3.0 to determine the local input points in both the Regional Impact and Division Needs categories allocated to each MPO, RPO, and Division. Each MPO, RPO, and Division received a minimum of 1,000 points, plus an additional 100 points for every 50,000 people in their geographic area, up to a maximum of 2,500 points. Each entity receives a separate allocation but the same number of points for both the Regional Impact and Division Needs categories. Appendix D also lists the number of local input points for each MPO, RPO, and Division.

The Workgroup also recommended to hold separate time periods for assigning points in the Regional Impact and Division Needs categories. In P3.0, there was one 90 day period to assign points to both categories, whereas in P4.0, there were separate periods for each. This allowed MPOs, RPOs, and Divisions to see which projects were funded in the Regional Impact category (and therefore not cascade down) prior to submitting local input points in the Division Needs category. The Workgroup recommended two separate 60 day windows for each period, however to improve coordination on the assignment of points between MPOs, RPOs, and Divisions, the Regional Impact period was over 90 days, while the Division Needs period was 60 days.

In accordance with GS 136-18.42, MPOs and RPOs are required to have a formal methodology approved by NCDOT for assigning local input points. Most MPOs and RPOs updated their methodologies from

P3.0, all of which were reviewed and approved by a NCDOT-led local input point methodology review committee, which included representatives from MPOs and RPOs. The Division Engineers also have a formal process for assignment points. The committee also reviewed their updated methodology for P4.0.

On July 9, 2015, the BOT approved the P4.0 Criteria, Measures, and Weights as recommended by the Workgroup. No changes were made by the BOT from the Workgroup's recommendations.

### Comparison of Criteria, Measures and Weights between P4.0 and P3.0 for All Modes

Figure 3: Highway Scoring Criteria, Measures, and Weights

Criteria	P4.0 Measure(s)	P4.0 Weights			P3.0 Measure(s)	P3.0 Weights		
		SW	REG	DIV		SW	REG	DIV
Congestion	<ul style="list-style-type: none"> <li>Volume-to-Capacity Ratio</li> <li>Volume</li> </ul>	30%	20%	15%	<ul style="list-style-type: none"> <li>Volume-to-Capacity Ratio</li> <li>Volume</li> </ul>	30%	25%	20%
Benefit/Cost	<ul style="list-style-type: none"> <li>Travel Time Savings</li> <li>Safety Benefits</li> <li>Cost of Project to NCDOT</li> <li>% Local Contribution</li> </ul>	25%	20%	15%	<ul style="list-style-type: none"> <li>Travel Time Savings</li> <li>Cost of Project to NCDOT</li> </ul>	30%	25%	20%
Safety	<ul style="list-style-type: none"> <li>Critical Crash Rates, Crash Severity, Crash Density (segments)</li> <li>Crash Frequency, Severity Index (intersections)</li> </ul>	15%	10%	10%	<ul style="list-style-type: none"> <li>Critical Crash Rates, Crash Severity, Crash Density (segments)</li> <li>Crash Frequency, Severity Index (intersections)</li> </ul>	10%	10%	10%
Economic Comp.	<ul style="list-style-type: none"> <li>Long-term Jobs Expected</li> <li>% Change in County Economy</li> </ul>	10%	N/A	N/A	<ul style="list-style-type: none"> <li>Long-term Jobs Expected</li> <li>% Change in Division Economy</li> </ul>	10%	N/A	N/A
Multimodal	<ul style="list-style-type: none"> <li>Congestion on Route near Multimodal Passenger Terminal</li> <li>Distance to nearest Multimodal Terminal</li> </ul>	5%	N/S	N/S	<ul style="list-style-type: none"> <li>Congestion on STRAHNET Routes</li> <li>Congestion on Routes that provide Direct Connection to Transportation Terminal</li> <li>Truck Volumes</li> </ul>	20%	N/S	N/S
Freight	<ul style="list-style-type: none"> <li>Truck Volumes</li> <li>Congestion on non-Interstate STRAHNET or Designated Future Interstate Route</li> <li>Distance to nearest Freight Terminal</li> </ul>	15%	10%	5%				
Accessibility / Connectivity	<ul style="list-style-type: none"> <li>County Economic Indicator</li> <li>Does the Project Upgrade how the Roadway Functions?</li> </ul>	N/A	10%	5%	<ul style="list-style-type: none"> <li>Commerce County Tier Designation</li> <li>Does project upgrade roadway</li> <li>Commuting times by Census tracts</li> </ul>	N/S	10%	N/S
Lane Width	<ul style="list-style-type: none"> <li>Comparison of Existing Conditions to DOT Design Standard</li> </ul>	N/S	N/S	N/S	<ul style="list-style-type: none"> <li>Comparison of Existing Conditions to DOT Design Standard</li> </ul>	N/S	N/S	N/S
Shoulder Width	<ul style="list-style-type: none"> <li>Comparison of Existing Conditions to DOT Design Standard</li> </ul>	N/S	N/S	N/S	<ul style="list-style-type: none"> <li>Comparison of Existing Conditions to DOT Design Standard</li> </ul>	N/S	N/S	N/S
Pavement Condition	<ul style="list-style-type: none"> <li>Pavement Condition Rating</li> </ul>	N/S	N/S	N/S	<ul style="list-style-type: none"> <li>Pavement Condition Rating</li> </ul>	N/S	N/S	N/S

Note: Figure 3 lists the default criteria, measures, and weights for evaluating highway projects. In both P3.0 and P4.0, Regions and Divisions were allowed to use Alternative Criteria, as long as all MPOs, RPOs, and Divisions (within the Region or Division) were in agreement. With Alternate Criteria, the entities within a Region or Division can select different criteria (than the defaults above) and/or assign different weights to the criteria. However, the measure is the same for each criteria across the state. In P3.0, entities within Regions A and B, and Divisions 1, 2, 3, and 4 agreed to the use of Alternate Criteria. In P4.0, entities within Region B, and Divisions 2, 3, and 6 agreed to the use of Alternate Criteria.

N/A = Not Applicable based on the STI law

N/S = Considered, but Not Selected by the Workgroup for use in evaluating projects



Figure 4: Aviation Scoring Criteria, Measures, and Weights

Criteria	P4.0 Measure(s)	P4.0 Weights			P3.0 Measure(s)	P3.0 Weights		
		SW	REG	DIV		SW	REG	DIV
NCDOA Project Rating	<ul style="list-style-type: none"> <li>NCDOA Project Rating (reflects updated System Plan)</li> </ul>	40%	30%	25%	<ul style="list-style-type: none"> <li>NCDOA Project Rating</li> </ul>	40%	40%	30%
FAA ACIP Rating	<ul style="list-style-type: none"> <li>Federal Aviation Administration Airport Capital Improvement Plan (ACIP) rating</li> </ul>	10%	5%	10%	<ul style="list-style-type: none"> <li>Federal Aviation Administration Airport Capital Improvement Plan (ACIP) rating</li> </ul>	40%	20%	10%
Non-State Contribution Index	<ul style="list-style-type: none"> <li>Local, federal, or private funds toward the project</li> <li>State funds toward the project</li> </ul>	30%	20%	5%	Not used			
Benefit/Cost	<ul style="list-style-type: none"> <li>Total \$ Econ. Contribution of Tier</li> <li>Total # of Instrument Flight Rule (IFR) Ops of Tier</li> <li>NCDOA Capital Project Rating</li> <li>Project Cost</li> </ul>	20%	15%	10%	Not used			
Local Investment Index	Not used – data used in Non-State Contribution Index			<ul style="list-style-type: none"> <li>Local funds toward the project</li> <li>State funds toward the project</li> </ul>	10%	5%	5%	
Federal Investment Index	Not used – data used in Non-State Contribution Index			<ul style="list-style-type: none"> <li>Federal funds toward the project</li> <li>State funds toward the project</li> </ul>	10%	5%	-	
Volume / Demand Index	Not used – data used as benefit in Benefit/Cost			<ul style="list-style-type: none"> <li>Based aircraft, aircraft operations, and recorded Instrument Flight Rule (IFR) operations</li> <li>Employment density near the airport</li> </ul>	-	-	5%	

NCDOA = NC Division of Aviation

Figure 5: Bicycle and Pedestrian Scoring Criteria, Measures, and Weights

<b>Criteria</b>	<b>P4.0 Measure(s)</b>	<b>P4.0 Weight</b>	<b>P3.0 Measure(s)</b>	<b>P3.0 Weight</b>
		<b>DIV</b>		<b>DIV</b>
Safety	<ul style="list-style-type: none"> <li>• Number of crashes</li> <li>• Posted speed limit</li> <li>• Project safety benefit</li> </ul>	15%	<ul style="list-style-type: none"> <li>• Crash Points</li> <li>• Speed Limit Points</li> </ul>	15%
Access	<ul style="list-style-type: none"> <li>• Destination Type within buffer</li> <li>• Distance to Prime Destination</li> </ul>	10%	<ul style="list-style-type: none"> <li>• Destination Type within buffer</li> <li>• Distance to Prime Destination</li> </ul>	10%
Demand / Density	<ul style="list-style-type: none"> <li>• Number of households within buffer</li> <li>• Number of employees within buffer</li> </ul> ~Added factor for unoccupied housing units (second homes) + group housing, excluding prisons)	10%	<ul style="list-style-type: none"> <li>• Number of households within buffer</li> <li>• Number of employees within buffer</li> </ul>	10%
Connectivity	<ul style="list-style-type: none"> <li>• Specific Improvement Type</li> <li>• Degree of bike/ped separation from roadway</li> <li>• ADA compliance</li> <li>• Connectivity to a similar/better project type</li> </ul>	10%	Not used	
Cost Effectiveness	<ul style="list-style-type: none"> <li>• Safety score</li> <li>• Access score</li> <li>• Demand / Density score</li> <li>• Connectivity score</li> <li>• Estimated Project Cost to NCDOT</li> </ul>	5%	<ul style="list-style-type: none"> <li>• Access Points</li> <li>• Demand / Density Points</li> <li>• Cost to NCDOT</li> </ul> [was called Benefit-Cost]	10%
Constructability	Not used		<ul style="list-style-type: none"> <li>• Right-of-Way Acquired</li> <li>• Preliminary Engineering / Design Completed</li> <li>• Environmental Impact Points</li> </ul>	5%

Figure 6: Ferry Scoring Criteria, Measures, and Weights

Criteria	P4.0 Measure(s)	P4.0 Weights		P3.0 Measure(s)	P3.0 Weights	
		REG	DIV		REG	DIV
Asset Condition	<ul style="list-style-type: none"> <li>Asset Condition Rating</li> </ul>	15%	15%	<ul style="list-style-type: none"> <li>Average Vessel Health Ratings</li> <li>Average Ramp &amp; Gantry Ratings [was called Safety]</li> </ul>	15%	15%
Benefits	<ul style="list-style-type: none"> <li>Monetized value of number of hours saved</li> </ul>	10%	10%	<ul style="list-style-type: none"> <li>Highway hours on alternate route</li> <li>Hours on ferry crossing [was called Benefit/Cost]</li> </ul>	15%	15%
Accessibility / Connectivity	<ul style="list-style-type: none"> <li>Number of points of interest within 3 concentric rings of the route</li> </ul>	10%	10%	<ul style="list-style-type: none"> <li>Number of points of interest within 3 concentric rings of the route</li> </ul>	10%	10%
Asset Efficiency	<ul style="list-style-type: none"> <li>3-year maintenance cost</li> <li>Pro-rated 3-year replacement cost</li> </ul>	15%	15%	<ul style="list-style-type: none"> <li>3-year maintenance cost</li> <li>Pro-rated 3-year replacement cost</li> </ul>	10%	10%
Capacity / Congestion	<ul style="list-style-type: none"> <li>Number of vehicles left behind at each departure</li> <li>Total number of vehicles loaded and carried by the route</li> </ul>	20%	-	<ul style="list-style-type: none"> <li>Number of vehicles left behind at each departure</li> <li>Total number of vehicles loaded and carried by the route</li> </ul>	20%	-

Figure 7: Public Transportation Scoring Criteria, Measures, and Weights

Public Transportation – Vehicles

Criteria	P4.0 Measure(s)	P4.0 Weights		P3.0 Measure(s)	P3.0 Weights	
		REG	DIV		REG	Div
Access	<ul style="list-style-type: none"> <li>Annual OpStat Reported Hours</li> <li>Vehicles in Fleet</li> </ul>	10%	5%	Not used		
System Safety	<ul style="list-style-type: none"> <li>OpStat Reported Miles</li> <li>3 Year Average of Incidents</li> </ul>	10%	10%	Not used		
Impact	<ul style="list-style-type: none"> <li>Unlinked Annual Passenger Trips</li> <li>Projected New Unlinked Annual Passenger Trips</li> </ul>	20%	15%	Not used		
Cost Effectiveness	<ul style="list-style-type: none"> <li>Projected New Annual Unlinked Passenger Trips</li> <li>Cost to the State</li> </ul>	20%	15%	Not used		
Market Share	<ul style="list-style-type: none"> <li>Unlinked Annual Passenger Trips</li> <li>Projected New Unlinked Annual Passenger Trips</li> <li>Service Area Population</li> </ul>	10%	5%	Not used		
Benefit-Cost	Not used			<ul style="list-style-type: none"> <li>Projected ridership</li> <li>Cost to the State</li> </ul>	45%	25%
Vehicle Utilization Data	Not used			<ul style="list-style-type: none"> <li>Maximum vehicles utilized during the peak hour</li> <li>Total fleet size</li> </ul>	5%	5%
System Safety	Not used			<ul style="list-style-type: none"> <li>Transit system safety statistics</li> <li>National average safety statistics</li> </ul>	5%	5%
Connectivity	Not used			<ul style="list-style-type: none"> <li>Projected increase in ridership</li> <li>Types of destinations served</li> <li>Projected ridership</li> </ul>	5%	5%
System Operational Efficiency	Not used			<ul style="list-style-type: none"> <li>Annual ridership</li> <li>Service hours</li> <li>Revenue hours</li> </ul>	10%	10%

Public Transportation – Facilities (Passenger or Administrative/Maintenance/Operations)

Criteria	P4.0 Measure(s)	P4.0 Weights		P3.0 Measure(s)	P3.0 Weights	
		REG	DIV		REG	DIV
Impact (or) Age	<ul style="list-style-type: none"> <li>• Unlinked Annual Passenger Trips</li> <li>• Projected New Unlinked Annual Passenger Trips</li> <li>• Additional capacity</li> <li>• Existing capacity</li> <li>• Age of facility</li> </ul>	20%	15%	Not used		
Cost Effectiveness	<ul style="list-style-type: none"> <li>• Unlinked Annual Passenger Trips</li> <li>• Cost to the State</li> </ul>	20%	15%	Not used		
Market Share	<ul style="list-style-type: none"> <li>• Unlinked Annual Passenger Trips</li> <li>• Projected New Unlinked Annual Passenger Trips</li> <li>• Service Area Population</li> </ul>	15%	10%	Not used		
Ridership Growth	<ul style="list-style-type: none"> <li>• Ridership Growth Trend for previous 5 years</li> </ul>	15%	10%	Not used		
Age of Facility (or) Facility Demand (or) Park & Ride Demand (or) Bus Shelter Demand	Not used			<ul style="list-style-type: none"> <li>• Facility age</li> <li>• Peak service vehicles</li> <li>• Facility capacity</li> <li>• Number of spaces in lot</li> <li>• State match</li> <li>• Average boardings</li> <li>• Average alightings</li> </ul>	40%	30%
Benefit-Cost	Not used			<ul style="list-style-type: none"> <li>• Annual trips provided by facility</li> <li>• State match</li> </ul>	5%	5%
System Operational Efficiency	Not used			<ul style="list-style-type: none"> <li>• Annual ridership</li> <li>• Service hours</li> <li>• Revenue hours</li> </ul>	5%	5%
Facility Capacity	Not used			<ul style="list-style-type: none"> <li>• Proposed capacity</li> <li>• Current usage</li> <li>• Existing design capacity</li> </ul>	20%	20%

Public Transportation – Fixed Guideway

<b>Criteria</b>	<b>P4.0 Measure(s)</b>	<b>P4.0 Weights</b>		<b>P3.0 Measure(s)</b>	<b>P3.0 Weights</b>	
		<b>REG</b>	<b>DIV</b>		<b>REG</b>	<b>DIV</b>
Mobility	<ul style="list-style-type: none"> <li>• Estimated Annual Trips</li> </ul>	20%	15%	<ul style="list-style-type: none"> <li>• Estimated Annual Trips</li> </ul>	20%	15%
Cost Effectiveness	<ul style="list-style-type: none"> <li>• Cost of the Trip Over the Life of the Project</li> </ul>	15%	15%	<ul style="list-style-type: none"> <li>• Cost of the Trip Over the Life of the Project</li> </ul>	15%	15%
Economic Development	<ul style="list-style-type: none"> <li>• Number of new employees</li> <li>• Number of new residents</li> </ul>	20%	10%	<ul style="list-style-type: none"> <li>• Number of new employees</li> <li>• Number of new residents</li> </ul>	20%	10%
Congestion Relief	<ul style="list-style-type: none"> <li>• Passengers/Day</li> <li>• Average Time of Trip</li> </ul>	15%	10%	<ul style="list-style-type: none"> <li>• Passengers/Day</li> <li>• Average Time of Trip</li> </ul>	15%	10%

Figure 8: Rail Scoring Criteria, Measures, and Weights

Criteria	P4.0 Measure(s)	P4.0 Weights			P3.0 Measure(s)	P3.0 Weight		
		SW	REG	DIV		SW	REG	DIV
Cost Effectiveness	<ul style="list-style-type: none"> <li>Return on Investment Index</li> <li>Regional Job Creation Index</li> </ul>	35%	25%	20%	Not used			
System Health	<ul style="list-style-type: none"> <li>Capacity Index</li> <li>Accessibility/Connectivity Index</li> </ul>	35%	20%	10%	Not used			
Safety and Suitability	<ul style="list-style-type: none"> <li>Safety Index</li> </ul>	20%	15%	10%	Not used			
Project Support	<ul style="list-style-type: none"> <li>Funding Leverage Index</li> </ul>	10%	10%	10%	Not used			
Benefit Cost	Not used – incorporated into Cost Effectiveness			<ul style="list-style-type: none"> <li>Benefits due to emissions savings, fuel savings, travel time savings, and highway-to-rail diversions</li> </ul>	VAR	VAR	VAR	
Economic Competitiveness	Not used – incorporated into Cost Effectiveness			<ul style="list-style-type: none"> <li>Number of jobs</li> </ul>	VAR	VAR	VAR	
Capacity / Congestion	Not used – incorporated into System Health			<ul style="list-style-type: none"> <li>Current daily volume</li> <li>Maximum daily allowable volume</li> </ul>	VAR	VAR	VAR	
Safety	Not used – incorporated into Safety and Suitability			<ul style="list-style-type: none"> <li>Safety Review Index</li> </ul>	VAR	VAR	VAR	
Accessibility	Not used – incorporated into System Health			<ul style="list-style-type: none"> <li>Project length</li> <li>National Highway System miles</li> <li>County unemployment rate</li> </ul>	VAR	VAR	VAR	
Connectivity	Not used – incorporated into System Health			<ul style="list-style-type: none"> <li>Projected daily volume</li> <li>National Highway System facilities</li> <li>Ridership increase</li> </ul>	VAR	VAR	VAR	
Mobility	Not used			<ul style="list-style-type: none"> <li>Future capacity</li> <li>Current capacity</li> <li>Number of trains</li> <li>Current daily volume</li> <li>Projected daily volume</li> <li>Population</li> </ul>	VAR	VAR	VAR	

VAR = Varies. P4.0 utilized 4 different project types that were assigned varying weights or eligibility within each criteria and each STI category.

## **PRIORITIZATION 4.0 IMPLEMENTATION**

MPOs, RPOs, and Divisions submitted candidate projects for P4.0 for all six modes (Aviation, Bicycle & Pedestrian, Ferry, Highway, Public Transportation, and Rail) during the period of October 20<sup>th</sup> through November 20<sup>th</sup>, 2015, using the SPOT On!ine application, which was updated for P4.0. Following the submittal of projects, the Prioritization Office, in coordination with several other business units, reviewed and updated the data associated with each project to ensure it was as accurate as possible. Project submitters (MPOs, RPOs, and Divisions) had an opportunity to review any updated data as well. Once the data was considered clean, scores were updated as needed. All projects were scored using the criteria and weights approved by the BOT in July 2015 (see Appendix E). The quantitative scores for all projects and the top-scoring projects funded in the Statewide Mobility category were released on April 13, 2016 in user-friendly spreadsheets.

As recommended by the Workgroup and approved by the BOT, each MPO, RPO, and Division had two time periods to assign local input points. Each entity assigned their Regional Impact local input points between April 18<sup>th</sup> and July 29<sup>th</sup>, 2016 based on their approved methodologies. In August 2016, the Prioritization Office first calculated the total scores for all Regional Impact projects, then the TIP Unit developed the draft list of funded Regional Impact projects. The final scores and list of funded projects were released on August 24, 2016.

The Division Needs local input point assignment period was originally scheduled from September 1<sup>st</sup> to October 31<sup>st</sup>, however due to the flooding experienced from Hurricane Matthew, this period was extended to November 14<sup>th</sup>. Following the submittal of the Division Needs local input points, the Prioritization Office calculated the total scores for all Division Needs projects.

At the time of writing of this report, the TIP Unit is currently programming the highest scoring Division Needs projects. This list of funded projects will be released with all of the other funded projects in the 2018-2027 Draft STIP, with the anticipated release of January 2017. The TIP Unit combines the lists of funded projects from the Statewide Mobility, Region Impact, and Division Needs categories in developing the Draft STIP. Similar to P3.0, the prioritization results are the primary input in determining the funded projects. Other factors considered are:

- Normalization approach for allocating funds between highway and non-highway projects
- Funds allocated to transition projects (projects let between October 1, 2013 and July 1, 2015)
- Provisions in the STI law such as corridor caps and caps affecting non-highway projects
- Project delivery time
- Funding availability for each STI category

**The Department anticipates updating this document by March 31, 2017 with the full results from P4.0 and the resulting impact to 2018-2027 Draft STIP.**





## PRIORITIZATION 4.0 RESULTS

A total of nearly 2,000 projects at a cost to NCDOT of almost \$57 billion were evaluated in P4.0, for the time period of 2021-2027 (projects in 2018-2020 are considered committed and were not evaluated in P4.0). The breakdown by mode is shown below in Figure 1.

Figure 9: P4.0 Projects Evaluated by Mode with 2018-2027 STIP Programmed Amounts

<b>Mode</b>	<b>Total Projects Evaluated</b>	<b>Cost to NCDOT (\$million)</b>	<b>Total Projects Programmed in 2018-2027 Draft STIP*</b>	<b>Amount Programmed in 2018-2027* (\$million)</b>
Highway	1202	\$52,864		
Aviation	176	\$483		
Bicycle & Pedestrian	358	\$380		
Ferry	9	\$113		
Public Transportation	114	\$42		
Rail	70	\$2,756		
<b>Total</b>	<b>1,929</b>	<b>\$56,638</b>		

\*These values will be provided following release of the 2018-2027 Draft STIP in January 2017.

## APPENDIX A – P3.0 SCORING CRITERIA, MEASURES, AND WEIGHTS FOR ALL MODES

### Highway Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	<p><b>[Travel Time] Benefit/Cost = 30%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project to NCDOT</li> </ul> <p><b>Congestion = 30%</b></p> <ul style="list-style-type: none"> <li>Comparison of the existing traffic volume to the existing capacity of the roadway (depending on data availability, Congestion may be measured by comparing congested travel speeds to uncongested speeds)</li> </ul> <p><b>Economic Competitiveness = 10%</b></p> <ul style="list-style-type: none"> <li>Estimate of the number of long-term jobs and the % change in economic activity within the NCDOT Division the project is expected to provide over 30 years</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Multimodal [&amp; Freight + Military] = 20%</b></p> <ul style="list-style-type: none"> <li>Measure of existing congestion along key military and truck routes, and routes that provide connections to transp. terminals</li> </ul> <p><b>Total = 100%</b></p>	--	--
<b>Regional Impact</b>	<p><b>[Travel Time] Benefit/Cost = 25%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project to NCDOT</li> </ul> <p><b>Congestion = 25%</b></p> <ul style="list-style-type: none"> <li>Comparison of the existing traffic volume to the existing capacity of the roadway (depending on data availability, Congestion may be measured by comparing congested travel speeds to uncongested speeds)</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Three component formula using commute times by census tracts, upgrade of travel function of roadway, and Department of Commerce County Tier designations</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Total = 70%</b></p>	15%	15%
<b>Division Needs</b>	<p><b>[Travel Time] Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project to NCDOT</li> </ul> <p><b>Congestion = 20%</b></p> <ul style="list-style-type: none"> <li>Comparison of the existing traffic volume to the existing capacity of the roadway</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

Note: Divisions 1, 2, 3, 4 have approved different criteria and weights for their respective areas – see end of Appendix A.

## Aviation Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b>	<p><b>NCDOA Project Rating = 40%</b></p> <ul style="list-style-type: none"> <li>Projects prioritized and classified within NC Division of Aviation (NCDOA) established project categories. Assigns point values based on priority of the project and need of the project</li> </ul> <p><b>FAA Airport Capital Improvement Plan = 40%</b></p> <ul style="list-style-type: none"> <li>Federal Aviation Administration Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS)</li> </ul> <p><b>Local Investment Index = 10%</b></p> <ul style="list-style-type: none"> <li>A measurement of the project's local funds compared to state funds and provides greater points for projects that have a higher % of local funding sources (i.e. local or public-private funds)</li> </ul> <p><b>Federal Investment Index = 10%</b></p> <ul style="list-style-type: none"> <li>A measurement of the project's federal funds compared to state funds and provides greater points for projects with higher % of federal funds verses state funds</li> </ul> <p><b>Total = 100%</b></p>	--	--
<b>Regional Impact</b>	<p><b>NCDOA Project Rating = 40%</b></p> <ul style="list-style-type: none"> <li>Projects prioritized and classified within NC Division of Aviation (NCDOA) established project categories. Assigns point values based on priority of the project and need of the project</li> </ul> <p><b>FAA Airport Capital Improvement Plan = 20%</b></p> <ul style="list-style-type: none"> <li>Federal Aviation Administration Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS)</li> </ul> <p><b>Local Investment Index = 5%</b></p> <ul style="list-style-type: none"> <li>A measurement of the project's local funds compared to state funds and provides greater points for projects that have a higher % of local funding sources (i.e. local or public-private funds)</li> </ul> <p><b>Federal Investment Index = 5%</b></p> <ul style="list-style-type: none"> <li>A measurement of the project's federal funds compared to state funds and provides greater points for projects with higher % of federal funds verses state funds</li> </ul> <p><b>Total = 70%</b></p>	15%	15%
<b>Division Needs</b>	<p><b>NCDOA Project Rating = 30%</b></p> <ul style="list-style-type: none"> <li>Projects prioritized and classified within NC Division of Aviation (NCDOA) established project categories. Assigns point values based on <u>priority</u> of the project and <u>need</u> of the project</li> </ul> <p><b>FAA Airport Capital Improvement Plan = 10%</b></p> <ul style="list-style-type: none"> <li>Federal Aviation Administration Airport Capital Improvement Plan (ACIP) Rating</li> </ul> <p><b>Local Investment Index = 5%</b></p> <ul style="list-style-type: none"> <li>A measurement of the project's local funds compared to state funds and provides greater points for projects that have a higher % of local funding sources (i.e. local or public-private funds)</li> </ul> <p><b>Volume/Demand Index = 5%</b></p> <ul style="list-style-type: none"> <li>Index representing traffic (aircraft operations) plus employment density (jobs near the airport). Identifies projects where there is more traffic and in areas with more user demand</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

**Bicycle & Pedestrian Scoring**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Division Needs	<p><b>Access = 10%</b></p> <ul style="list-style-type: none"> <li>This criterion measures community benefit as a result of constructing the proposed project, and is measured by the quantity and significance of destinations associated with the proposed project. Access benefit is also measured by the proximity of the proposed project to the most important end destination</li> </ul> <p><b>Constructability = 5%</b></p> <ul style="list-style-type: none"> <li>This criterion measures the readiness of a project to be constructed in the near term. Factors such as secured right-of-way, environmental impact, and preliminary engineering work complete are used to calculate this score</li> </ul> <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>This criterion uses bicycle and pedestrian crash data and speed limit information along project corridors to determine the existing safety need</li> </ul> <p><b>Demand Density = 10%</b></p> <ul style="list-style-type: none"> <li>This criterion measures user benefit as a result of constructing the proposed project, and it is measured by the density of population and employment within a walkable or bike-able distance of the proposed project</li> </ul> <p><b>Benefit/Cost = 10%</b></p> <ul style="list-style-type: none"> <li>This criterion adds the Access and Demand scores together to create a combined benefit score, and then the benefit is divided into the cost of the project to NCDOT</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

## Ferry Scoring

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b> <i>(Note: all vessels are excluded from this category)</i>	<p><b>Safety [Route Health Index] = 15%</b></p> <ul style="list-style-type: none"> <li>The safety analysis of the ferry route based an Asset Health Index that is determined based on the condition ratings of the vessels and the ramps &amp; gantries</li> </ul> <p><b>Benefit/Cost [Travel Time] = 15%</b></p> <ul style="list-style-type: none"> <li>Travel time savings determined by comparing the travel hours saved by utilizing the various ferry routes instead of taking the shortest available alternative route</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>A measurement of the accessibility and connectivity provided by the various routes based on the number of points of interest within travel radii of 10, 20, &amp; 30 miles</li> </ul> <p><b>Asset Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>An evaluation of the cost effectiveness of asset operations in respect to continued maintenance on an asset versus the replacement costs of the subject asset</li> </ul> <p><b>Capacity/Congestion = 20%</b></p> <ul style="list-style-type: none"> <li>A measure of the capacity/congestion by an evaluation of the vehicles that are left behind each time a ferry vessel departs compared to the total numbers of vehicles carried by the route in a year</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Safety [Route Health Index] = 15%</b></p> <ul style="list-style-type: none"> <li>The safety analysis of the ferry route based an Asset Health Index that is determined based on the condition ratings of the vessels and the ramps &amp; gantries</li> </ul> <p><b>Benefit/Cost [Travel Time] = 15%</b></p> <ul style="list-style-type: none"> <li>Travel time savings determined by comparing the travel hours saved by utilizing the various ferry routes instead of taking the shortest available alternative route</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>A measurement of the accessibility and connectivity provided by the various routes based on the number of points of interest within travel radii of 10, 20, &amp; 30 miles</li> </ul> <p><b>Asset Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>An evaluation of the cost effectiveness of asset operations in respect to continued maintenance on an asset versus the replacement costs of the subject asset</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Expansion)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	<p><b>Benefit/Cost = 45%</b></p> <ul style="list-style-type: none"> <li>Assesses the projected ridership for the life of the expansion vehicle relative to the cost of the vehicle to the state</li> </ul> <p><b>Vehicle Utilization Data = 5%</b></p> <ul style="list-style-type: none"> <li>Examines how systems are maximizing current fleet</li> </ul> <p><b>System Safety = 5%</b></p> <ul style="list-style-type: none"> <li>Compares system safety statistics to the national average</li> </ul> <p><b>Connectivity = 5%</b></p> <ul style="list-style-type: none"> <li>Measures the connectivity of the proposed expansion of service to destinations (education, medical, employment, retail, other transfers)</li> </ul> <p><b>System Operational Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>Compares the number of trips to revenue hours reported</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Benefit/Cost = 25%</b></p> <ul style="list-style-type: none"> <li>Assesses the projected ridership for the life of the expansion vehicle relative to the cost of the vehicle to the state</li> </ul> <p><b>Vehicle Utilization Data = 5%</b></p> <ul style="list-style-type: none"> <li>Examines how systems are maximizing current fleet</li> </ul> <p><b>System Safety = 5%</b></p> <ul style="list-style-type: none"> <li>Compares system safety statistics to the national average</li> </ul> <p><b>Connectivity = 5%</b></p> <ul style="list-style-type: none"> <li>Measures the connectivity of the proposed expansion of service to vital destinations</li> </ul> <p><b>System Operational Efficiency = 10%</b></p> <ul style="list-style-type: none"> <li>Compares the number of trips to revenue hours reported</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Facilities)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	<p><b>Age of Facility, Facility Demand, Park &amp; Ride, Bus Shelter = 40%</b></p> <ul style="list-style-type: none"> <li>Age: examines the age of the facility compared to the useful life of the facility</li> <li>Facility Demand: measures the demand for new or expanded maintenance and operations facilities</li> <li>Park &amp; Ride: compares utilization to cost to state to construct</li> <li>Bus Shelter: examines current demand (boardings and alightings) at the proposed shelter location</li> </ul> <p><b>Benefit-Cost = 5%</b></p> <ul style="list-style-type: none"> <li>Examines the benefit (trips) relative to the cost of the project to the state</li> </ul> <p><b>System Operational Efficiency = 5%</b></p> <ul style="list-style-type: none"> <li>Compares the number of trips to revenue hours reported</li> </ul> <p><b>Facility Capacity = 20%</b></p> <ul style="list-style-type: none"> <li>Identifies the need for additional capacity by comparing proposed capacity, current usage, and current capacity</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Age of Facility, Facility Demand, Park &amp; Ride, Bus Shelter = 30%</b></p> <ul style="list-style-type: none"> <li>Age: examines the age of the facility compared to the useful life of the facility</li> <li>Facility Demand: measures the demand for new or expanded maintenance and operations facilities</li> <li>Park &amp; Ride: compares utilization to cost to state to construct</li> <li>Bus Shelter: examines current demand (boardings and alightings) at the proposed shelter location</li> </ul> <p><b>Benefit-Cost = 5%</b></p> <ul style="list-style-type: none"> <li>Examines the benefit (trips) relative to the cost of the project to the state</li> </ul> <p><b>System Operational Efficiency = 5%</b></p> <ul style="list-style-type: none"> <li>Compares the number of trips to revenue hours reported</li> </ul> <p><b>Facility Capacity = 10%</b></p> <ul style="list-style-type: none"> <li>Identifies the need for additional capacity by comparing proposed capacity, current usage, and current capacity</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>



**Public Transit Scoring (Fixed Guideway)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b>	<p><b>Mobility = 20%</b></p> <ul style="list-style-type: none"> <li>Measures the project usage (annual trips)</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measures the cost effectiveness of the project per trip over the life of the project</li> </ul> <p><b>Economic Development = 20%</b></p> <ul style="list-style-type: none"> <li>Measures the new employment and population growth in the fixed guideway corridor over 20 years</li> </ul> <p><b>Congestion Relief = 15%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Mobility = 15%</b></p> <ul style="list-style-type: none"> <li>Measures the project usage (annual trips)</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measures the cost effectiveness of the project per trip over the life of the project</li> </ul> <p><b>Economic Development = 10%</b></p> <ul style="list-style-type: none"> <li>Measures the new employment and population growth in the fixed guideway corridor over 20 years</li> </ul> <p><b>Congestion Relief = 10%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

## Rail Scoring (Track and Structures)

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Statewide Mobility</b> (Class I Freight Only)	<p><b>Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>Benefits associated with emissions savings, fuel savings, travel time savings divided by the project cost to the state</li> </ul> <p><b>Economic Competitiveness = 10%</b></p> <ul style="list-style-type: none"> <li>High-level relative measure of the anticipated statewide benefits of project improvements in numbers of jobs</li> </ul> <p><b>Capacity/Congestion = 15%</b></p> <ul style="list-style-type: none"> <li>Percentage that the existing track segment is over-capacity</li> </ul> <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Crash potential for railroad/highway at-grade crossings</li> </ul> <p><b>Accessibility = 10%</b></p> <ul style="list-style-type: none"> <li>Measures the potential for new or improved accessibility to rail service for industries by a freight rail project</li> </ul> <p><b>Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Values projects on strategic corridors, carrying military, ports, intermodal and transload traffic</li> </ul> <p><b>Mobility = 20%</b></p> <ul style="list-style-type: none"> <li>Measures either the change in percentage of available capacity or travel time savings provided by project</li> </ul> <p><b>Total = 100%</b></p>	--	--
<b>Regional Impact</b> (Freight / Passenger)	<p><b>Benefit/Cost = 10% (freight) / 10% (passenger)</b></p> <ul style="list-style-type: none"> <li>Benefits associated with emissions savings, fuel savings, travel time savings divided by the project cost to the state</li> </ul> <p><b>Capacity/Congestion = 15% (freight) / 25% (passenger)</b></p> <ul style="list-style-type: none"> <li>Percentage that the existing track segment is over-capacity</li> </ul> <p><b>Safety = 15% (freight) / 15% (passenger)</b></p> <ul style="list-style-type: none"> <li>Crash potential for railroad/highway at-grade crossings</li> </ul> <p><b>Accessibility = 10% (freight only)</b></p> <ul style="list-style-type: none"> <li>Measures the potential for new or improved accessibility to rail service for industries by a freight rail project</li> </ul> <p><b>Connectivity = 5% (freight only)</b></p> <ul style="list-style-type: none"> <li>Values projects on strategic corridors, carrying military, ports, intermodal and transload traffic</li> </ul> <p><b>Mobility = 15% (freight) / 20% (passenger)</b></p> <ul style="list-style-type: none"> <li>Measures either the change in percentage of available capacity or travel time savings provided by project</li> </ul> <p><b>Total = 70%</b></p>	15%	15%
<b>Division Needs</b> (Freight / Passenger)	<p><b>Benefit/Cost = 10% (freight) / 10% (passenger)</b></p> <ul style="list-style-type: none"> <li>Benefits associated with emissions savings, fuel savings, travel time savings divided by the project cost to the state</li> </ul> <p><b>Capacity/Congestion = 10% (freight) / 15% (passenger)</b></p> <ul style="list-style-type: none"> <li>Percentage that the existing track segment is over-capacity</li> </ul> <p><b>Safety = 10% (freight) / 10% (passenger)</b></p> <ul style="list-style-type: none"> <li>Crash potential for railroad/highway at-grade crossings</li> </ul> <p><b>Accessibility = 5% (freight only)</b></p> <ul style="list-style-type: none"> <li>Measures the potential for new or improved accessibility to rail service for industries by a freight rail project</li> </ul> <p><b>Connectivity = 5% (freight only)</b></p> <ul style="list-style-type: none"> <li>Values projects on strategic corridors, carrying military, ports, intermodal and transload traffic</li> </ul>	25%	25%

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
	<b>Mobility = 10% (freight) / 15% (passenger)</b> <ul style="list-style-type: none"> <li>Measures either the change in percentage of available capacity or travel time savings provided by project</li> </ul> <b>Total = 50%</b>		

**Rail Scoring (Freight Intermodal Facilities / Intercity Passenger Service & Stations)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Regional Impact</b> (Intercity Passenger Service Only)	<p><b>Benefit/Cost = 15%</b></p> <ul style="list-style-type: none"> <li>Benefits associated with emissions savings, fuel savings, travel time savings divided by the project cost to the state</li> </ul> <p><b>Capacity/Congestion = 25%</b></p> <ul style="list-style-type: none"> <li>Percentage that the existing facility is over-capacity</li> </ul> <p><b>Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Values projects based on type and value of connections to intercity passenger service, commuter service, bus service and parking</li> </ul> <p><b>Mobility = 20%</b></p> <ul style="list-style-type: none"> <li>Values daily volumes in relation to catchment area population</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b> (Facilities/ Intercity Passenger Service & Stations)	<p><b>Benefit/Cost = 10%</b></p> <ul style="list-style-type: none"> <li>Benefits associated with emissions savings, fuel savings, travel time savings divided by the project cost to the state</li> </ul> <p><b>Capacity/Congestion = 15%</b></p> <ul style="list-style-type: none"> <li>Percentage that the existing facility is over-capacity</li> </ul> <p><b>Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Values passenger projects based on type and value of connections to intercity passenger service, commuter service, bus service and parking</li> <li>Values projects serving military, port, intermodal and transload traffic and % of NC population in catchment area</li> </ul> <p><b>Mobility = 15%</b></p> <ul style="list-style-type: none"> <li>Values daily volumes in relation to catchment area population</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Highway Scoring - Alternate Criteria for Region A (Divisions 1 & 4)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Regional Impact	<p><b>[Travel Time] Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project to NCDOT. <i>Toll revenues anticipated from a project will reduce the cost to NCDOT and therefore increase the score in this criteria</i></li> </ul> <p><b>Congestion = 15%</b></p> <ul style="list-style-type: none"> <li>Comparison of the existing traffic volume to the existing capacity of the roadway (depending on data availability, Congestion may be measured by comparing congested travel speeds to uncongested speeds)</li> </ul> <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Lane Width = 10%</b></p> <ul style="list-style-type: none"> <li>Comparison of existing lane width to NCDOT Design standards. The greater the difference the higher the points awarded</li> </ul> <p><b>Shoulder Width = 10%</b></p> <ul style="list-style-type: none"> <li>Comparison of existing paved shoulder width to NCDOT Design standards. The greater the difference the higher the points awarded</li> </ul> <p><b>Total = 70%</b></p>	15%	15%

**Highway Scoring - Alternate Criteria for Region B (Divisions 2 & 3)**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Regional Impact	<p><b>[Travel Time] Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project to NCDOT. <i>Toll revenues anticipated from a project will reduce the cost to NCDOT and therefore increase the score in this criteria</i></li> </ul> <p><b>Safety = 25%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Multimodal [&amp; Freight + Military] = 25%</b></p> <ul style="list-style-type: none"> <li>Measure of existing congestion along key military and truck routes, and routes that provide connections to transportation terminals</li> </ul> <p><b>Total = 70%</b></p>	15%	15%

**Highway Scoring - Alternate Criteria for Divisions 1 & 4**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Division Needs	<p><b>[Travel Time] Benefit/Cost = 10%</b></p> <ul style="list-style-type: none"> <li>Travel time savings the project is expected to provide over 30 years divided by the cost of the project to NCDOT. <i>Toll revenues anticipated from a project will reduce the cost to NCDOT and therefore increase the score in this criteria</i></li> </ul> <p><b>Congestion = 10%</b></p> <ul style="list-style-type: none"> <li>Comparison of the existing traffic volume to the existing capacity of the roadway (depending on data availability, Congestion may be measured by comparing congested travel speeds to uncongested speeds)</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Lane Width = 10%</b></p> <ul style="list-style-type: none"> <li>Comparison of existing lane width to NCDOT Design standards. The greater the difference the higher the points awarded</li> </ul> <p><b>Shoulder Width = 10%</b></p> <ul style="list-style-type: none"> <li>Comparison of existing paved shoulder width to NCDOT Design standards. The greater the difference the higher the points awarded</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

**Highway Scoring - Alternate Criteria for Divisions 2 & 3**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Division Needs	<p><b>Congestion = 20%</b></p> <ul style="list-style-type: none"> <li>Comparison of the existing traffic volume to the existing capacity of the roadway (depending on data availability, Congestion may be measured by comparing congested travel speeds to uncongested speeds)</li> </ul> <p><b>Safety = 20%</b></p> <ul style="list-style-type: none"> <li>Evaluation of the number, severity, and frequency of crashes along the roadway</li> </ul> <p><b>Multimodal [&amp; Freight + Military] = 10%</b></p> <ul style="list-style-type: none"> <li>Measure of existing congestion along key military and truck routes, and routes that provide connections to transportation terminals</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

## APPENDIX B – P4.0 WORKGROUP MEMBERS

Full Name	Organization/Unit	Member Type
Betty Huskins	North Carolina Regional Council of Governments	Participant
Chris Lukasina	Capital Area MPO	Participant
Dana Stoogenke	Rocky River RPO	Participant
David Wasserman	NCDOT Prioritization Office (SPOT)	Participant
Debbie Barbour	NCDOT Preconstruction	Participant
Don Voelker	NCDOT Prioritization Office (SPOT)	Participant
Jay Swain	NCDOT Division Thirteen Engineer	Participant
Johanna Reese	North Carolina Association of County Commissioners	Participant
John Rouse	NCDOT Division Two Engineer	Participant
Julie White	North Carolina Metropolitan Mayor's Coalition	Participant
Karyl Fuller	Isothermal RPO	Participant
Lauren Blackburn	NCDOT - Non-highway modes	Participant
Louis Mitchell	NCDOT Division Ten Engineer	Participant
Matt Day	Triangle Area RPO	Participant
Mike Holder	NCDOT Chief Engineer's Office	Participant
Neil Burke	Charlotte Regional Transportation Planning Org.	Participant
Patrick Flanagan	Eastern Carolina RPO	Participant
Patrick Norman	NCDOT Transportation Planning Branch	Participant
Peggy Holland	Jacksonville Urban Area MPO	Participant
Rob Stone	NCDOT Division Eight Engineer	Participant
Rose Williams	North Carolina League of Municipalities	Participant
Sarah Lee	NCDOT Prioritization Office (SPOT)	Participant
Tyler Meyer	Greensboro Urban Area MPO	Participant
Van Argabright	NCDOT Program Development Branch	Participant
Susan Pullium	NCDOT Strategic Planning	Facilitator
Amna Cameron	Legislative Staff	Advisory
Bryce Ball	Legislative Staff	Advisory
Dan Madding	Department of Agriculture	Advisory
Frank Winn	NCDOT IT	Advisory
George Hoops	Federal Highway Administration	Advisory
Hugh Johnson	Governor's Office	Advisory
Jason Soper	Legislative Staff - House	Advisory
Jeff DeBellis	Department of Commerce	Advisory
Kolt Ulm	Legislative Staff - Senate	Advisory
Stephanie Ayers	NC State Ports Authority	Advisory
Shelly Heath	NCDOT	Administrative

## APPENDIX C – P4.0 CONSENSUS ITEMS

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
9/22/2014	<i>Welcome/Kick-Off</i>	Decision Making Process	Use a consensus approach where possible, only 'call for a vote' when absolutely necessary	Consensus	
10/20/2014	<i>Plus/Delta; Establishing Priorities</i>	n/a	n/a	n/a	
11/3/2014	<i>P3.0 Review; P4.0 Schedule</i>	n/a	n/a	n/a	
11/17/2014	<i>P3.0 Review; P4.0 Potential Changes</i>	P4.0 Schedule	2 - 60 day local input periods	Consensus	
12/1/2014	<i>Commerce Update; Potential Changes</i>	Emergency Evacuation Routes*	Can be included but should be measured as part of local input points if important to an area*	Consensus	*Reviewed discussion multiple times, see final decision on 3/30/15
12/15/2014	<i>Goals for Prioritization; Re-prioritization</i>	Goals for Prioritization	Acceptable as written during P3.0	Consensus	
		Projects not subject to re-prioritization	ROW or construction w/in first 5 years of STIP	Consensus	
1/5/2015	<i>Update on current efforts external to workgroup</i>	n/a	n/a	n/a	
1/20/2015	<i>Midterm Review; Potential Changes</i>	Land Use	Do not include in P4.0 criteria	Consensus	
2/2/2015	<i>Cambridge Recommendations; Peak ADT; Potential Changes</i>	Cambridge Global Recommendations	Improve consistency of terminology used in multiple modes	Consensus	
2/2/2015		Cambridge Global Recommendations	When possible, calculate future benefits rather than current conditions	Consensus	



<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
2/2/2015		Cambridge Global Recommendations	Scale all criteria on a relative basis based on the distribution of results from projects included in P3.0	Consensus	
2/2/2015		Cambridge Global Recommendations	Rely on consistent scaling of mode-specific criteria for evaluating projects across modes	Consensus	
2/2/2015		Cambridge: Ensure transparency when evaluating across modes	Continue using the P3.0 method of allocating funds across highway vs. non-highway	Consensus	
2/2/2015		Route Continuity	Due to constrained criteria in STI legislation, route continuity should be measured as part of local input points if important to an area	Consensus	
2/16/2015	<i>Potential Changes to Criteria</i>	Accessibility/Connectivity	50% County Tier Designation (based on economic distress indicator from DOC) + 50% Upgrade of Roadway Function (based on chart of improvement types & travel time savings/user)	Consensus	
2/16/2015		Multimodal [&Freight+Military]	Split into two separate criteria, one for passenger and one for freight	Consensus	
2/16/2015		Multimodal [+Military]	40% V/C along route if project is within 5 miles of a multimodal passenger terminal + 60% proximity (graduated within 5 miles) to multimodal passenger/military terminal	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
2/16/2015		Freight [+Military]	50% Truck volume along route + 30% V/C if project is non-interstate STRAHNET or future interstate + 20% proximity (graduated within 20 miles) to freight/military terminal	Consensus	
2/16/2015		Scoring by Improvement Type (Highway Projects)	Continue P3.0 methodology of scoring all highway projects using the same criteria	Consensus	
3/2/2015	<i>Potential Changes in Criteria; Non-Highway Review</i>	Pavement Condition	Continue using the P3.0 method of scoring	Consensus	
3/2/2015		Lane Width	Continue using the P3.0 method of scoring	Consensus	
3/2/2015		Shoulder Width	Continue using the P3.0 method of scoring	Consensus	
3/2/2015		Economic Competitiveness	Continue using the P3.0 method of scoring; continue to review/refine inputs to the model	Consensus	
3/16/2015	<i>Potential Changes in Criteria; Travel Demand Model Update; Non-Highway Criteria</i>	Category Specific Measures	Use the same criteria definitions across all three categories (statewide, regional, division) for the following criteria: Benefit/Cost*, Safety, Freight*, Economic Competitiveness*, Accessibility/Connectivity*, Lane Width, Shoulder Width, Pavement <i>*subject to potential use of NCSTM</i>	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/16/2015		Inputs to TREDIS	<u>Travel Growth Rate</u> : use VMT growth rate by county, area type, and facility type from NCSTM	Consensus	
3/16/2015		Peak ADT	Develop location specific factors for all primary routes. Use default factors for secondary routes, and examine developing location specific factors for secondary routes if time and resources allow.	Consensus	
3/16/2015		Peak ADT	Use PADT in Congestion (volume/capacity and volume), Freight (volume/capacity), and Multi-Modal (volume/capacity). AADT will continue to be used for calculation of travel time savings (Benefit-Cost and Economic Competitiveness) if statewide model is not used.	Consensus	
3/16/2015		Congestion	<u>Statewide</u> : $(((\text{PADT}/\text{Capacity}) \times 60\%) + ((\text{PADT}) \times 40\%))$ <u>Regional</u> : $(((\text{PADT}/\text{Capacity}) \times 80\%) + ((\text{PADT}) \times 20\%))$ <u>Division</u> : $[\text{PADT}/\text{Capacity}]$	Consensus	
3/16/2015		Benefit-Cost	$[(\text{Total Benefits over 10 years}/\text{Cost to NCDOT}) + ((\text{"Other Funds"}/\text{Total Project Cost}) \times 100)]$	Consensus	
3/16/2015		Bicycle/Pedestrian Criteria	<u>Safety</u> : 40% B/P Crashes + 40% Posted Speed Limit + 20% Safety Benefit	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/16/2015		Bicycle/Pedestrian Criteria	<u>Access:</u> continue using P3.0 method, adding regional significant B/P facilities to 'Major Centers' and removing household density from both 'Major Centers' and 'Secondary Centers'	Consensus	
3/16/2015		Bicycle/Pedestrian Criteria	<u>Demand-Density:</u> continue using P3.0 method, adding 'factor for unoccupied housing units (second homes),' and 'group housing, excluding prison facilities'	Consensus	
3/16/2015		Bicycle/Pedestrian Criteria	<u>Constructability:</u> remove	Consensus	
3/16/2015		Bicycle/Pedestrian Criteria	<u>Connectivity:</u> quality of service-consistency index score [CQOS <sub>endA</sub> +CQOS <sub>endB.../n</sub> ]	Consensus	
3/16/2015		Bicycle/Pedestrian Criteria	<u>Cost-Effectiveness:</u> [(Safety+Access+Demand-Density+Connectivity)/cost to NCDOT]	Consensus	
3/16/2015		Bicycle/Pedestrian Criteria	<u>Criteria Weights:</u> Safety - 15%, Access - 10%, Demand-Density - 10%, Connectivity - 10%, Cost-Effectiveness - 5%	Consensus	
3/30/2015	<i>Non-Highway Criteria; Highway Criteria Weights</i>	Emergency Evacuation Routes*	Should be measured as part of local input points if important to an area*	Agreement	*Reviewed discussion multiple times, NCDOT agreed to remove from future P4.0 discussion, original decision from 12/1/14 upheld

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/30/2015		Public Transportation Criteria: Vehicle	<u>Access</u> : annual OpStat reported hours / vehicles in fleet	Consensus	
3/30/2015		Public Transportation Criteria: Vehicle	<u>Safety</u> : OpStat reported miles divided by 3 Year average of incidents*	Consensus	
3/30/2015		Public Transportation Criteria: Vehicle	<u>Impact</u> : (unlinked annual passenger trips + projected new unlinked annual passenger trips) / unlinked annual passenger trips	Consensus	
3/30/2015		Public Transportation Criteria: Vehicle	<u>Cost-Effectiveness</u> : projected new annual unlinked passenger trips for the life of the vehicle / cost to the state	Consensus	
3/30/2015		Public Transportation Criteria: Vehicle	<u>Market Share</u> : (unlinked annual passenger trips + projected new unlinked annual passenger trips) / service area population	Consensus	
3/30/2015		Public Transportation Criteria: Vehicle	<u>Criteria Weights (Regional Impact)</u> : Access - 10%, Safety - 5%*, Impact - 20%, Cost-Effectiveness - 20%, Market Share - 15%*	Consensus	*Asked PTD to determine if transit working group has concerns with these edited percentages for 'safety' and 'market share'
3/30/2015		Public Transportation Criteria: Vehicle	<u>Criteria Weights (Division Needs)</u> : Access - 5%, Safety - 5%*, Impact - 15%, Cost-Effectiveness - 15%, Market Share - 10%*	Consensus	*Asked PTD to determine if transit working group has concerns with these edited percentages for 'safety' and 'market share'

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/30/2015		Public Transportation Criteria: Facility-Passenger	<u>Impact (either/or - age)*:</u> (unlinked annual passenger trips + projected new unlinked annual passenger trips ) / unlinked annual passenger trips	Consensus	*Criteria only used to evaluate expansion facilities
3/30/2015		Public Transportation Criteria: Facility-Passenger	<u>Age (either/or - impact)*:</u> age / 45 years	Consensus	*Criteria only used to evaluate replacement facilities
3/30/2015		Public Transportation Criteria: Facility-Passenger	<u>Cost Effectiveness:</u> estimated trips for the life of the facility / cost to the state	Consensus	
3/30/2015		Public Transportation Criteria: Facility-Passenger	<u>Market Share:</u> (unlinked annual passenger trips + projected annual unlinked passenger trips) / service area population	Consensus	
3/30/2015		Public Transportation Criteria: Facility-Passenger	<u>Ridership Growth:</u> ridership growth trend for the previous 5 years	Consensus	
3/30/2015		Public Transportation Criteria: Facility- Admin/Maint/Oper	<u>Impact (either/or - age)*:</u> (additional capacity + existing capacity) / existing capacity	Consensus	*Criteria only used to evaluate expansion facilities
3/30/2015		Public Transportation Criteria: Facility- Admin/Maint/Oper	<u>Age (either/or - impact)*:</u> age / 45 years	Consensus	*Criteria only used to evaluate replacement facilities
3/30/2015		Public Transportation Criteria: Facility- Admin/Maint/Oper	<u>Cost Effectiveness:</u> unlinked passenger trips for the life of the facility / cost to the state	Consensus	
3/30/2015		Public Transportation Criteria: Facility- Admin/Maint/Oper	<u>Market Share:</u> (unlinked annual passenger trips + projected annual unlinked passenger trips) / service area population	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/30/2015		Public Transportation Criteria: Facility- Admin/Maint/Oper	<u>Ridership Growth</u> : ridership growth trend for the previous 5 years	Consensus	
3/30/2015		Public Transportation Criteria: Facility	<u>Criteria Weights (Regional Impact)</u> : Impact or Age - 20%, Cost-Effectiveness - 20%, Market Share - 15%, Ridership Growth - 15%	Consensus	
3/30/2015		Public Transportation Criteria: Facility	<u>Criteria Weights (Division Needs)</u> : Impact or Age - 15%, Cost-Effectiveness - 15%, Market Share - 10%, Ridership Growth - 10%	Consensus	
3/30/2015		Public Transportation Criteria: Fixed Guideway	<u>Mobility</u> : estimated annual trips (1 point for every 250,000 trips)	Consensus	
3/30/2015		Public Transportation Criteria: Fixed Guideway	<u>Cost-Effectiveness</u> : cost of the trip over the life of the project (100 points for a cost of \$4 or less per trip; decreasing by 1 point for every \$0.11 increase per trip)	Consensus	
3/30/2015		Public Transportation Criteria: Fixed Guideway	<u>Economic Development</u> : 1 point per 1,000 new employees and 1 point per 500 new residents	Consensus	
3/30/2015		Public Transportation Criteria: Fixed Guideway	<u>Congestion Relief</u> : ((guideway passengers/day) x 290 days x 30 years x average time of trip x value of time)/\$10,000,000	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/30/2015		Public Transportation Criteria: Fixed Guideway	<u>Criteria Weights (Regional Impact):</u> Mobility - 20%, Cost-Effectiveness - 15%, Economic Development - 20%, Congestion Relief - 15%	Consensus	
3/30/2015		Public Transportation Criteria: Fixed Guideway	<u>Criteria Weights (Division Needs):</u> Mobility - 15%, Cost-Effectiveness - 15%, Economic Development - 10%, Congestion Relief - 10%	Consensus	
3/30/2015		Safety Benefits	Only use as an additional benefit for the "Total Benefits over 10 years" element in the 'Benefit-Cost' criteria; do not include in safety criteria	Consensus	
3/30/2015		Safety	Continue using the P3.0 method of scoring	Consensus	
3/30/2015		NC Statewide Travel Demand Model	Use \$12.75 for the auto-commute value of time	Consensus	
3/30/2015		NC Statewide Travel Demand Model	Consider use of statewide model for components of 'Benefit-Cost' and 'Economic Competitiveness' criteria only in P4.0; Decision on whether to use the model for these criteria has not yet been made	Consensus	
3/30/2015		Ferry Criteria	<u>Asset Condition:</u> 100 - Asset Condition Rating (provides the most points to the asset in the worst condition)	Consensus	



<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/30/2015		Ferry Criteria	<u>Benefits:</u> Monetized values based on number of hours saved due to VMT reductions	Consensus	
3/30/2015		Ferry Criteria	<u>Accessibility/Connectivity:</u> The number of POI within 3 concentric rings of the route is determined, scaled by a multiplying factor (75% for Ring 1, 50% for Ring 2, 25% for Ring 3), and totaled	Consensus	
3/30/2015		Ferry Criteria	<u>Asset Efficiency:</u> 3-year maintenance cost / pro-rated 3-year replacement cost	Consensus	
3/30/2015		Ferry Criteria	<u>Capacity/Congestion:</u> Percentage 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 time frame)	Consensus	
3/30/2015		Ferry Criteria	<u>Criteria Weights (Regional Impact):</u> Asset Condition - 15%, Benefits - 10%, Accesibility/Connectivity - 10%, Asset Efficiency - 15%, Capacity/Congestion - 20%	Consensus	
3/30/2015		Ferry Criteria	<u>Criteria Weights (Division Needs):</u> Asset Condition - 15%, Benefits - 10%, Accesibility/Connectivity - 10%, Asset Efficiency - 15%	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
3/30/2015		Highway Weights: Statewide Mobility	Eliminate the following criteria from consideration: 'Pavement Condition', 'Shoulder Width', and 'Lane Width'	Consensus	
3/30/2015		Highway Weights: Regional Impact	Eliminate the following from consideration as a default criteria: 'Pavement Condition', 'Shoulder Width', and 'Lane Width'	Consensus	
3/30/2015		Highway Weights: Division Needs	Eliminate the following from consideration as a default criteria: 'Pavement Condition', 'Shoulder Width', and 'Lane Width'	Consensus	
4/13/2015	<i>Non-Highway Criteria; Highway Criteria Weights; Number of Projects and New Submittals; Local Input Points; Normalization</i>	Aviation Criteria	<u>NCDOA Project Rating</u> : Project rating from the NC Airports System Plan	Consensus	
4/13/2015		Aviation Criteria	<u>FAA ACIP Rating</u> : Rating from FAA Airport Capital Improvement Plan	Consensus	
4/13/2015		Aviation Criteria	<u>Non-State Contribution Index</u> : Project's Highway Trust funds / all other sources of project funding	Consensus	
4/13/2015		Aviation Criteria	<u>Benefit/Cost</u> : [ ( Total \$ Econ. Contribution of Tier / Total # of IFR Ops of Tier ) * NCDOA Capital Project Rating ] / Project Cost	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
4/13/2015		Aviation Criteria	<u>Criteria Weights (Statewide Mobility):</u> NCDOA Project Rating - 40%, FAA ACIP Rating - 10%, Non-State Contribution Index - 30%, Benefit/Cost - 20%	Consensus	
4/13/2015		Aviation Criteria	<u>Criteria Weights (Regional Impact):</u> NCDOA Project Rating - 30%, FAA ACIP Rating - 5%, Non-State Contribution Index - 20%, Benefit/Cost - 15%	Consensus	
4/13/2015		Aviation Criteria	<u>Criteria Weights (Division Needs):</u> NCDOA Project Rating - 25%, FAA ACIP Rating - 10%, Non-State Contribution Index - 5%, Benefit/Cost - 10%	Consensus	
4/13/2015		Rail Criteria	<u>Cost Effectiveness:</u> (Return on Investment Index * 75%) + (Regional Job Creation Index * 25%)	Consensus	
4/13/2015		Rail Criteria	<u>System Health:</u> (Capacity Index * 75%) + (Accessibility/Connectivity Index * 25%)	Consensus	
4/13/2015		Rail Criteria	<u>Safety and Suitability:</u> Safety Index	Consensus	
4/13/2015		Rail Criteria	<u>Project Support:</u> Funding Leverage Index	Consensus	
4/13/2015		Rail Criteria	<u>Criteria Weights (Statewide Mobility - Freight Rail only):</u> Cost Effectiveness - 35%, System Health - 35%, Safety and	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
			Suitability - 20%, Project Support - 10%		
4/13/2015		Rail Criteria	<u>Criteria Weights (Regional Impact):</u> Cost Effectiveness - 25%, System Health - 20%, Safety and Suitability - 15%, Project Support - 10%	Consensus	
4/13/2015		Rail Criteria	<u>Criteria Weights (Division Needs):</u> Cost Effectiveness - 20%, System Health - 10%, Safety and Suitability - 10%, Project Support - 10%	Consensus	
4/13/2015		Highway Criteria Weights	<u>Statewide Mobility:</u> Benefit-Cost - 25%, Congestion - 30%, Economic Competitiveness - 10%, Safety 15%, Freight - 15%, Multimodal - 5%	Consensus	
4/13/2015		Highway Criteria Weights	<u>Regional Impact:</u> Benefit-Cost - 20%, Congestion - 20%, Accessibility/Connectivity - 10%, Safety - 10%, Freight - 10%	Consensus	
4/13/2015		Highway Criteria Weights	<u>Division Needs:</u> Benefit-Cost - 15%, Congestion - 15%, Accessibility/Connectivity - 5%, Safety - 10%, Freight - 5%	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
4/13/2015		Use of Alternate Criteria for Highway Projects	Each funding region and/or division may submit alternate criteria and/or percentage weights for use in evaluating highway projects at the Regional and/or Division level; requires unanimous support from all impacted MPOs, RPOs, and Division Engineers; submissions must be received by the SPOT office on or before new project submittal period begins in October 2015	Agreement	
4/13/2015		Scaling	Use P4.0 projects to set scale	Consensus	
5/4/2015	<i>Legislative and BOT Feedback; Normalization</i>	Public Transportation Criteria: Vehicle	<u>Criteria Weights (Regional Impact):</u> Access - 10%, Safety - 10%*, Impact - 20%, Cost-Effectiveness - 20%, Market Share - 10%*	Consensus Update	*Update to Consensus from 3/30/15
5/4/2015		Public Transportation Criteria: Vehicle	<u>Criteria Weights (Division Needs):</u> Access - 5%, Safety - 10%*, Impact - 15%, Cost-Effectiveness - 15%, Market Share - 5%*	Consensus Update	*Update to Consensus from 3/30/15
5/4/2015		Freight [+Military]	Add ferry terminals where the truck volumes exceed 10,000 to the list of eligible freight terminals	Consensus	
5/4/2015		Normalization	Continue with the same normalization approach in P4.0 as was used in P3.0	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
5/18/2015	<i>NC Statewide Travel Demand Model; Number of Projects and New Sumbittals; Local Input Points</i>	NC Statewide Travel Demand Model	Use statewide model for Statewide Mobility and Regional Impact categories (only for components of 'Benefit-Cost' and 'Economic Competitiveness', as stated in 3/30 consensus)	Consensus	
5/18/2015		Benefit-Cost / Economic Competitiveness / NC Statewide Travel Demand Model	Use similar methodology as in P3.0 to calculate components for Division Needs, using 10 year growth factors from statewide model	Consensus	
5/18/2015		Number of Projects in the Database (Highway)	<u>Automatically keep in the database:</u> Projects programmed for R/W or CON only in years 6-10 based on Final STIP, siblings of programmed projects, projects with a completed NEPA document, projects with project planning actively underway as of December 31, 2014, any project that received any amount of local input points in P3.0 (in either Regional Impact or Division Needs category)	Consensus	
5/18/2015		Number of Projects in the Database (Highway)	Any project not automatically retained in the database will be put in "holding tank" for use in resubmittals (SPOT ID and mapping retained, but data will need to be reprocessed)	Agreement	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
5/18/2015		Number of Projects in the Database (Non-Highway)	Non-highway modes will use same method as stated for Highways	Consensus	
5/18/2015		Number of Projects in the Database	Projects remaining in the database may be modified (with MPO/RPO and Division Engineer agreement) without counting against the total number of new submittals	Agreement	
5/18/2015		New Submittals (Highway)	Each MPO/RPO gets a minimum of 10 new project submittals + additional project submittals based on every 100K in pop, maximum of 20 (same method as P3.0); Each Division gets 7 new projects; '1 in, 1 out' is allowed as long as there is agreement between MPO/RPO and Division	Consensus	
5/18/2015		New Submittals (Non-Highway)	MPO/RPO and Division will have the same number of new submittals per mode as stated for Highway	Consensus	
5/18/2015		New Submittals	All new project submittals (all modes) must be made only by MPOs, RPOs, or Divisions	Agreement	
5/18/2015		Number of Local Input Points	Continue P3.0 process (# of points per area = 1000 points + additional 100 points per 50,000 population, with cap of 2,500 per area)	Consensus	

<u>Date</u>	<u>Meeting Focus</u>	<u>Topic</u>	<u>Decision</u>	<u>Consensus/Vote</u>	<u>Notes</u>
5/19/2015		Local Input Point Percentages	One MPO, one RPO, and one Chief Engineer representative will participate in the local input methodology internal review group as advisory members; this group will review MPO and RPO methodologies and provide approval, and will also review Division Engineers' methodologies and provide comments to the Chief Engineer (who will approve them)	Consensus	
5/20/2015		Local Input Point Percentages	Equal split between MPO/RPO and Division Engineer for local input percentages for the Regional Impact (15%/15%) and Division Needs (25%/25%) categories	Consensus	

Totals

- 102 Consensus Items
- 2 Consensus Updates
- 5 Agreement Items (the Workgroup agreed to these items, but consensus not required)
- 3 items n/a (neither agreement nor consensus required)



## APPENDIX D – P4.0 PROJECT SUBMITTAL AND LOCAL INPUT POINT ALLOCATIONS

MPO/RPO Name	2013 Census Pop.	Population (Nearest 100,000)	Population (Nearest 50,000)	Maximum New Submittal	Local Input Points
Albemarle RPO	171,853	200,000	150,000	12	1,300
Burlington-Graham MPO	162,290	200,000	150,000	12	1,300
Cabarrus Rowan MPO	319,680	300,000	300,000	13	1,600
Cape Fear RPO	136,026	100,000	150,000	11	1,300
Capital Area MPO	1,105,002	1,100,000	1,100,000	20	2,500
Charlotte Regional TPO	1,296,029	1,300,000	1,300,000	20	2,500
Down East RPO	175,303	200,000	200,000	12	1,400
Durham-Chapel Hill-Carrboro MPO	408,415	400,000	400,000	14	1,800
East Carolina RPO	171,185	200,000	150,000	12	1,300
Fayetteville Area MPO	373,067	400,000	350,000	14	1,700
French Broad River MPO	397,330	400,000	400,000	14	1,800
Gaston-Cleveland-Lincoln MPO	382,310	400,000	400,000	14	1,800
Goldsboro Urban Area MPO	92,025	100,000	100,000	11	1,200
Grand Strand Trans. Study Area	37,066	0	50,000	10	1,100
Greater Hickory MPO	364,501	400,000	350,000	14	1,700
Greensboro Urban Area MPO	376,299	400,000	400,000	14	1,800
Greenville Urban Area MPO	130,792	100,000	150,000	11	1,300
High Country RPO	209,900	200,000	200,000	12	1,400
High Point Urban Area MPO	285,126	300,000	300,000	13	1,600
Isothermal RPO	132,747	100,000	150,000	11	1,300
Jacksonville Urban MPO	143,225	100,000	150,000	11	1,300
Kerr-Tar RPO	165,905	200,000	150,000	12	1,300
Land-of-Sky RPO	64,741	100,000	50,000	11	1,100
Lumber River RPO	226,554	200,000	250,000	12	1,500
Mid-Carolina RPO	186,524	200,000	200,000	12	1,400
Mid-East RPO	111,415	100,000	100,000	11	1,200
New Bern MPO	55,955	100,000	50,000	11	1,100
Northwest Piedmont RPO	172,656	200,000	150,000	12	1,300
Peanut Belt RPO	121,291	100,000	100,000	11	1,200
Piedmont Triad RPO	252,035	300,000	250,000	13	1,500
Rocky Mount Urban Area MPO	79,108	100,000	100,000	11	1,200
Rocky River RPO	106,311	100,000	100,000	11	1,200
Southwestern RPO	134,842	100,000	150,000	11	1,300
Triangle Area RPO	213,707	200,000	200,000	12	1,400
Upper Coastal Plain RPO	228,569	200,000	250,000	12	1,500
Wilmington Urban Area MPO	254,808	300,000	250,000	13	1,500
Winston Salem Urban Area MPO	406,788	400,000	400,000	14	1,800

Division	2013 Census Pop.	Population (Nearest 100,000)	Population (Nearest 50,000)	Maximum New Submittal	Local Input Points
01	262,307	300,000	250,000	7	1,500
02	493,267	500,000	500,000	7	2,000
03	672,930	700,000	650,000	7	2,300
04	583,672	600,000	600,000	7	2,200
05	1,430,323	1,400,000	1,450,000	7	2,500
06	668,091	700,000	650,000	7	2,300
07	900,291	900,000	900,000	7	2,500
08	514,372	500,000	500,000	7	2,000
09	744,298	700,000	750,000	7	2,500
10	1,422,458	1,400,000	1,400,000	7	2,500
11	370,833	400,000	350,000	7	1,700
12	735,110	700,000	750,000	7	2,500
13	498,777	500,000	500,000	7	2,000
14	354,651	400,000	350,000	7	1,700

### Notes:

- MPOs/RPOs receive a minimum 10 new project submittals for each mode
- MPOs/RPOs receive an additional submittal per 100,000 people
- Maximum number of new project submittals is 20 for MPOs/RPOs
- Population is rounded to nearest 100,000 people to determine maximum # of new highway project submittals for each MPO/RPO
  
- All Areas receive a minimum of 1,000 points
- Areas receive an additional 100 points per 50,000 people
- Maximum number of local input points is 2,500
- Population is rounded to nearest 50,000 people to determine # of local input points for each MPO/RPO or Division
- Areas receive separate allocation of local input points for Regional Impact and Division Needs funding categories (amount of points is the same for each)
  
- MPO/RPO boundaries are based on official 2015 boundaries.

## APPENDIX E – P4.0 SCORING CRITERIA, MEASURES, AND WEIGHTS FOR ALL MODES

### Highway Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Statewide Mobility</b>	<p><b>Benefit/Cost = 25%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Congestion = 30%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Economic Competitiveness = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Multimodal [ + Military] = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to multimodal passenger terminals.</li> </ul> <p><b>Freight [ + Military] = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Total = 100%</b></p>	--	--
<b>Regional Impact</b>	<p><b>Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Congestion = 20%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Freight [ + Military ] = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Total = 70%</b></p>	15%	15%

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Division Needs	<p><b>Benefit/Cost = 15%</b></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><b>Congestion = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway.</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Freight [ + Military ] = 5%</b></p> <ul style="list-style-type: none"> <li>• Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Accessibility/Connectivity = 5 %</b></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

Note: Region B and Divisions 2, 3, 6 have approved different criteria and weights for their respective areas – see end of Appendix E.

**Aviation Scoring**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
Statewide Mobility	<p><b>NCDOA Project Rating = 40%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>FAA ACIP Rating = 10%</b></p> <ul style="list-style-type: none"> <li>Federal Aviation Administration (FAA) Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS).</li> </ul> <p><b>Non-State Contribution Index = 30%</b></p> <ul style="list-style-type: none"> <li>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).</li> </ul> <p><b>Benefit/Cost = 20%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Total = 100%</b></p>	--	--
Regional Impact	<p><b>NCDOA Project Rating = 30%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>FAA ACIP Rating = 5%</b></p> <ul style="list-style-type: none"> <li>Federal Aviation Administration (FAA) Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS).</li> </ul> <p><b>Non-State Contribution Index = 20%</b></p> <ul style="list-style-type: none"> <li>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).</li> </ul> <p><b>Benefit/Cost = 15%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Total = 70%</b></p>	15%	15%
Division Needs	<p><b>NCDOA Project Rating = 25%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>FAA ACIP Rating = 10%</b></p> <ul style="list-style-type: none"> <li>Federal Aviation Administration (FAA) Airport Capital Improvement Plan (ACIP) Rating. Ratings based on critical airport development and capital needs within National Airspace System (NAS).</li> </ul> <p><b>Non-State Contribution Index = 5%</b></p> <ul style="list-style-type: none"> <li>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).</li> </ul> <p><b>Benefit/Cost = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

**Bicycle & Pedestrian Scoring**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Division Needs</b>	<p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of number of bicycle and/or pedestrian crashes, speed limit, and safety benefits to determine adequacy of safety for users of the project.</li> </ul> <p><b>Access = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Demand = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the degree of bike/ped separation from the roadway, ADA compliance, and connectivity to a similar or better project type.</li> </ul> <p><b>Cost Effectiveness = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of combined user benefits of Safety, Access, Demand, and Connectivity criteria compared to the cost of the project to NCDOT.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Ferry Scoring**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Regional Impact</b>	<p><b>Asset Condition = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the condition rating of the asset.</li> </ul> <p><b>Benefits = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>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, &amp; 30 miles.</li> </ul> <p><b>Asset Efficiency = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the cost effectiveness of continued maintenance of the asset compared to replacement of the asset.</li> </ul> <p><b>Capacity/Congestion = 20%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Asset Condition = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the condition rating of the asset.</li> </ul> <p><b>Benefits = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>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, &amp; 30 miles.</li> </ul> <p><b>Asset Efficiency = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the cost effectiveness of continued maintenance of the asset compared to replacement of the asset.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Vehicle)**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Regional Impact</b>	<p><b>Access = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual hours of operation compared to the number of vehicles in the fleet.</li> </ul> <p><b>System Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual miles compared to the 3 year average of reported incidents.</li> </ul> <p><b>Impact = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Access = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual hours of operation compared to the number of vehicles in the fleet.</li> </ul> <p><b>System Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the reported annual miles compared to the 3 year average of reported incidents.</li> </ul> <p><b>Impact = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the total projected passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Passenger Facility)**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Regional Impact</b>	<p><b>Impact = 20% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>OR</b></p> <p><b>Age = 20% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 15%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Impact = 15% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the number of existing passenger trips.</li> </ul> <p><b>OR</b></p> <p><b>Age = 15% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 10%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>



**Public Transit Scoring (Admin/Maintenance/Operations Facility)**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Regional Impact</b>	<p><b>Impact = 20% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the existing and additional capacity compared to the existing capacity.</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p><b>Age = 20% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 15%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Impact = 15% (Expansion projects only)</b></p> <ul style="list-style-type: none"> <li>Measurement of the existing and additional capacity compared to the existing capacity.</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p><b>Age = 15% (Non-expansion projects)</b></p> <ul style="list-style-type: none"> <li>Age of the facility divided by 45 years (considered the useful life).</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of existing annual passenger trips compared to the cost of the project to the state.</li> </ul> <p><b>Market Share = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number of existing and projected annual passenger trips compared to the population in the service area.</li> </ul> <p><b>Ridership Growth = 10%</b></p> <ul style="list-style-type: none"> <li>Growth trend of ridership over the past 5 years.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Public Transit Scoring (Fixed Guideway)**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Regional Impact</b>	<p><b>Mobility = 20%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the projected annual trips.</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the cost per trip over the life of the project.</li> </ul> <p><b>Economic Development = 20%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the projected new employment and population growth in the fixed guideway corridor over 20 years.</li> </ul> <p><b>Congestion Relief = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the projected travel time savings to a passenger over 30 years.</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>
<b>Division Needs</b>	<p><b>Mobility = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the projected annual trips.</li> </ul> <p><b>Cost Effectiveness = 15%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the cost per trip over the life of the project.</li> </ul> <p><b>Economic Development = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the projected new employment and population growth in the fixed guideway corridor over 20 years.</li> </ul> <p><b>Congestion Relief = 10%</b></p> <ul style="list-style-type: none"> <li>• Measurement of the projected travel time savings to a passenger over 30 years.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

## Rail Scoring

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Statewide Mobility</b> (Class I Freight Only)	<p><b>Cost Effectiveness = 35%</b></p> <ul style="list-style-type: none"> <li>Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region.</li> </ul> <p><b>System Health = 35%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Safety and Suitability = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of potentially hazardous rail crossings.</li> </ul> <p><b>Project Support = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of outside contributions to the project compared to the cost of the project to the state.</li> </ul> <p><b>Total = 100%</b></p>	--	--
<b>Regional Impact</b>	<p><b>Cost Effectiveness = 25%</b></p> <ul style="list-style-type: none"> <li>Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region.</li> </ul> <p><b>System Health = 20%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Safety and Suitability = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of potentially hazardous rail crossings.</li> </ul> <p><b>Project Support = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of outside contributions to the project compared to the cost of the project to the state.</li> </ul> <p><b>Total = 70%</b></p>	15%	15%
<b>Division Needs</b>	<p><b>Cost Effectiveness = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of monetized benefits compared to the project cost to NCDOT, and the jobs created for the region.</li> </ul> <p><b>System Health = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Safety and Suitability = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of potentially hazardous rail crossings.</li> </ul> <p><b>Project Support = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of outside contributions to the project compared to the cost of the project to the state.</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

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

**Highway Scoring - Alternate Criteria for Region B (Divisions 2 & 3)**

Funding Category	Quantitative Data	Local Input	
		Division Input	MPO/RPO Input
<b>Regional Impact</b>	<p><b>Safety = 25%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Benefit/Cost = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Congestion = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Freight [ + Military ] = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Multimodal [ + Military ] = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to multimodal passenger terminals.</li> </ul> <p><b>Total = 70%</b></p>	<b>15%</b>	<b>15%</b>

**Highway Scoring - Alternate Criteria for Division 2**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
<b>Division Needs</b>	<p><b>Safety = 20%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Congestion = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Accessibility/Connectivity = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Multimodal [ + Military ] = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to multimodal passenger terminals.</li> </ul> <p><b>Freight [ + Military ] = 5%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Total = 50%</b></p>	<b>25%</b>	<b>25%</b>

**Highway Scoring - Alternate Criteria for Division 3**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Division Needs	<p><b>Safety = 15%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Congestion = 10%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Multimodal [ + Military ] = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to multimodal passenger terminals.</li> </ul> <p><b>Freight [ + Military ] = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Accessibility/Connectivity = 5%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Total = 50%</b></p>	25%	25%

**Highway Scoring - Alternate Criteria for Division 6**

Funding Category	Quantitative Data	Local Input	
		Division Rank	MPO/RPO Rank
Division Needs	<p><b>Benefit/Cost = 15%</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Congestion = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the Peak ADT traffic volume on the roadway compared to the existing capacity of the roadway.</li> </ul> <p><b>Safety = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of the number, severity, and frequency of crashes along the roadway.</li> </ul> <p><b>Freight [ + Military ] = 10%</b></p> <ul style="list-style-type: none"> <li>Measurement of congestion along routes that provide connections to freight intermodal terminals and routes that have high truck volumes.</li> </ul> <p><b>Accessibility/Connectivity = 5 %</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><b>Total = 50%</b></p>	25%	25%