



# Data Driven Results: North Carolina's Strategic Prioritization Process

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## Background

#### NCDOT is responsible for 6 modes of transportation:

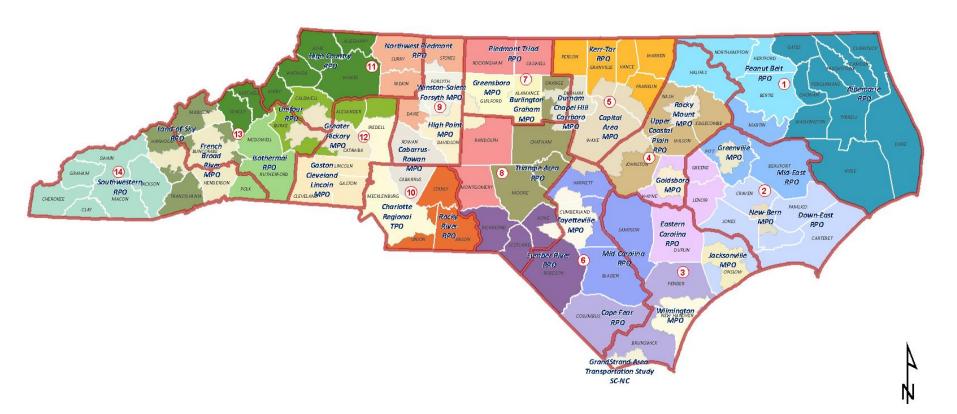
- Aviation (74 publicly-owned airports)
- Bicycle and Pedestrian
- Ferries 2nd largest system in US (behind Washington)
- Highways Maintains 80,000 miles (80%) of highways (2nd only to Texas in miles)
- Public Transportation
- Rail

Annual Budget of approx. \$4.3 B (federal dollars account for 25% of total budget)

# **Background**

#### Key Partners, as shown on colorful map below, include:

- 19 Metropolitan Planning Organizations (MPOs)
- 18 Rural Planning Organizations (RPOs)
- 14 Field Offices (Divisions)



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## Strategic Transportation Investment (STI)

#### New funding formula for NCDOT's Capital Expenditures

- Focus on Mobility/Expansion and Modernization projects for all modes where needs are the greatest
- All modes must compete for the same funds
- Replaces former geographic equity funding formula

#### House Bill 817 signed into Law June 26, 2013

- Most significant transportation legislation in NC since 1989
- Overwhelming support in both House (105-7) and Senate (44-2)

After initial implementation (2015), funding based on prioritization results are for projects 6-10 years in the future

Workgroup charged with providing recommendations to NCDOT on weights and criteria. Reps include:

- MPOs & RPOs
- NCDOT Division Engineers
- Local Government Advocacy Groups



## How the STI Works

40% of Funds

30% of Funds

30% of Funds

Estimated \$16B in Funds for SFY 2016-2025

#### **Statewide Mobility**

# Focus → Address Significant Congestion and Bottlenecks

#### Eligible Projects

- Statewide type Projects (such as Interstates)
- Selection based on 100% Data
- Projects Programmed prior to Local Input Ranking

#### **Regional Impact**

# Focus → Improve Connectivity within Regions

#### Eligible Projects

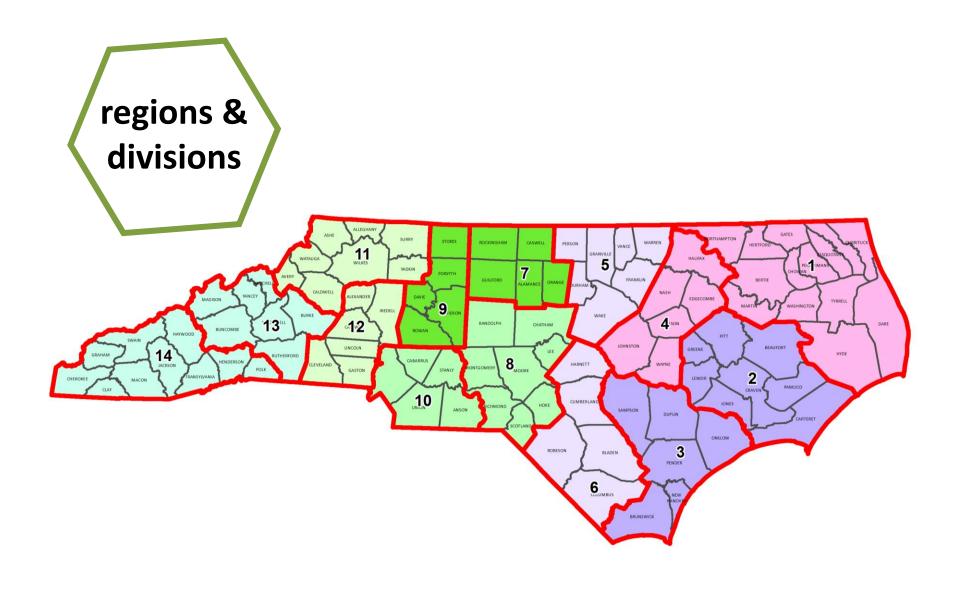
- Projects Not Selected in Statewide Mobility Category
- Regional Projects
- Selection based on 70% Data & 30% Local Input
- Funding based on population within Region (7)

#### **Division Needs**

#### Focus → Address Local Needs

#### Eligible Projects

- Projects Not Selected in Statewide or Regional Categories
- Division Projects
- Selection based on 50% Data & 50% Local Input
- Funding based on equal share for each Division (14) = ~\$30M / yr



# Eligibility Definitions - Highways

	Statewide	Regional	Division
Highway	<ul> <li>Interstates and Future Interstates</li> <li>Routes on the NHS as of July 1, 2012</li> <li>Routes on Department of Defense Strategic Highway Network (STRAHNET)</li> <li>Appalachian Development Highway System Routes</li> <li>Uncompleted Intrastate projects</li> <li>Designated Toll Facilities</li> </ul>	• Other US and NC Routes ~10,500 miles	• All SR Routes • ~65,000 miles

# *Eligibility Definitions – Non-Highways*

	Statewide	Regional	Division
Aviation  Airports. Funding not to exceed \$500K per airport  Airports not in Funding not to		Other Commercial Service Airports not in Statewide. Funding not to exceed \$300K per airport project per year	All Airports without Commercial Service. Funding not to exceed \$18.5M for airports within this category
Bicycle- Pedestrian	N/A	N/A	All routes
Public Transportation	N/A	Service spanning two or more counties and serving more than one municipality. Funding amounts not to exceed 10% of regional allocation.	Service not included on Regional. Multimodal terminals and stations serving passenger transit systems
Ferry	N/A	State maintained routes, excluding replacement vessels	Replacement of vessels
Rail	Freight Capacity Service on Class I Railroad Corridors	Rail service spanning two or more counties not included on Statewide  Rail service spanning two or Rail service not included Statewide or Regional	

# Highway Project Scoring Overview

	Statewide Mobility	Regional Impact	Division Needs
Eligible Projects:	Statewide	<ul><li>Statewide</li><li>Regional</li></ul>	<ul><li>Statewide</li><li>Regional</li><li>Division</li></ul>
Overall Weights:	100% Quantitative Data	70% Quantitative Data / 30% Local Input	50% Quantitative Data / 50% Local Input
Quant. Criteria	<ul> <li>Benefit-Cost</li> <li>Congestion</li> <li>Economic Comp.</li> <li>Safety</li> <li>Freight</li> <li>Multimodal</li> <li>Pavement Condition</li> <li>Lane Width</li> <li>Shoulder Width</li> </ul>	<ul> <li>Benefit-cost</li> <li>Congestion</li> <li>Safety</li> <li>Freight</li> <li>Multimodal</li> <li>Pavement Condition</li> <li>Lane Width</li> <li>Shoulder Width</li> <li>Accessibility and connectivity to employment centers, tourist destinations, or military installations</li> </ul>	<ul> <li>Benefit-cost</li> <li>Congestion.</li> <li>Safety</li> <li>Freight</li> <li>Multimodal</li> <li>Pavement Condition</li> <li>Lane Width</li> <li>Shoulder Width</li> <li>Accessibility and connectivity to employment centers, tourist destinations, or military installations</li> </ul>
Notes:	Projects Selected Prior to Local Input	Quant. Criteria can be different for each Region	Quant. Criteria can be different for each Division

# Highway Scoring – Eligible Quantitative Criteria

<u>Criteria</u>	Existing Conditions	Project Benefits (Future Condition
- Congestion (Volume/Capacity + Volume)	<b>√</b>	
<ul> <li>Benefit/Cost (Travel Time Savings + Safety Benefits / Cost to NCDOT)</li> </ul>		
- Safety Score (Critical Crash Rates, Density, Severity)	V	
<ul> <li>Economic Competitiveness (Jobs, Change County Economy)</li> </ul>		
<ul> <li>Accessibility / Connectivity (County Economic Indicator, Improve Mobility)</li> </ul>	<b>*</b>	
<ul> <li>Freight (Truck Volumes, STRAHNet/Future Interstate, Freight Terminals)</li> </ul>	$\checkmark$	
- Multimodal (Passenger Terminals)	<b>V</b>	
- Lane Width (Existing Width vs. Standard Width)	1	
- Shoulder Width (Existing Width vs. Standard Width)	<b>*</b>	
- Pavement Score (Pavement Condition Rating)	<b>V</b>	

## STI – Non-Highway Criteria

### Separate prioritization processes for each mode

- Must have minimum of 4 quantitative criteria
- Criteria based on 0-100 point scale with no bonus points and not favoring any particular mode of transportation











# Results – Projects Scored and Programmed

#### **Nearly 3100 projects (highway + non-highway)**

- Highways 1800 (250+ intersection/interchange projects)
- Bike/Ped 500
- Public Transportation 200
- Aviation 500
- Ferry 50
- Rail 50

### Nearly 500 Projects Programmed in STIP (2016-2025)

- 478 projects under STI vs. 175 from old formula
- 300,000 jobs vs 174,000

#### Projects are located where needs are greatest

133 intersection/interchange projects to alleviate congestion/bottlenecks

# STI Allocations for STIP (\$ in millions)

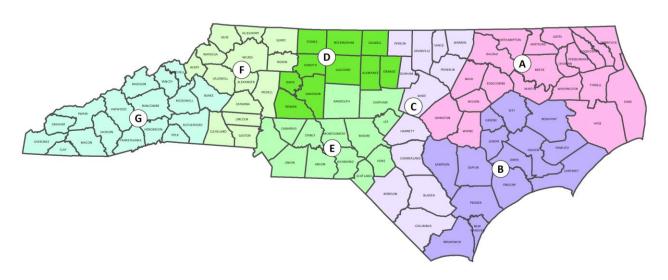
10 YR ALLOCATION (\$ in 1000'S)			
Statewide (40%)	\$5,633,900		
Regional (30%)	\$4,219,350		
Division (30%)	\$4,225,430		

# Statewide Allocations 2016-2015 STIP



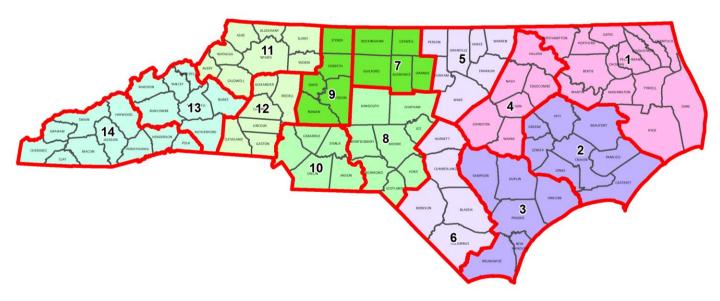
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# Regional Allocations 2016-2015 STIP



Distribution Regions	Population	% of State Population	Regional 10-Year Allocation (in thousands)
A (Divs. 1&4)	850,821	8.63%	\$364,016
B (Divs. 2&3)	1,202,495	12.19%	\$514,477
C (Divs. 5&6)	2,158,804	21.89%	\$923,625
D (Divs. 7&9)	1,667,951	16.91%	\$713,618
E (Divs. 8&10)	1,998,959	20.27%	\$855,237
F (Divs. 11&12)	1,117,339	11.33%	\$478,044
G (Divs. 13&14)	865,583	8.78%	\$370,332
	9,861,952		\$4,219,350

# Division Allocations 2016-2015 STIP

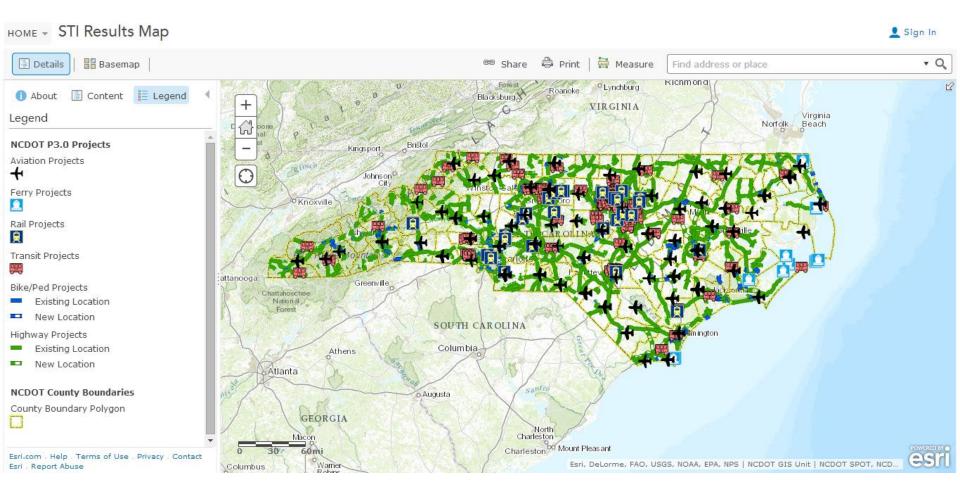


10 YR ALLOCATION (\$ in 1000'S)				
Division 1 (30%)	\$4,225,430		Division 8 (30%)	\$4,225,430
Division 2 (30%)	\$4,225,430		Division 9 (30%)	\$4,225,430
Division 3 (30%)	\$4,225,430		Division 10 (30%)	\$4,225,430
Division 4 (30%)	\$4,225,430		Division 11 (30%)	\$4,225,430
Division 5 (30%)	\$4,225,430		Division 12 (30%)	\$4,225,430
Division 6 (30%)	\$4,225,430		Division 13 (30%)	\$4,225,430
Division 7 (30%)	\$4,225,430		Division 14 (30%)	\$4,225,430

### STI Website -

## http://ncdot.gov/strategictransportationinvestments/

## Interactive map (AGOL) of all projects evaluated with data and scores (pdf)



## Contact Information

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