



North Carolina Board of Transportation 1 South Wilmington Street, Raleigh, North Carolina 27601 November 1-2, 2017

WEDNESDAY, November 1, 2017

11:30AM -12:00PM

Audit Committee	Room 160
-----------------	----------

12:00PM – 1:00PM BREAK

1:00PM – 2:00PM WORK SESSION – FULL BOARD ATTENDANCE ROOM 150

History of Transportation Update	Walter Turner, NC Transportation Museum Foundation
Fee Study	Tim Little
Chief Financial Officer Update	Chairman Fox
Product Evaluation Awareness	Chairman Fox

2:00PM – 2:10PM BREAK

2:10PM - 3:30PM

Highway Committee	Room 150
Multi-Modal Committee	EIC

3:30PM – 3:40PM BREAK

3:40PM - 5:00PM

Economic Development/Intergovernmental Relations (EDIR) Co	ommittee Room 150
Funding Appropriations and Strategies (FAST) Committee	EIC

5:00PM ADJOURN

NORTH CAROLINA BOARD OF TRANSPORTATION MEETING

Call to Order
 Ethics Statement
 Approval of October 5, 2017 Board Meeting Minutes
 Road and Bridge Naming Honorary Designation
 Chairman Fox Chairman Fox

INFORMATION AND DELEGATED AUTHORITY

Secretary's Remarks

(Item C)

Award of Highway Construction Contracts from October 2017
Letting

(Item D)

Award of Contracts to Private Firms for Engineering Services

Funds for Secondary Road Improvement Projects – Highway Fund
and Highway Trust Fund

(Item H)

Approval of Funds for Division-wide Small Construction, Statewide
Contingency, Public Access, and Economic Development

(Item L)

Approval of Funds for Specific Spot Safety Improvement Projects

North Carolina Beyond the Connected Age

Michael Walden, Ph.D. NC State University

Secretary Trogdon

DMV Update Commissioner Torre Jessup

ACTION Chairman Fox

Approval of Projects

(Item G) Additions and Abandonments to State Secondary Road System

(Item I) Public Transportation Program

(Item I-1) Public Transportation
(Item I-1A) Public Transportation
(Item I-2) Rail Program
(Item I-4) Aviation

(Item K) North Carolina Highway Trust Funds
(Item M) Funds for Specific Federal-Aid Projects
(Item N) Revisions to the 2016-2017 STIP

(Item O) Municipal and Special Agreements
(Item R) Right of Way Resolutions and Ordinances

(Item T) Submission of Comprehensive Transportation Plans for Mutual Adoption by the Board of

Transportation

Committee Reports Committee Chairs

Other Business Chairman Fox

Adjourn Chairman Fox

PROJECTS LIST NORTH CAROLINA BOARD OF TRANSPORTATION RALEIGH, NORTH CAROLINA

November 1-2, 2017

Delegated	AuthoritySecretary Trogdon
(Item C)	Award of Highway Construction Contracts from October 2017 Letting
(Item D)	Award of Contracts to Private Firms for Engineering Services
(Item E)	Funds for Secondary Road Improvement Projects – Highway Fund and Highway Trust Fund
(Item H)	Funds for Division-wide Small Construction, Statewide Contingency, Public Access, and Economic Development
(Item L)	Funds for Specific Spot Safety Improvement Projects
Action	Chairman Fox
(Item G)	Additions, Abandonments, and Road Name Changes to State Secondary Road System
(Item I)	Public Transportation Program (Item I-1) Public Transportation (Item I-1A) Public Transportation (Item I-2) Rail Program (Item I-3) Bicycle and Pedestrian (No Item this month) (Item I-4) Aviation
(Item J)	Specific State Funds for Construction Projects (Item K now replaces Item J)
(Item K)	North Carolina Highway Trust Funds
(Item M)	Funds for Specific Federal-Aid Projects
(Item N)	Revisions to the 2016-2025 STIP
(Item O)	Municipal and Special Agreements
(Item P)	Municipal Street System Changes (No Item this month)
(Item R)	Right of Way Resolutions and Ordinances
(Item S)	Maintenance Allocations (No Item this month)
(Item T)	Submission of Comprehensive Transportation Plans for Mutual Adoption by the Board of Transportation
(Item \/)	(No Item this month)

NCDOT Board of Transportation Agenda

ITEM C

October 2017

According to Executive Order No. 2 and G.S. 143B-350(g), the Board is requested to concur with staff recommendations and delegate authority to the Secretary to award the following highway construction projects.

HIGHWAY LETTING NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

RALEIGH N.C. OCTOBER, 2017 DIVISION 00001

C204082 52016.3.1

FF-0012(064) DARE F-5700 10/03/2017

PROPOSAL LENGTH 0 MILES

TYPE OF WORK CONSTRUCT 183'-7" X 46' X 10'-6" PASSENGER/VEHICLE FERRY.

* LUMP SUM OMMITTED. ATTY ATTEST NOT MARKED THROUGH. IMPROPER DATE.

LOCATION NC-12

EST CONST PROGRESS.... FY-2018..64% OF BID

FY-2019..36% OF BID

RPN 001 6 BIDDER(S) DBE GOAL %

ESTIMATE 12,301,448.50

PAGE: 1 of 7

ITEM C

DATE AVAILABLE OCT 30 2017
FINAL COMPLETION MAR 01 2019

	\$ TOTALS	% DIFF
* BOLLINGER SHIPYARDS LOCKPORT LLC LOCKPORT, LA	9,726,019.19	-20.9
* IMPROPER BID BOND FORM		
* ATTY ATTEST NOT MARKED THROUGH		
* STEINER SHIPYARD, INC. BAYOU LA BATRE, AL	10,490,000.00	-14.7
* LUMP SUM PRICE OMITTED		
* IMPROPER BID BOND FORM		
* LUMP SUM OMMITTED. ATTY ATTEST NOT MARKED THROUGH.		
SOUTHWEST SHIPYARD, L. P. HOUSTON, TX	10,750,000.00	-12.6
GULF ISLAND SHIPYARDS LLC HOUMA, LA	11,073,893.07	-10.0
CONRAD SHIPYARD LLC MORGAN CITY, LA	12,506,877.00	+1.7
* V T HALTER MARINE INC PASCAGOULA, MS	13,914,373.00	+13.1
* LUMP SUM PRICE OMITTED		
* IMPROPER BID BOND FORM		

* DENOTES IRREGULAR BID

HIGHWAY LETTING NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

RALEIGH N.C. OCTOBER, 2017 DIVISION 00003

C204090

2018CPT.03.05.10711, 2018CPT.03.05.20711, 2018CPT.03.05.20712, 3.107111

STATE FUNDED

PENDER

10/17/2017

PROPOSAL LENGTH 35.563 MILES

TYPE OF WORK MILLING, RESURFACING, AND SHOULDER CONST & RECONST.

LOCATION 1 SECTION OF US-17, 1 SECTION OF NC-50, 1 SECTION OF NC-210, AND 36 SECTIONS OF SECONDARY

ROADS.

EST CONST PROGRESS.... FY-2018..72% OF BID

FY-2019..28% OF BID

RPN 003 3 BIDDER(S) MBE GOAL 3.00 % WBE GOAL 3.00%

ESTIMATE 4,346,981.99

PAGE: 2 of 7

ITEM C

DATE AVAILABLE DEC 04 2017

INTER COMPLETION MAY 18 2018 COMPLETE ALL WORK REQUIRED ON MAPS #1, AND ON #21 THRU #25.

NO WORK ALLOWED FROM 3/26/2018 UNTIL 4/05/2018.

AUG 10 2018 COMPLETE ALL WORK REQUIRED ON MAPS #4 AND #20. NO WORK

ALLOWED WHEN SCHOOLS ARE IN SESSION.

AUG 10 2018 COMPLETE ALL WORK REQUIRED ON MAPS #16 AND #17.

FINAL COMPLETION DEC 01 2018

\$ TOTALS % DIFF S T WOOTEN CORPORATION WILSON, NC 3,672,560.25 -15.5 BARNHILL CONTRACTING COMPANY ROCKY MOUNT, NC 3,929,401.68 -9.6 HIGHLAND PAVING COMPANY LLC FAYETTEVILLE, NC 4,539,183.07 +4.4

DIVISION 00004

PAGE: 3 of 7 ITEM C

C203977 53022.3.1

NHPIM-0040(050) JOHNSTON I-5781 10/17/2017

PROPOSAL LENGTH 16.34 MILES

TYPE OF WORK SIGNALS, PAVEMENT AND BRIDGE REHABILITATION.

LOCATION I-40 FROM SR-1010 (CLEVELAND ROAD) TO WEST OF SR-1211 (MORGAN ROAD).

EST CONST PROGRESS.... FY-2018..50% OF BID FY-2019..50% OF BID

RPN 004 5 BIDDER(S) DBE GOAL 6.00 %

ESTIMATE 10,176,546.15

DATE AVAILABLE NOV 27 2017 FINAL COMPLETION JUL 01 2019

	\$ TOTALS	% DIFF
PENHALL COMPANY LOS ANGELES, CA	10,176,915.77	+0.0
INTERSTATE IMPROVEMENT, INC. FARIBAULT, MN	10,374,070.06	+1.9
S T WOOTEN CORPORATION WILSON, NC	11,421,690.93	+12.2
ARCHER WESTERN CONSTRUCTION LLC ATLANTA, GA	11,506,499.34	+13.1
DIAMOND SURFACE, INC. ROGERS, MN	11,958,391.92	+17.5

DIVISION 00005

PAGE: 4 of 7 ITEM C

C204091

2018CPT.05.06.10921.1, 2018CPT.05.06.20921.1

STATE FUNDED

WAKE

10/17/2017

PROPOSAL LENGTH 23.07 MILES

TYPE OF WORK MILLING, RESURFACING, AND SHOULDER RECONSTRUCTION.

1 SECTION OF NC-55 AND 11 SECTIONS OF SECONDARY ROADS.

EST CONST PROGRESS.... FY-2018..67% OF BID FY-2019..33% OF BID

RPN 005 2 BIDDER(S) MBE GOAL 3.00 % WBE GOAL 5.00%

ESTIMATE 3,557,752.63

DATE AVAILABLE FEB 01 2018

INTER COMPLETION AUG 26 2018 COMPLETE ALL WORK REQUIRED ON MAPS #7 AND #8.

FINAL COMPLETION NOV 15 2018

\$ TOTALS % DIFF
THE LANE CONSTRUCTION CORPORATION CHESHIRE, CT 3,667,043.80 +3.1
FSC II LLC DBA FRED SMITH COMPANY RALEIGH, NC 3,772,819.39 +6.0

DIVISION 00006

PAGE: 5 of 7 ITEM C

C204013 53088.3.1

HSIP-0074(170) ROBESON R-5752 10/17/2017

PROPOSAL LENGTH 1.487 MILES

TYPE OF WORK GRADING, DRAINAGE, PAVING, AND STRUCTURE.

LOCATION US-74 AT SR-2220 (BROADBRIDGE RD) AND US-74 AT SR-2225 (CREEK RD).

EST CONST PROGRESS.... FY-2018..50% OF BID FY-2019..50% OF BID

RPN 006 2 BIDDER(S) DBE GOAL 11.00 %

ESTIMATE 8,887,147.69

DATE AVAILABLE NOV 27 2017 THRU MAR 15 2018

INTER COMPLETION COMPLETE ALL WORK EXCEPT PLANTING, REFORESTATION, OR PERMANENT

VEGETATION ESTABLISHMENT 575 DAYS AFTER START DATE

FINAL COMPLETION 755 DAY(S) AFTER START DATE

\$ TOTALS % DIFF C. M. LINDSAY & SONS, INC. LUMBERTON, NC 7,512,104.74 -15.5 BMCO CONSTRUCTION, INC. LUMBERTON, NC 7,832,822.03 -11.9

DIVISION 00008

PAGE: 6 of 7 ITEM C

C203976 46077.3.1

STATE FUNDED MONTGOMERY, MOORE B-5362 10/17/2017

PROPOSAL LENGTH 0.082 MILES

TYPE OF WORK GRADING, DRAINAGE, PAVING, AND STRUCTURE. LOCATION BRIDGE #53 OVER DROWNING CREEK ON NC-73.

EST CONST PROGRESS.... FY-2018..100% OF BID

RPN 007 7 BIDDER(S) MBE GOAL 1.00 % WBE GOAL 3.00%

ESTIMATE 1,159,251.87

DATE AVAILABLE NOV 27 2017 THRU MAR 15 2018

INTER COMPLETION COMPLETE ALL WORK EXCEPT PLANTING, REFORESTATION, OR PERMANENT

VEGETATION ESTABLISHMENT 150 DAYS AFTER START DATE

FINAL COMPLETION 330 DAY(S) AFTER START DATE

	\$ TOTALS	% DIFF
DELLINGER, INC. MONROE, NC	1,012,976.54	-12.6
SLOAN CONSTRUCTION A DIVISION OF REEVES CONSTRUCTION COMPANY	1,059,598.52	-8.6
SMITH-ROWE, LLC MOUNT AIRY, NC	1,092,540.40	-5.8
S T WOOTEN CORPORATION WILSON, NC	1,121,288.54	-3.3
LEE CONSTRUCTION COMPANY OF THE CAROLINAS , INC. PINEVILLE, NC	1,135,627.95	-2.0
EXTREME CONCRETE CUTTING OF GAFFNEY, LLC GAFFNEY, SC	1,190,335.92	+2.7
DANE CONSTRUCTION INC MOORESVILLE, NC	1,255,850.75	+8.3

HIGHWAY LETTING NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

RALEIGH N.C. OCTOBER, 2017 DIVISION 00013 PAGE: 7 of 7 ITEM C

C204089

2018CPT.13.01.10111, 2018CPT.13.01.10112, 2018CPT.13.01.20111, 2018CPT.13.01.20112

STATE FUNDED BUNCOMBE

10/17/2017

PROPOSAL LENGTH 105.89 MILES

TYPE OF WORK MILLING, RESURFACING, AND SHOULDER RECONSTRUCTION.

LOCATION 1 SECT EACH OF US-19/23/74, US-25, US-70, US-70/74A, US-74A, NC-151, NC-191, NC-280, AND 109 SECT

OF SECONDARY ROADS.

EST CONST PROGRESS.... FY-2018..30% OF BID

FY-2019..67% OF BID FY-2020..03% OF BID

RPN 008 2 BIDDER(S) MBE GOAL 1.00 % WBE GOAL 4.00%

ESTIMATE 11,958,857.96

DATE AVAILABLE MAR 15 2018

INTER COMPLETION AUG 03 2018 COMPLETE ALL WORK REQUIRED ON MAP #8.

FINAL COMPLETION AUG 01 2019

\$ TOTALS % DIFF HARRISON CONSTRUCTION COMPANY DIVISION OF APAC-ATLANTIC INC KN 12,792,512.72 +7.0 ROGERS GROUP INC NASHVILLE, TN 15,525,022.23 +29.8

ESTIMATE TOTAL 52,387,986.79

LETTING TOTAL 48,560,133.01 -7.3

HIGHWAY LETTING NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

RALEIGH N.C.

SEPTEMBER 19, 2017

DIVISION 00014

C204039 34243.3.2 STATE FUNDED POLK I-4729A

PROPOSAL LENGTH 0.679 **MILES**

TYPE OF WORK GRADING, DRAINAGE, PAVING, SIGNING, AND STRUCTURES.

LOCATION I-26/US-74/NC-108 INTERCHANGE MODIFICATION IN THE TOWN OF COLUMBUS.

> EST CONST PROGRESS.... FY-2018..92% OF BID FY-2019..08% OF BID

RPN 009 7 BIDDER(S) MBE GOAL 3.00 % WBE GOAL 4.00%

ESTIMATE 22,897,599.51

PAGE: 8 of 8

ITEM C

DATE AVAILABLE OCT 30 2017

INTER COMPLETION AUG 17 2018 COMPLETE ALL WORK EXCEPT PLANTING, REFORESTATION, OR

PERMANENT VEGETATION ESTABLISHMENT

FINAL COMPLETION FEB 13 2019

\$ TOTALS	% DIFF
VECELLIO & GROGAN INC SHARPE BROTHERS BECKLEY, WV 19,088,383.95	-16.6
GLF CONSTRUCTION CORPORATION MIAMI, FL 19,871,926.89	-13.2
FLATIRON CONSTRUCTORS INC MORRISVILLE, NC 20,693,890.26	-9.6
SLOAN CONSTRUCTION A DIVISION OF REEVES CONSTRUCTION COMPANY 22,379,490.13	-2.3
NHM CONSTRUCTORS, LLC ASHEVILLE, NC 23,761,371.45	+3.8
BLYTHE DEVELOPMENT CO. CHARLOTTE, NC 24,573,781.02	+7.3
CHARLES BLALOCK & SONS, INC. SEVIERVILLE, TN 28,438,720.48	+24.2

ESTIMATE TOTAL	68,568,892.74	
LETTING TOTAL	65,369,416.88	-4.7

NCDOT November 2017 Board of Transportation Agenda

According to Executive Order No. 2 and G. S. 143B-350 (g) the Board is requested to concur with staff recommendations and delegate authority to the Secretary to award contracts to private firms for engineering services.

Professional Services Management

Chief Operating Officer

Chief Engineer

Field Support

Structures Management

After careful evaluation of the workload and schedules of the work that can be accomplished by our staff, it was determined necessary to employ private firms for Planning and Engineering Services on an as needed basis for various federal-aid and state funded projects to support the Structures Management Unit. These contracts will expire two (2) years after the date of execution or after the contract amount has been depleted, whichever occurs first. Our staff has completed the actions for employing private firms in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

STATEWIDE

Description of Work: 2017 Structures Management Support LSC AECOM Technical Services of North Carolina Inc,

Chicago, IL

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: Alfred Benesch & Company, Charlotte, NC

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: Alpha & Omega Group PC, Raleigh, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: AMEC Foster Wheeler Environment & Infrastructure

Inc, Chicago, IL

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization : Progressive Design Group, Inc.

5% / \$150,000.00

SPSF Utilization: Carolina Land Acquisition Inc

5% / \$150,000.00

Description of Work: 2017 Structures Management Support LSC

Firm: Arete Engineers, PLLC, Boone, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: ATCS, P.L.L.C., Raleigh, NC

Maximum Engineering Fee: \$3,000,000.00 SPSF Utilization: TGS Engineers

25% / \$750,000.00

Description of Work: 2017 Structures Management Support LSC Firm: Calyx Engineers and Consultants, Raleigh, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: Carolina Transportation Engineers & Associates, PC,

Belmont, NC

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: CDM Smith Inc, Raleigh, NC

Maximum Engineering Fee: \$5,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Dewberry Engineers Inc, Raleigh, NC

Maximum Engineering Fee: \$3,000,000.00

DBE/WBE/SPSF Utilization: CH Engineering PLLC

4% / \$120,000.00

Description of Work: 2017 Structures Management Support LSC

Firm: DRMP Inc, Charlotte, NC

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Gannett Fleming Inc, Philadelphia, PA

Maximum Engineering Fee: \$5,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Hardesty & Hanover, LLP, New York, NY

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: HDR Engineering Inc of the Carolinas, Chicago, IL

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: HNTB of North Carolina PC, Raleigh, NC

Maximum Engineering Fee: \$5,000,000.00

SPSF Utilization: Axiom Environmental, Inc.

1% / \$50,000.00

SPSF Utilization: Environmental Services Inc

2% / \$100,000.00

DBE/MBE/SPSF Utilization: MA Engineering Consultants Inc

1% / \$50,000.00

Description of Work: 2017 Structures Management Support LSC ICE of Carolinas PLLC, North Charleston, SC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: Infrastructure Engineers Inc, Lakewood, CO

Maximum Engineering Fee: \$3,000,000.00

DBE/MBE/SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: Johnson, Mirmiran & Thompson, Inc., Hunt Valley,

MD

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: Kisinger Campo & Associates Corp, Tampa, FL

Maximum Engineering Fee: \$7,000,000.00

DBE/WBE/SPSF Utilization: Dovetail Cultural Resource Group I Inc

1% / \$70,000.00

DBE/WBE/SPSF Utilization: Ecological Engineering LLP

4% / \$280,000.00 Mattern & Craig Inc

SPSF Utilization: Mattern & Craig Inc

1% / \$70,000.00

DBE/WBE/SPSF Utilization : Three Oaks Engineering

6% / \$420,000.00

Description of Work: 2017 Structures Management Support LSC

Firm: KCI Associates of North Carolina PA, Baltimore, MD

Maximum Engineering Fee: \$7,000,000.00

DBE/WBE/SPSF Utilization: Planning Communities, LLC

5% / \$350,000.00

Description of Work: 2017 Structures Management Support LSC

Firm: The Kercher Group Inc, Newark, DE

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC Firm: Kimley-Horn and Associates, Inc, Raleigh, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: The Louis Berger Group Inc, Morristown, NJ

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Mead & Hunt Inc, Raleigh, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: MI Engineering, PLLC, Raleigh, NC

Maximum Engineering Fee: \$7,000,000.00

DBE/SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC Firm: Michael Baker Engineering, Inc., Cary, NC

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization : Sungate Design Group PA

10% / \$700,000.00

Description of Work: 2017 Structures Management Support LSC Firm: Modjeski and Masters, Inc., Mechanicsburg, PA

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Moffatt & Nichol Inc. Los Angeles, CA

Maximum Engineering Fee: \$7,000,000.00

DBE/WBE/SPSF Utilization : Falcon Engineering Inc

7.5% / \$525,000.00

Description of Work: 2017 Structures Management Support LSC

Mott MacDonald I&E LLC, Iselin, NJ Firm:

\$3,000,000.00 Maximum Engineering Fee:

DBE/WBE/SPSF Utilization:

Axiom Environmental, Inc. SPSF Utilization:

1% / \$30,000.00

DBE/WBE/SPSF Utilization: Ecological Engineering LLP

1% / \$30.000.00 Falcon Engineering Inc 1% / \$30,000.00

SPSF Utilization: The Kercher Group Inc

1% / \$30,000.00

DBE/MBE/SPSF Utilization: Simpson Engineers & Associates PC

1% / \$30,000.00

Description of Work: 2017 Structures Management Support LSC

ms Consultants Inc, Youngstown, OH Firm:

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization: Arete Engineers, PLLC

5% / \$350,000.00

Description of Work: 2017 Structures Management Support LSC Firm:

Parrish and Partners of North Carolina, PLLC,

Greensboro, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC Parsons Transportation Group, Raleigh, NC Firm:

Maximum Engineering Fee: \$1,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm: Rummel Klepper & Kahl LLP, Raleigh, NC

\$7,000,000.00 Maximum Engineering Fee:

DBE/MBE/SPSF Utilization: Accelerate Engineering PLLC

3% / \$210,000.00

DBE/MBE/SPSF Utilization: MM/I and Associates LLC

1% / \$70,000.00

Description of Work: 2017 Structures Management Support LSC Firm:

RS&H Architects-Engineers-Planners, Inc.,

Jacksonville, FL

Maximum Engineering Fee: \$5,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Simpson Engineers & Associates PC, Cary, NC Firm:

Maximum Engineering Fee: \$7,000,000.00

DBE/MBE/SPSF Utilization: 100% Description of Work: 2017 Structures Management Support LSC Siva Corrosion Services Inc. West Chester, PA Firm:

\$1,000,000.00 Maximum Engineering Fee:

DBE/MBE/SPSF Utilization: 100%

DBE/SPSF Utilization:

Description of Work: 2017 Structures Management Support LSC Stantec Consulting Services Inc. Raleigh, NC Firm:

Maximum Engineering Fee: \$7,000,000.00

DBE/WBE/SPSF Utilization: Falcon Engineering Inc

> 5% / \$350,000.00 MI Engineering, PLLC 5% / \$350,000.00

SPSF Utilization: Sungate Design Group PA

5% / \$350,000.00

Description of Work: 2017 Structures Management Support LSC

Firm: Stewart, Philadelphia, PA

\$3,000,000.00 Maximum Engineering Fee:

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: STV Engineers, Inc., Charlotte, NC

\$3,000,000.00 Maximum Engineering Fee:

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC Firm:

Summit Design and Engineering Services, PLLC,

Hillsborough, NC

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: TGS Engineers, Shelby, NC

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: Vaughn & Melton Consulting Engineers Inc, Asheville,

NC

Maximum Engineering Fee: \$7,000,000.00

DBE/WBE/SPSF Utilization: Three Oaks Engineering

3% / \$210,000.00

SPSF Utilization: Catlin Engineers and Scientists

4% / \$280,000.00

DBE/WBE/SPSF Utilization: Ecological Engineering LLP

3% / \$210,000.00

SPSF Utilization: G & A Consulting Engineers, PLLC

3% / \$210,000.00

Description of Work: 2017 Structures Management Support LSC VHB Engineering NC PC, Watertown, MA

Maximum Engineering Fee: \$3,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Volkert Inc, Birmingham, AL

Maximum Engineering Fee: \$5,000,000.00

SPSF Utilization: 0%

Description of Work: 2017 Structures Management Support LSC

Firm: Wetherill Engineering, Inc., Raleigh, NC

Maximum Engineering Fee: \$7,000,000.00

DBE/WBE/SPSF Utilization: 100%

Description of Work: 2017 Structures Management Support LSC

Firm: WSP USA Inc, Raleigh, NC

Maximum Engineering Fee: \$7,000,000.00

SPSF Utilization: 0%

Right of Way

After careful evaluation of the workload and schedules of the work that can be accomplished by our staff, it was determined necessary to employ private firms to provide Right of Way services listed below for our Department to obligate available funds. Our staff was authorized to proceed with the actions required to employ private engineering firms in accordance with the policies and procedures adopted by the Board on May 7, 2009. These are for information only.

DIVISION 12

Scope of Work:

Project: 50134.2.1 (I-5717) and 37944.2.4 & 37944.2.5 (R-

2307B) Iredell County

I-77 and the NC 150 Interchange Construct

Interchange Improvements, (Combined with R-2307B)

&

NC 150 from SR 1902 (Harvel Road) in Catawba County to I-77 in Iredell County (Combined w/ I-5717) Right of Way acquisition, negotiations, legal, appraisal

and relocation assistance.

Estimated Construction Cost: \$124,200,000.00

Firm: Professional Property Services Inc, Cornelius, NC

Maximum Engineering Fee: \$2,315,343.00

SPSF Utilization: 0%

DIVISION 13

Project: 34400.2.5 (R-2233BB) Rutherford County

US 221 South of US 74 Business (Charlotte Road) to

North of SR 1366 (Roper Loop Road)

Scope of Work: Right of Way acquisition, negotiations, legal, appraisal

and relocation assistance.

Estimated Construction Cost: \$81,400,000.00

Firm: Telecommunication & Industrial Consulting Services

Corp, Pineville, NC

Maximum Engineering Fee: \$2,670,093.98

SPSF Utilization: 0%

Highway Operations

Pavement Management System

The following are supplemental contracts to previous contracts approved by the Board with the same engineering firms. These supplemental contracts were necessary due to approved additional work that was unknown at the inception and is required of the firms to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. These are for information only.

STATEWIDE

Project: High Speed Data Collection of Interstate and Primary

Pavements

Scope of Work: High speed data collection on sections of both asphalt

and concrete surfaced pavements covering all of the

interstate and primary routes.

Estimated Construction Cost: N/A

Firm: Pathway Services, Inc., Tulsa, Oklahoma

Original Engineering Fee: \$2,100,000.00
Previous Supplemental Fee: \$4,200,000.00
Supplemental Fee: \$17,500,000.00

Supplemental Work: Continued high speed data collection on Interstate

and Primary Pavements and addition of data

collection on the secondary system pavements.

SPSF Utilization: 0%

Project: Quality Assurance for High Speed Data Collection

and Processing

Scope of Work: Sample, verify, and report on the quality of pavement

distress data collected as part of the High Speed Data

Collection and Processing

Estimated Construction Cost: N/A

Firm: Morian Properties LLC, Conneaut Lake, PA

Original Engineering Fee: \$300,000.00 Previous Supplemental Fee: \$600,000.00

Supplemental Fee: \$600,000.00 and two (2) year extension

Supplemental Work: Continued Quality Assurance for High Speed Data

Collection and Processing

SPSF Utilization: 100%

Transportation Asset Analytics

The following are supplemental contracts to previous contracts approved by the Board with the same engineering firms. These supplemental contracts were necessary due to approved additional work that was unknown at the inception and is required of the firms to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

STATEWIDE

Description of work: 2016 Highway Asset Inventory and Assessments

Contract

Firm: A. Morton Thomas & Associates Inc, Raleigh, NC

Original Engineering Fee: \$500,000.00 Supplemental Fee: \$800,000.00

SPSF Utilization: 0%

Description of work: 2016 Highway Asset Inventory and Assessments

Contract

Firm: Mattern & Craig Inc, Asheville, NC

Original Engineering Fee: \$ 500,000.00 Supplemental Fee: \$1,100,000.00

SPSF Utilization: 100%

Description of work: 2016 Highway Asset Inventory and Assessments

Contract

Firm: SEPI Engineering & Construction Inc., Raleigh, NC

Original Engineering Fee: \$2,000,000.00 Supplemental Fee: \$500,000.00

SPSF Utilization: 0%

Description of work: 2016 Highway Asset Inventory and Assessments

Contract

Firm: Summit Design and Engineering Services, PLLC,

Hillsborough, NC

Original Engineering Fee: \$500,000.00 Supplemental Fee: \$900,000.00

SPSF Utilization: 100%

Divisions

Divisions 1-4 and 6

The following are supplemental contracts to previous contracts approved by the Board with the same engineering firms. These supplemental contracts were necessary due to approved additional work that was unknown at the inception and is required of the firms to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. These are for information only.

DIVISIONS 1 - 4, and 6

Description of Work: 2015 Eastern Region Divisions 1, 2, 3, 4, & 6 LSC

Firm: HNTB of North Carolina PC, Raleigh, NC

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$9,000,000.00
Supplemental Fee: \$2,000,000.00

SPSF Utilization: Carolina Land Acquisitions Inc

5% / \$100,000.00

SPSF Utilization: Environmental Services Inc

5% / \$100,000.00

DBE/MBE/SPSF Utilization: MA Engineering Consultants Inc

5% / \$100,000.00

DBE/SPSF Utilization: MI Engineering, PLLC 5% / \$100,000.00

Description of Work: 2015 Eastern Region Divisions 1, 2, 3, 4, & 6 LSC Firm: Calyx Engineers and Consultants, Raleigh, NC

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$5,000,000.00
Supplemental Fee: \$2,000,000.00

SPSF Utilization: 100%

Description of Work: 2015 Eastern Region Divisions 1, 2, 3, 4, & 6 LSC Firm: RS&H Architects-Engineers-Planners, Inc., Charlotte.

NC

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$5,000,000.00
Supplemental Fee: \$2,000,000.00

SPSF Utilization: Carolina Ecosystems Inc

2.5% / \$50,000.00

DBE/WBE/SPSF Utilization: Planning Communities, LLC

5% / \$100,000.00

SPSF Utilization: Commonwealth Heritage Group Inc

2% / \$40,000.00

Technical Services

Roadway

The following is a supplemental contract to a previous contract approved by the Board with the same engineering firm. This supplemental contract was necessary due to approved additional work that was unknown at the inception and is required of the firm to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

DIVISION 7

Project: 34900.1.4 (U-3109A) Alamance County

NC 119 Relocation from I-40/I-85 to North of SR 1921

(Mebane Rogers Road/Stage Coach Road)

Scope of Work: Roadway, Hydraulics, and Traffic Control Design

Estimated Construction Cost: \$49,400,000.00

Firm: Michael Baker Engineering, Inc., Cary, NC

Original Engineering Fee: \$434,547.18
Previous Supplemental Fee: \$34,293.13
Supplemental Fee: \$95,979.78

Supplemental Work: Request to incorporate an early opening ICT into the

TMP design and provide quantities for the roadway pay items in the ICT, revise Y20 to eliminate stream impacts and remove Y20DET, develop a functional design and provide a preliminary estimate for U-3109B, extend -Y10- and revise to a C&G section, and add median break and left turns on -L- at approx.

130+30

SPSF Utilization: Sungate Design Group PA

31% / \$29,504.60

SPSF Utilization: Progressive Design Group, Inc.

36% / \$34,400.40

Geotechnical Engineering Unit

The following are supplemental contracts to previous contracts approved by the Board with the same engineering firms. These supplemental contracts were necessary due to approved additional work that was unknown at the inception and is required of the firms to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. These are for information only.

STATEWIDE

Description of work: 2014 Geotechnical LSC

Firm: Catlin Engineers and Scientists, Wilmington, NC

Original Engineering Fee: \$5,000,000.00
Previous Supplemental Fee: \$1,500,000.00
Supplemental Fee: \$500,000.00

SPSF Utilization: 100%

Description of work: 2014 Geotechnical LSC

Firm: Froehling & Robertson Inc, Raleigh, NC

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$500,000.00
Supplemental Fee: \$500,000.00

SPSF Utilization: 0%

Description of Work: 2014 Geotechnical LSC

Firm: Kleinfelder Inc, Los Angeles, CA

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$1,000,000.00
Supplemental Fee: \$750,000.00

SPSF Utilization: 0%

Description of Work: 2014 Geotechnical LSC

Firm: ECS Southeast LLP, Charlotte, NC

Original Engineering Fee: \$1,000,000.00
Previous Supplemental Fee: \$1,500,000.00
Supplemental Fee: \$500,000.00

SPSF Utilization: 0%

Project Development

The following is a supplement contract to a previous contract approved by the Board with the same engineering firm. This supplemental contract was necessary due to approved additional work that was unknown at the inception and is required of the firm to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

DIVISION 6

Description of work: 2014 Statewide Bridge Group I

Firm: Ramey Kemp & Associates, Inc., Raleigh, NC

Original Engineering Fee: \$750,000.00 Supplemental Fee: \$600,000.00

SPSF Utilization: 100%

Photogrammetry Unit

After careful evaluation of the workload and schedules of the work that can be accomplished by our staff, it was determined necessary to employ private firms for Aerial Imagery Acquisition Services on an as needed basis for various federal-aid and state funded projects to support the Photogrammetry Unit. These contracts will expire three (3) years after the date of execution or after the contract amount has been depleted, whichever occurs first. Our staff has completed the actions for employing private firms in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

STATEWIDE

Description of Work: 2017 Aerial Imagery Acquisition Services LSC Firm: MA Engineering Consultants Inc, Cary, NC

Maximum Engineering Fee: \$500,000.00

DBE/MBE/SPSF Utilization: 100%

Description of Work: 2017 Aerial Imagery Acquisition Services LSC Spatial Data Consultants Inc., High Point, NC

Maximum Engineering Fee: \$500,000.00

SPSF Utilization: 100%

Description of Work: 2017 Aerial Imagery Acquisition Services LSC Firm: The Sanborn Map Company Inc, Charlotte, NC

Maximum Engineering Fee: \$500,000.00

SPSF Utilization: 0%

Photogrammetry Unit

After careful evaluation of the workload and schedules of the work that can be accomplished by our staff, it was determined necessary to employ private firms for Photogrammetric Mapping Services on an as needed basis for various federal-aid and state funded projects to support the Photogrammetry Unit. These contracts will expire three (3) years after the date of execution or after the contract amount has been depleted, whichever occurs first. Our staff has completed the actions for employing private firms in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

STATEWIDE

Description of Work: 2017 Photogrammetric Mapping Services LSC Firm: Avioimage Mapping Services Inc, Charlotte, NC

Maximum Engineering Fee: \$900,000.00

SPSF Utilization: 100%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: ESP Associates PA, Charlotte, NC

Maximum Engineering Fee: \$600,000.00

SPSF Utilization: 0%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: GeoData Corp, Zebulon, NC

Maximum Engineering Fee: \$1,200,000.00

SPSF Utilization: 100%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: GPI Geospatial Inc, Charlotte, NC

Maximum Engineering Fee: \$1,200,000.00

SPSF Utilization: 0%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: GRW Engineers Inc, Lexington, KY

Maximum Engineering Fee: \$900,000.00

SPSF Utilization: 0%

Description of Work: 2017 Photogrammetric Mapping Services LSC Firm: MA Engineering Consultants Inc, Cary, NC

Maximum Engineering Fee: \$1,500,000.00

DBE/MBE/SPSF Utilization: 100%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: So Deep Sam NC Inc, Raleigh, NC

Maximum Engineering Fee: \$900,000.00

SPSF Utilization: 0%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: Spatial Data Consultants Inc., High Point, NC

Maximum Engineering Fee: \$1,500,000.00

SPSF Utilization: 100%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: Surdex Corporation, Chesterfield, MO

Maximum Engineering Fee: \$900,000.00

SPSF Utilization: 0%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: The Sanborn Map Company Inc, Charlotte, NC

Maximum Engineering Fee: \$1,200,000.00

SPSF Utilization: 0%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: Triangle Aerial Surveys, Inc., Raleigh, NC

Maximum Engineering Fee: \$600,000.00

DBE/MBE Utilization: 100%

Description of Work: 2017 Photogrammetric Mapping Services LSC

Firm: WSP USA Inc, Raleigh, NC

Maximum Engineering Fee: \$900,000.00

SPSF Utilization: 0%

Turnpike Authority

The following are supplemental contracts to previous contracts approved by the Board with the same engineering firms. These supplemental contracts were necessary due to approved additional work that was unknown at the inception and is required of the firms to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. These are for information only.

STATEWIDE

Description of work: 2015-2018 Toll Operation Services LSC Firm: Atkins North America Inc, Raleigh, NC

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$1,000,000.00
Supplemental Fee: \$2,000,000.00

SPSF Utilization: 0%

Description of work: 2015-2018 Toll Operation Services LSC

Firm: RS&H Architects-Engineers-Planners, Inc., Charlotte,

NC

Original Engineering Fee: \$3,000,000.00 Supplemental Fee: \$2,000,000.00

SPSF Utilization: Forge Communications LLC

5% / \$100,000.00

The following is a supplemental contract to a previous contract approved by the Board with the same engineering firm. This supplemental contract was necessary due to approved additional work that was unknown at the inception and is required of the firm to complete the project. Our staff has completed the actions in accordance with the policies and procedures adopted by the Board on May 7, 2009. This is for information only.

STATEWIDE

Description of work: 2015 NCTA Toll Operations LSC

Firm: HNTB of North Carolina PC, Raleigh, NC

Original Engineering Fee: \$3,000,000.00
Previous Supplemental Fee: \$4,000,000.00
Supplemental Fee: \$3,000,000.00

SPSF Utilization: Asset Management Associates PLLC

20% / \$600,000.00

NCDOT NOVEMBER 2017 BOARD OF TRANSPORTATION AGENDA Secondary Road Improvement Projects (Highway and Trust Funds)

According to G.S. 143B-350(g), the Board is requested to concur with staff recommendations and delegate authority to the Secretary to approve funds for Secondary Road Improvement projects

Div / County	SR No. / Road Name	Description	Amount
Div 4 Halifax	Road in Lake Shores Subdivision	Upgrade to Minimum Standards for Addition Property owner participation 4C.042076	\$9,000.00
Div 7 Guilford	SR 2020 UNION GROVE ROAD	GDB&P Increase Funds 7C.041241	\$36,169.34
Div 7 Guilford	SR 2809 Blue Lantern Rd	GDB&P Establish Funds 7C.041258	\$129,913.15
Div 7 Guilford	SR1620 Sunnyvale Rd	GDB&P Establish Funds 7C.041259	\$100,000.00
Div 7 Guilford	SR 2125 (Rhondan Drive)	GDB&P Increase Funds 7C.041228	\$35,338.47
Div 9 Rowan	SR 1349 Turkey Road	GDB&P Establish Funds 9C.080128	\$50,000
Div 11 Alleghany		Countywide Spot Improvements Increase Funds 11C.003011	\$90,059.00
Div 11 Wilkes		Div 11 Maintenance Operations Increase Funds 1DOT.1.1.1.1.1	\$2,451,908.88

Closings:

Div / County	SR No. / Road Name	Description	Amount
Div 7	SR 2945	GDB&P	
Guilford	(Carmon Loop)	Increase & Close	\$5,297.16
	,	7C.041213	

NCDOT November 2017 Board of Transportation Agenda

Road Additions:

County	Pet. No.	Length (Miles)	Description	Date of Report
Division 1 Northampton	51475	0.30	Hillcrest Lane	10/4/17
Northampton	51476	0.24	Squire Road	10/5/17
Division 4 Halifax	51477	0.15	Berkshire Subdivision Berkshire Drive	8/15/17
Halifax	51478	0.42	Pine Ridge Estates Subdivision Pine Ridge Road	8/10/17
Division 6 Bladen	51479	0.17	J. Hill Acres Subdivision J. Hill Acres Road, SR 1225 Ext.	8/2/17
Columbus	51480	0.07 0.04 0.05 0.05	Riegelwood Subdivision Alexander Court No Name Road A No Name Road B No Name Road C	8/2/17
Columbus	51481	0.36 0.09	Timber Cove Subdivision Timber Cove Drive, SR 1760 Ext. Mahan Street, SR 1597 Ext.	8/2/17
Division 7 Rockingham	51482	0.66	River Run Subdivision Wild Fern Lane	7/7/17
Division 11 Wilkes	51483	0.47 0.25 0.27 0.15	The Farm Subdivision Peterson Farm Drive Peterson Pond Drive Top View Drive Old Homeplace Drive	9/2/17
Division 13 Burke	51484	0.22	Williams Place Subdivision Williams Place	2/15/17

NCDOT November 2017 Board of Transportation Agenda

Deletions:

County	Pet. No.	Length (Miles)	Description	Date of Report
Division 3 Brunswick	51485	1.62	SR 1553 Kay Todd Road	9/6/17
Division 5				
Vance	51486	0.15	SR 1192 Bobbitt Street	8/21/17
		0.07	SR 1193	
			North Pine Street	
		0.16	SR 1194	
			Birch Street	

Summary: Number of Roads Petitioned for Addition – 17

Number of Roads Petitioned for Abandonment - 4

Road Renaming:

Division 1 – Currituck County requests renaming SR 1530, Terminal Road to Airport Road.

Corrections:

Division 10 – Cabarrus County Petition 20753 added SR 2490 for 0.20 miles. The correct mileage should be 0.23 miles.

Division 12 – Iredell County Petition 51413 abandoned SR 1379 for 0.22 miles. The correct mileage to abandon should be 0.34 miles. This petition should have also included abandoning SR 2790 for 0.12 miles.

Division 12 – Iredell County Petition 51406 added SR 2790 for 0.72 miles. The correct mileage should be 0.82 miles.

Division 12 – Iredell County Petition 48325 correction listed on the July 2017 BOT Agenda should not have been listed.

NCDOT NOVEMBER 2017 BOARD OF TRANSPORTATION AGENDA Funds Request

Division-wide Small Construction, Statewide Contingency, Public Access, Economic Development, High Impact/Low Cost

According to Executive Order No. 2 and G.S. 143B-350(g), the Board is requested to concur with staff recommendation and delegate authority to the Secretary to approve funds for specific Division-wide Small Construction / Statewide Contingency projects.

County	Description	Туре	Amount
Div 1 Northampton	Hillcrest Lane. Upgrade to minimum construction standards for Pre-1975 route in conjunction with addition to the State Highway System	Contingency	\$45,000.00 \$45,000.00
	WBS 80050	7 0 17 12	\$ 10,000.00
Div 1	Squire Lane. Upgrade to minimum		
Northampton	construction standards for Pre-1975 route in conjunction with addition to the State Highway	Contingency	\$65,000.00
	System WBS 80051	TOTAL	\$65,000.00
Div 4 Nash	City of Rocky Mount – Replace chain link safety fence around detention ponds at County Club Road and Jeffrey's Road	Contingency	\$32,000.00
	WBS 80053	TOTAL	\$32,000.00
Div 4 Wayne	City of Mount Olive – Road widening for continuation of center turn lane along NC 55 as well as increased shoulder width to improve	Contingency	\$214,512.00
	safety along the corridor.		
	WBS 80054	TOTAL	\$214,512.00
Div 14 Macon	Drainage Improvements along West Palmer Street (SR 1442)	Small Construction	\$79,246.97
	WBS 44780 – Increase funds and close	TOTAL	\$79,246.97

November 2, 2017 Page 1 of 2

NCDOT NOVEMBER 2017 BOARD OF TRANSPORTATION AGENDA Funds Request

Division-wide Small Construction, Statewide Contingency, Public Access, Economic Development, High Impact/Low Cost

Summary:

Number of Divisions 3 Number of Projects 5

Small Construction Commitment\$79,246.97Public Access Commitment\$0.00Contingency Commitment\$356,512.00Economic Development\$0.00

TOTAL \$435,758.97

November 2, 2017 Page 2 of 2

Town/County Division	5310 Elderly & Disabled		Estimated	l Cost
5	18-ED-909 Granville County Senior Services will use the funds to continue purchasing of transportation services from the Kerr Area Rural Transportation Authority on a public transit route within the city limits of Oxford that includes (16) stops at senior apartment complexes, Senior Center, hospital, pharmacies, Department of Social Services, and grocery stores. (Capital)	\$ \$ \$ \$ \$	161,000 128,800 16,100 16,100	Total Federal State Local
12	18-ED-934 Alexander County will use funds to purchase additional transportation services for Alexander County seniors or disabled individuals to congregate meal programs within Alexander County. Also, this funding will help any supplemental activities related to the congregate programs five days per week, for those who would otherwise not be able to attend due to lack of transportation. (Capital)	\$ \$ \$ \$	100,000 80,000 10,000 10,000	Total Federal State Local
Town/County Division	5311 Community Transportation		Estimated	l Cost
•	5311 Community Transportation 18-CT-025 Hyde County Non-Profit Private Transportation use the additional Admin funds that resulted from the consolidation with Tyrrell County to provide transportation services to residents of Tyrrell county. The funds will support a part-time office employee, office supplies, and other administrative expenses that will occur with expanding service to Tyrrell county. (Admin)	\$ \$ \$	134,444 107,554 6,721 20,169	Total Federal State Local
Division	18-CT-025 Hyde County Non-Profit Private Transportation use the additional Admin funds that resulted from the consolidation with Tyrrell County to provide transportation services to residents of Tyrrell county. The funds will support a part-time office employee, office supplies, and other administrative expenses that will occur with expanding service to Tyrrell	\$ \$	134,444 107,554 6,721	Total Federal State Local

Item I - 1, 4 Project(s), Total Federal/State Funds \$ 390,915

^{*}STI projects funded through the Highway Trust Fund are approved by the BOT on Item K

ADDITIONS to the Transit 2018-2027 STIP

STIP#	Transit Partner	DESCRIPTION	match	FUND	FY 17 (000)	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)
TD- 5289	Go Raleigh	Add Compressed Natural Gas (CNG) fueling station to GoRaleigh's Poole Road Bus Maintenance Facility Add additional local funding from Wake Transit Plan (PE)	STPDA	STBGDA		245							
			Local	L		62							
TD- 5289	Go Raleigh	Add Compressed Natural Gas (CNG) fueling station to GoRaleigh's Poole Road Bus Maintenance Facility Add additional local funding from Wake Transit Plan (PE)		STBDGA		2516							
			Local	L		629							
TG- 6170	СЕРТА	ADA and Preventive Maintenance	STPBGDA	STPBDGA	375	135							
			Local	L	94	34							
TO- 6148	Davidson County Transportation	Lexington Loop	CMAQ	CMAQ				80					
			Local	L				20					

MODIFICATIONS to the Transit 2018-2027 STIP

STIP#	Transit Partner	DESCRIPTION	match	FUND	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)
TQ- 6782	Winston Salem Transit	FTA Section 5310 Winston Salem Allocation set aside for low income, disabled and elderly populations	Local	L	165	86	86	86	86	86	86	86
			5310	FNU	659	344	344	344	344	344	344	344

ADMINISTRATIVE MODIFICATIONS to the Transit 2016-2025 STIP

STIP#	Transit Partner	DESCRIPTION	match	FUND	FY 16 (000)	FY17 (000)	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)
TG- 4759	GTA	Preventive Maintenance	FUZ	5307			5125	2597	2640	2640	2640	2640	2640	2640
			Local	L			1282	650	650	660	660	660	660	660
TG- 4753	PART	Preventive Maintenance &	FUZ	5307			84	84	84	84	84	84	84	84
		Passenger Amenities	Local	L			21	21	21	21	21	21	21	21
TG- 4957	GTA	Operating – ADA Paratransit	FUZ	5307			864	434	444	444	444	444	444	444
			Local	L			216	110	111	111	111	111	111	111
TG- 5105	GTA	Routine Capital	FUZ	5307			104	53	54	54	54	54	54	54
			Local	L	·		26	14	14	14	14	14	14	14

TS- 4758	GTA	Safety and Security	FUZ	5307			87	44	45	45	45	45	45	45
TO- 4971	GTA	Operating – Fixed Route	FUZ	5307			2456	1233	1253	1253	1253	1253	1253	1253
			Local	L			2456	1233	1253	1253	1253	1253	1253	1253
			State	SMAP		1868	1812	1812	1812	1812	1812	1812	1812	1812
			Local	L		1868	1812	1812	1812	1812	1812	1812	1812	1812
TO- 5209	PART	Operating – Fixed Route	FUZ	5307			216	216	216	216	216	216	216	216
			Local	L			216	216	216	216	216	216	216	216
TO- 5221	TAMS	Operating - Rural Transit	FUZ	5307			70	70	70	70	70	70	70	70
			Local	L			70	70	70	70	70	70	70	70
TA- 6684	GTA	GTA Electric Replacement Buses	CMAQ	CMAQ			1908	1946						
			Local	L			477	487						
TA- 4767	GTA	Replacement Paratransit Buses	FBUS	5339			875	416	422	422	422	422	422	422
			Local	Local			155	74	74	75	75	75	75	75
TA- 6690	PART	Replacement Vehicles	FBUS	5339			31	32	32	32	32	32	32	32
			Local	Local			6	6	6	6	6	6	6	6
TA- 6689	TAMS	Replacement Vehicles	FBUS	5339			33	34	34	35	35	35	35	35
			Local	Local			6	6	6	7	7	7	7	7
TD- 5279	City of Greensboro	Renovation of J. Douglas Galyon Depot	FBUS	5339				960						
			State					142						
TO			Local		ļ			142						
TO- 6139	GTA	Section 5310 Operating	FEPD	5310			101	52	53	53	53	53	53	53
			Local	L			101	52	53	53	53	53	53	53
TQ- 7000		Section 5310 Program Administration	FEPD	5310			491	26	26	26	26	26	26	26
TQ- 6783	GTA	Section 5310 Capital Project	FEPD	5310			341	177	177	177	177	177	177	177
			Local	L			86	44	45	45	45	45	45	45
TM- 5308	GTA	Transit Enhancement	FUZ	5307				0	0	0	0	0	0	0
			Local	L				0	0	0	0	0	0	0
TP- 5101	GTA	Planning Assistance - 5303	5303	5303		141	141	141	141	141	141	141	141	141
			State	State		18	18	18	18	18	18	18	18	18
			Local	Local		18	18	18	18	18	18	18	18	18
TD 5282	City of Asheville (ART)	Asheville Redefines Transit. Transit Station	FBUS	5339			214							
			Local	L			750							
TO- 4075	City of Asheville (ART)	Transit Operations	FUZ	5307	600	600	600	600	600					
			Local	L	600	600	600	600	600					
				SMAP	654	654	765	765	765					

TP- 5113	City of Asheville (ART)	Planning Assistance	FMPL	5303	60	60	60	60	60	60	60		
TQ- 7010	City of Asheville (ART)	5310 Administrative Oversight	FEPD	5310				30					
TQ- 6186	City of Asheville (ART)	5310 Traditional Projects	FEPD	5310				200					
			Local	L				50					
TQ- 6187	City of Asheville (ART)	5310 other projects	FEPD	5310				94					
			Local	L				94					
TG- 6183B	City of Asheville (ART)	Transit Preventive Maintanence	FUZ	5307					800				
			Local	L					200				
TM- 5138	City of Asheville (ART)	Black Mountain Trailblazer Service Operating Assistance	FUZ	5307			83						
			Local	L			83						
TM- 5137	City of Asheville (ART)	Black Mountain Trailblazer Service JARC Operating Assistance	FUZ	5307			105						
			Local	L			105						
TM- 5315	City of Asheville (ART)	ART Limited Sunday Service JARC Operating Assistance	FUZ	5307			187						
			Local	L			187						
TM- 5163	City of Asheville (ART)	Administrative Oversight of JARC projects in the Asheville Urbanized Area	FUZ	5307			49						
TQ- 9033	CRTPO-CATS	Enhanced Mobility to Seniors	FEPD	5310		1120							
			Local	L		280							

Deletions to the Transit 2017-2025 STIP

STIP#	Transit Partner	DESCRIPTION	match	FUND	FY18 (000)	FY19 (000)	FY20 (000)	FY21 (000)	FY22 (000)	FY23 (000)	FY24 (000)	FY25 (000)
TG- 4704	City of Asheville (ART)	Routine Capital Bus Stop, Shelters, Benches, Shop equipment, Spare Parts, Engines, Farebox, Service Vehicles, ETC.	FUZ	5307	0	0	0	0	0	0	0	0
TM- 5006	City of Asheville (ART)	Transit Operations	Jarc	5316	0	0	0	0	0	0	0	0
			Local	L	0	0	0	0	0	0	0	0

Item I-1A, 37 Projects, Total Federal/State funds \$88,725,000

	NCDOT November 2017 Board of Transportation Agenda Rail Program	
Town/County Division	Project Description	Estimated Cost
Statewide 80000.1.2.1	The Rail Division requests reallocation of Freight Rail & Rail Crossing Safety Improvement (FRRCSI) funds from the Rail Crossing "No Trespassing" Signs (project complete) to the Track & Infrastructure Program Management in the FRRCSI fund. This program management includes administration, engineering, and inspections for track and rail access improvements. Additional funds are needed to support these efforts. The total estimated cost to the Department is \$68,802. FRRCSI ID: F14199	\$68,802
Statewide 80000.2.4.1	The Rail Division request reallocation of Freight Rail & Rail Crossing Safety Improvement (FRRCSI) funds from crossing number 465 303U (NC 37 - Main Street), crossing number 465 298A (SR 1101 - Bear Swamp Road), and crossing number 465 371V (NC 343) to Crossing Safety & Signals Improvements Program Management in the FRRCSI fund (due to a railroad request no to compete). This program management is for the administration and engineering for crossing safety studies. The total estimated cost to the Department is \$127,000. FRRCSI ID: F14299	\$127,000

ITEM I-2 SUMMARY - 2 PROJECTS - \$195,802 (TOTAL FEDERAL AND STATE)

NCDOT November 2017 Board of Transportation Agenda

Division of Bicycle and Pedestrian Transportation

Town/County Division

Project Description

Estimated Cost

There will be no items presented for approval at the November 2, 2017 Board of Transportation meeting.

ITEM I-3 SUMMARY - NO PROJECTS

NCDOT November 2017 Board of Transportation Agenda

Aviation Program

Town/County Division	Project Description
Division 03 Ellis Airport Onslow County	GA Apron Expansion And Hangar Sites Project designs and constructs a southern expansion of the GA Apron, sites for hangars a connector taxilane, associated roadways and utilities. This project will expand the existing GA apron to permit additional aircraft parking, improved circulation and facilitate development of additional hangars. This is a cash flow project using FY18 and FY19 entitlement state commercial service funds with \$864,708 from each Fiscal Year. [3770]
Division 03 Ellis Airport Onslow County	Air Traffic Control Tower Construct an Air Traffic Control Tower to the Albert J Ellis Airport in Onslow County. Additional funding required supplementing the SFY2016 Legislative entitlement as a result of bid costs higher than original estimates.
Division 04 Halifax- Northampton Airport	State match to NPE for SIB loan.
Division 08 Siler City Municipal Airport	Lighting Rehabilitation Rehabilitate airfield lighting system in order to enhance safe operations at this airport. [3417]
Division 07 Burlington Alamance Regional Airport	Airport Perimeter Fencing – Phase II Installation of 10' chain link fence with three strands of barb wire as a wildlife deterrent in order to improve security and safety by minimizing wildlife incursions on the active airfield. Additional fencing is required to prevent wetlands disruption. Construction bids were higher due to additional fence and market price. These funds are in addition to the original award from the January 2016 BOT.
Division 10 Charlotte Monroe Executive Airport	Lighting and Beacon Rehabilitation Rehabilitate airfield lighting system, including the airfield beacon in order to enhance safe operations at this airport. [3812,3330]

Runway Strengthening – Construction

Division 10 Concord Regional Airport Strengthen runway to support current commercial airline traffic. This project is primarily funded with grant from FAA in the amount of approximately \$6M, and the airport will be using the FY18 and FY19 entitlement state commercial services funds as their local match. This is a cash flow project with \$586,901 from FY18 and estimated \$70,000 from FY19 budget years. [3573]

ITEM I-4 SUMMARY – 5 PROJECTS – (TOTAL STATE and FEDERAL COST) \$ 5,064,000 **Project selection and approval for award. Cost is estimated. Only eligible cost within the project scope of work will be reimbursed.

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Perquimans Co. Div. 1 R-4467 REGIONAL	WBS 35748.2.2 US 17 Business / NC 37 from east of Perquimans River Bridge to NC 37. Initial funds are requested for full right of way and utilities.	\$1,030,000.00
Perquimans Co. Div. 1 R-4467 REGIONAL	WBS 35748.3.2 US 17 Business / NC 37 from east of Perquimans River Bridge to NC 37. Initial funds are requested for construction based on the estimate from the 12 month Tentative Letting List published October 10, 2017. This is a Cash Flow project with \$16,100,000.00 in SFY 18, SFY 19 and SFY 20.	\$48,300,000.00
Lenoir Co. Div. 2 R-2553 STATEWIDE	WBS 34460.1.2 US 70 (Kinston Bypass). \$4,799,338.00 has previously been approved for preliminary engineering. Additional funds are requested to complete the Draft EIS. This project has previously been identified as a Trust Fund Intrastate System project.	\$2,000,000.00
Lenoir Co. Div. 2 R-5703 REGIONAL	WBS 46375.3.1 NC 148 (Harvey Parkway) from NC 58 to NC 11. Initial funds are requested for construction based on the estimate from the 12 month Tentative Letting List published October 5, 2017. This is a Cash Flow project with \$28,833,333.33 in SFY 18 and SFY 19 and \$28,833,333.34 in SFY 20.	\$86,500,000.00
New Hanover/ Pender Cos. Div. 3 R-3300 STATEWIDE/ REGIONAL	WBS 40237.4.S1 US 17 Hampstead Bypass from US 17 to US 17 north of Hampstead. \$47,201.00 has previously been approved for project mitigation. Additional funds are requested using Regional Tier funding.	\$150,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
New Hanover Co. Div. 3 U-3338C REGIONAL	WBS 34932.2.4 SR 1175 (Kerr Avenue) Interchange at US 74 (Martin Luther King Jr. Parkway). Initial funds are requested for right of way and Map Act appraisals.	\$100,000.00
New Hanover Co. Div. 3 U-4751A STATEWIDE	WBS 40191.3.3 SR 1409 (Military Cutoff Road Extension) from Lendire Road west of US 17 Business (Market Street) to US 17 Business (Market Street)/ SR 1403 (Middle Sound Loop Road). \$975,000.00 has previously been approved for construction. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget.	\$210,000.00
Onslow Co. Div. 3 U-5716 STATEWIDE	WBS 50116.1.2 NC 24 at US 258 (Richlands Highway) intersection. \$650,000.00 has previously been approved for preliminary engineering. Additional funds are requested.	\$1,500,000.00
Onslow Co. Div. 3 U-5789 REGIONAL	WBS 44361.2.1 NC 53 (Western Boulevard) at SR 2714 (Jacksonville Parkway). Initial funds are requested for full right of way and utilities.	\$1,075,000.00
Johnston Co. Div. 4 R-5718 DIVISION	WBS 50472.2.1 SR 1003 (Buffalo Road) from US 70 to SR 1934 (Old Beulah Road). Initial funds are requested for full right of way and utilities.	\$627,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Durham Co. Div. 5 P-5728 REGIONAL	WBS 47607.1.1 Norfolk Southern H Line. Construct grade separation at Neal Road. Initial funds are requested for preliminary engineering.	\$600,000.00
Durham/ Durham Co. Div. 5 U-5934 STATEWIDE	WBS 45929.1.1 NC 147 (Durham Freeway) from I-40 to future I-885 (East End Connector) in Durham. Initial funds are requested for preliminary engineering.	\$300,000.00
Statewide Div. 5 M-0488D STATEWIDE	WBS 46404.1.4 South Eastern Extension of I-540 - Map Act Lawsuit. \$425,000.00 has previously been approved for preliminary engineering. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget.	\$195,000.00
Wake Co. Div. 5 P-5729 REGIONAL	WBS 47608.1.1 Gresham Lake Road. Construct grade separation at SR 2013 (Gresham Lake Road). Initial funds are requested for preliminary engineering.	\$1,100,000.00
Wake Co. Div. 5 U-5518B REGIONAL/ STATEWIDE	WBS 43612.2.3 US 70 (Glenwood Avenue) at SR 3067 (T.W. Alexander Drive). \$25,000.000 has previously been approved for appraisal of a specific parcel using Regional Tier funding. Additional funds are requested for advanced acquisition of Specific Parcel 900 (Property of Southbridge Fellowship Church) for \$3,550,000.00 using Statewide Tier funding.	\$3,550,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Cumberland Co. Div. 6 U-2519AB REGIONAL	WBS 34817.2.28 Fayetteville Outer Loop from south of SR 1118 (Parkton Road) to south of SR 1003 (Camden Road). Initial funds are requested for full right of way and utilities.	\$22,400,000.00
Cumberland/ Robeson Cos. Div. 6 U-2519AA REGIONAL	WBS 34817.2.27 Fayetteville Outer Loop from I-95 to south of SR 1118 (Parkton Road) in Robeson County. Initial funds are requested for full right of way and utilities.	\$6,200,000.00
Guilford Co. Div. 7 R-4707 REGIONAL	WBS 36599.1.5 US 29; SR 4771 (Reedy Fork Parkway); and SR 2526 (Summit Avenue) from north of SR 2641 (Bryan Park Road) to US 29 / SR 4771 (Reedy Fork Parkway) interchange in Greensboro. \$900,000.00 has previously been approved for preliminary engineering. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget.	\$210,000.00
Guilford Co. Div. 7 R-5725 REGIONAL	WBS 50474.1.1 NC 68 at NC 150 intersection in Oak Ridge. Intersection improvements. \$250,000.00 has previously been approved for preliminary engineering. Additional funds are requested.	\$400,000.00
Guilford Co. Div. 7 TA-6678 REGIONAL	WBS 47591.1.1 PART - Airport area hub shuttle service LTV #1 FY 16 expansion fleet vehicle. Initial funds are requested for preliminary engineering.	\$7,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Greensboro/ Guilford Co. Div. 7 U-2525B STATEWIDE	WBS 34821.3.S6 Greensboro Eastern Loop from north of US 70 to US 29 north of Greensboro. \$129,108,603.00 has previously been approved for construction. Additional funds are needed to cover work for supplemental agreements. This is a Strategic Transportation Investments Transition project.	\$9,900,000.00
Greensboro/ Guilford Co. Div. 7 U-2525B STATEWIDE	WBS 34821.2.3 Greensboro Eastern Loop from north of US 70 to US 29 north of Greensboro. \$37,485,740.00 has previously been approved for right of way and utilities. Additional funds are needed to cover settlement of condemnation claims. This is a Strategic Transportation Investments Transition project. This project has previously been identified as a Trust Fund Urban Loop project.	\$1,335,000.00
Guilford/ Randolph Cos. Divs. 7/8 U-5864A DIVISION	WBS 46389.1.2 SR 1595 / SR 4053 (Surret Drive) from I-85 in Trinity to SR 1300 (West Fairfield Road) in High Point. Initial funds are requested for preliminary engineering.	\$400,000.00
Orange Co. Div. 7 I-3306AC REGIONAL	WBS 34178.1.6 I-40 at NC 86. Initial funds are requested for preliminary engineering.	\$1,000,000.00
Randolph Co. Div. 8 R-2220DA REGIONAL	WBS 34394.1.4 US 64 from SR 1409 (Lake Park Road) to Asheboro Bypass. Initial funds are requested for preliminary engineering.	\$1,045,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Davidson Co. Div. 9 P-5731 DIVISION	WBS 47610.1.1 East 7th Avenue. Initial funds are requested for preliminary engineering.	\$1,000,000.00
Davidson Co. Div. 9 P-5732 DIVISION	WBS 47611.1.1 Yadkin Valley Station in Lexington. Initial funds are requested for preliminary engineering.	\$1,800,000.00
Forsyth Co. Div. 9 AV-5738 DIVISION	WBS 46332.2.1 Smith Reynolds Airport (INT). Acquire land and clear terrain obstructions east of runway 15-33 to drain and grade material in place. \$172,000.00 has previously been approved for right of way and utilities. Additional funds are requested.	\$19,000.00
Forsyth Co. Div. 9 AV-5738 DIVISION	WBS 46332.1.1 Smith Reynolds Airport (INT). Acquire land and clear terrain obstructions east of runway 15-33 to drain and grade material in place. \$154,400.00 has previously been approved for preliminary engineering. Additional funds are requested.	\$17,600.00
Winston- Salem/ Forsyth Co. Div. 9 R-2247CB REGIONAL	WBS 34409.2.7 Winston-Salem Northern Beltway from north of the US 421 Interchange to SR 1314 (Robinhood Road). \$1,224,497.00 has previously been approved for specific parcels. Funds are requested for appraisal of Specific Parcel 900. This project has previously been identified as a Trust Fund Urban Loop project.	\$25,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Forsyth Co. Div. 9 TA-6680 REGIONAL	WBS 47593.1.1 PART - Airport area hub shuttle service. Purchase one expansion light transit vehicle. Initial funds are requested for preliminary engineering.	\$8,000.00
Winston- Salem/ Forsyth Co. Div. 9 U-2579E STATEWIDE	WBS 34839.2.8 Winston-Salem Northern Beltway (Eastern Section) from SR 2211 (Baux Mountain Road) to NC 8. \$3,703,666.00 has previously been approved for appraisal and advanced acquisition of specific parcels. Additional funds are requested for advanced acquisition of Specific Parcel 902 (Property of Mr. Raymond Lineberry and wife Linda). This project has previously been identified as a Trust Fund Urban Loop project.	\$108,643.00
Rowan Co. Div. 9 P-5726 REGIONAL	WBS 47604.1.1 Norfolk Southern Main track. Construct track improvements, second platform, pedestrian underpass, sitework retaining wall and signaling equipment. Initial funds are requested for preliminary engineering.	\$700,000.00
Rowan Co. Div. 9 P-5733 DIVISION	WBS 47612.1.1 Norfolk Southern mainline. Upgrade station building, waiting space expansion and surface parking. Initial funds are requested for preliminary engineering.	\$300,000.00
Forsyth/ Surry Co. Div. 9/11 TA-6681 REGIONAL	WBS 47594.1.1 Piedmont Authority Regional Transportation (PART) - Purchase expansion fleet vehicle to expand service on PART Surry Express #1. Initial funds are requested for preliminary engineering.	\$47,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Anson Co. Div. 10 R-5708 REGIONAL	WBS 46380.3.1 US 74 at intersection of US 74 and SR 1714 (Stanback Ferry Road). \$1,200,000.00 has previously been approved for construction. Funds need to be decreased (\$201,340.58). Project is complete. WBS will be closed.	-\$201,340.58
Cabarrus Co. Div. 10 P-5725 REGIONAL	WBS 47603.1.1 Norfolk Southern Mainline. Construct track improvements, second platform, pedestrian underpass, sitework, retaining wall and signaling equipment. Initial funds are requested for preliminary engineering.	\$600,000.00
Cabarrus Co. Div. 10 U-5806 DIVISION	WBS 44378.1.D1 Intersection of SR 2894 (Concord Mills Boulevard) and Entrance No. 1 - Kings Grant Pavilion. \$1,256,615.00 has previously been approved for preliminary engineering. Additional funds are requested.	\$300,000.00
Cabarrus Co. Div. 10 U-5806 DIVISION	WBS 44378.2.1 Intersection of SR 2894 (Concord Mills Boulevard) and Entrance No. 1 - Kings Grant Pavilion. \$100,000.00 has previously been approved for full right of way. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget.	\$235,000.00
Mecklenburg Co. Div. 10 P-5702 DIVISION	WBS 46396.1.1 Norfolk Southern Mainline (track milepost 376). Initial funds are requested for preliminary engineering.	\$100,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Mecklenburg Co. Div. 10 P-5730 DIVISION	WBS 47609.1.1 Norfolk Southern Railroad. Extend Clanton Road to Wilkinson Boulevard (US 29 & US 74) with grade separation of the Norfolk Southern Railroad. Close the Donald Ross crossing at the Norfolk Southern Railroad (Crossing #716178E). Initial funds are requested for preliminary engineering.	\$2,000,000.00
Mecklenburg Co. Div. 10 U-5763 REGIONAL	WBS 50176.1.1 NC 51 (Matthews Township Parkway) from SR 3356 (Sardis Road) to SR 1010 (East John Street/Monroe Road). \$200,000.00 has previously been approved for preliminary engineering. Additional funds are requested.	\$800,000.00
Stanly Co. Div. 10 P-5703 REGIONAL	WBS 46397.1.1 Norfolk Southern N Line, milepost 27.5 to 29.6. Initial funds are requested for preliminary engineering.	\$300,000.00
Stanly Co. Div. 10 R-2530B REGIONAL	WBS 34446.1.6 NC 24 - 27 from Bird Road in Albemarle to west of the Pee Dee River. \$2,904,231.00 has previously been approved for preliminary engineering. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget. This project has previously been identified as a Trust Fund Intrastate System project.	\$320,000.00
Caldwell/ Watauga Cos. Div. 11 R-2237C STATEWIDE	WBS 34402.3.7 US 321 from SR 1500 (Blackberry Road) to US 221 at Blowing Rock. \$81,256,360.00 has previously been approved for construction. Additional funds are requested to cover contract costs. This project has previously been identified as a Trust Fund Intrastate System project. This is a Strategic Transportation Investments transition project.	\$1,000,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Iredell Co. Div. 12 R-2522 REGIONAL	WBS 38794.1.2 US 21 - NC 115 from Cedar Lane Avenue in Troutman to SR 1336 (Barium Loop Road) in Barium Springs. \$500,000.00 has previously been approved for preliminary engineering. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget.	\$115,000.00
Madison/ Yancey Cos. Div. 13 R-2518WM STATEWIDE	WBS 34445.3.1 Wetland mitigation on US 19 from I-26 to SR 1336 (Jacks Creek Road). \$2,492,141.00 has previously been approved for wetland mitigation. Additional funds are needed for wetland mitigation. This project has previously been identified as a Trust Fund Intrastate System project.	\$50,000.00
Clay Co. Div. 14 R-5742 DIVISION	WBS 46325.1.D1 NC 175 from Georgia State Line to US 64, upgrade roadway. \$858,893.00 has previously been approved for preliminary engineering. Additional funds are requested.	\$750,000.00
Graham Co. Div. 14 U-5866 DIVISION	WBS 46390.2.1 US 129 (Rodney Orr Bypass) to Robinsville Highschool and Middle School. Construct new route including bridge over Cheoah River. \$170,000.00 has previously been approved for full right of way and utilities. Additional funds are requested.	\$1,330,000.00
Polk Co. Div. 14 R-5838 DIVISION	WBS 47108.1.1 NC 108 from I-26 to US 176. Widen roadway. \$100,000.00 has previously been approved for preliminary engineering. Additional funds are needed to cover expenditures that have or will exceed the previously authorized budget.	\$185,000.00

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Statewide M-0360 STATEWIDE/ REGIONAL/ DIVISION	WBS 36824.1.2 Design Services, statewide, preliminary engineering for miscellaneous projects. \$2,000,000.00 has previously been approved for preliminary engineering. Additional funds are requested using 30% Statewide (\$390,000.00) / 30% Regional (\$390,000.00) / 40% Division (\$520,000.00) Tier funding.	\$1,300,000.00
Statewide R-9999WM STATEWIDE	WBS 34634.4.3 Mitigation for Yadkin 01. Initial funds are requested to purchase private mitigation bank credits.	\$26,000,000.00
Statewide R-9999WM STATEWIDE	WBS 34634.4.4 Mitigation for Cape Fear 02. Initial funds are requested to purchase private mitigation bank credits.	\$10,000,000.00
Statewide F-5703 DIVISION	WBS 47256.1.1 Replacement vessel (Support Fleet) for tugs and barges. Initial funds are requested for preliminary engineering.	\$900,000.00
Statewide M-0479 STATEWIDE/ REGIONAL/ DIVISION	WBS 46314.1.S1 Statewide project development and environmental analysis, preliminary engineering for miscellaneous projects. \$2,530,000.00 has previously been approved for preliminary engineering. Additional funds are requested for additional design work. Additional funds are requested using 40% Statewide (\$2,800,000.00) / 30% Regional (\$2,100,000.00) / 30% Division (\$2,100,000.00) Tier funding.	\$7,000,000.00

***Correction and resubmission from October 5, 2017 Board Approval (Page K-3)

Sampson/ WBS 45883.1.1

Pender/ I-40 from SR 1725 (Milemarker 352) in Sampson County to Duplin Cos. SR 1501 (Milemarker 388) in Pender County. Initial funds are

Div. 3 requested for preliminary engineering.

I-5940

STATEWIDE

***The correct description should be:
(No funding change is requested)

Pender/ WBS 45883.1.1

Duplin/ Cos. I-40 from east of Sampson County Line (Milemarker 360)
Div. 3 to east of SR 1318 (Camp Kirkwood Road) (Milemarker 393)
I-5940 in Pender County. Initial funds are requested for preliminary

STATEWIDE engineering.

***Correction and resubmission from October 5, 2017 Board Approval (Page K-29)

Avery Co. WBS 35574.1.3

Div. 11 US 19E – NC 194 from multi-lanes east of Spruce Pine in R-2520A Mitchell County to SR 1106 (Mullin Hill Road) Initial funds are

DIVISION requested for preliminary engineering.

***Please remove Mitchell County from Description....should read as:

(No funding change is requested)

Avery Co. WBS 35574.1.3

Div. 11 US 19E – NC 194 from multi-lanes east of Spruce Pine R-2520A to SR 1106 (Mullin Hill Road) Initial funds are requested

DIVISION for preliminary engineering.

STATEWIDE STRATEGIC TRANSPORTATION 12 PROJECTS \$52,598,643.00

INVESTMENTS

REGIONAL STRATEGIC TRANSPORTATION 24 PROJECTS \$172,680,659.42

INVESTMENTS

STRATEGIC TRANSPORTATION INVESTMENTS	55 PROJECTS	\$247,242,902.42
STATEWIDE/REGIONAL/DIVISION STRATEGIC TRANSPORTATION INVESTMENTS	2 PROJECTS	\$8,300,000.00
REGIONAL/STATEWIDE STRATEGIC TRANSPORTATION INVESTMENTS	2 PROJECTS	\$3,700,000.00
DIVISION STRATEGIC TRANSPORTATION INVESTMENTS	15 PROJECTS	\$9,963,600.00

According to Executive Order No. 2 and G.S. 143B-350(g) the Board is requested to concur with staff recommendations and delegate authority to the Secretary to approve Funds for Specific Spot Safety Improvement Projects

Town/ County Division PROJ. CATEGORY	Project Description	Estimated Cost
Robeson Co. Div. 6 SS-4906DI	WBS 47702.3.1 SR 1002 (Old Allenton Rd) at SR 2104 (7th Street). Initial Spot Safety construction funds are needed for All Way Stop installation. File 06-17-48582C	\$9,500.00
Robeson Co. Div. 6 SS-4906DI	WBS 47702.2.1 SR 1002 (Old Allenton Rd) at SR 2104 (7th Street). Initial Spot Safety right of way and utilities funds are needed for All Way Stop installation. File 06-17-48582R	\$2,000.00

ITEM L SUMMARY 2 PROJECTS \$11,500.00

Division 1

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Perquimans Co. SS-4901BD REGIONAL	47641.1.1, HSIP-0017(164) US 17 Business (Edenton Street) at SR 1338 (Wynne Fork Road) and SR 1107 (Ballahack Road). Funds are needed for preliminary engineering.	\$2,000.00 Cost \$1,800.00 Fed. \$200.00 State
Washington Co. SS-4901BC STATEWIDE	47640.1.1, HSIP-0064(195) US 64 at NC 32 and SR 1357 (Washington Street). Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State

Division 2

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost	
Carteret Co. W-5702E REGIONAL	44848.2.5, HSIP-0070(209) US 70 at SR 1124 (Howard Avenue / Nine Foot Road); US 70 at SR 1140 (Roberts Road); US 70 at SR 1141 (Hibbs Road). Funds are needed for full right of way and utilities.	\$5,000.00 \$4,500.00 \$500.00	
Kinston/ Lenoir Co. SS-4902CO STATEWIDE	47642.1.1, HSIP-0070(214) US 70 (West Vernon Avenue) at SR 1548 (Hill Farm Road) / Sussex Street. Funds are needed for preliminary engineering.	\$25,000.00 \$22,500.00 \$2,500.00	
Lenoir Co. SS-4902CP REGIONAL	47644.1.1, HSIP-0011(038) NC 11 at SR 1121 (Gray Branch Church Road / Davis Mill Road). Funds are needed for preliminary engineering.	\$7,000.00 \$6,300.00 \$700.00	
Lenoir Co. W-5702F REGIONAL	44848.2.6, HSIP-0011(037) NC 11 at SR 1161 (Albrittons Road/Greene Haynes Road). Funds are needed for full right of way and utilities.	\$61,400.00 \$55,260.00 \$6,140.00	

Division 2 (Continued)

Rural

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Newport/ Carteret Co. R-5782J DIVISION	44912.3.11, TAP-0220(089) ADA (Americans with Disabilities Act) Curb Ramps at various locations with a population <5000. Construction funds are needed to install or upgrade ADA Ramps.	\$106,000.00 Cost \$84,800.00 Fed. \$21,200.00 State
Beaufort/ Carteret Co. R-5782K DIVISION	44912.3.12, TAP-0220(090) ADA (Americans with Disabilities Act) Curb Ramps at various locations with a population <5000. Construction funds are needed to install or upgrade ADA Ramps.	\$163,000.00 Cost \$130,400.00 Fed. \$32,600.00 State
Atlantic Beach/ Carteret Co. R-5782L DIVISION	44912.3.13, TAP-0220(091) ADA (Americans with Disabilities Act) Curb Ramps at various locations with a population <5000. Construction funds are needed to install or upgrade ADA Ramps.	\$60,000.00 Cost \$48,000.00 Fed. \$12,000.00 State

Division 2 (Continued)

Rural

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Havelock/ Craven Co. R-5782H DIVISION	44912.3.9, TAP-0220(087) Construct ADA (Americans with Disabilities Act) compliant curb ramps on city streets in Havelock with population >5000. Funds are needed for construction to construct or upgrade ADA ramps.	\$50,000.00 Cost \$40,000.00 Fed. \$10,000.00 State
Craven Co. R-5782I DIVISION	44912.3.10, TAP-0220(088) ADA (Americans with Disabilities Act) Curb Ramps at various locations with a population >5000. Construction funds are needed to install or upgrade ADA Ramps.	\$107,000.00 Cost \$85,600.00 Fed. \$21,400.00 State
Greenville/ Pitt Co. R-5782D DIVISION	44912.3.5, TAP-0220(084) ADA (Americans with Disabilities Act) ramps at various locations with population >5000. Funds are needed for construction to construct or upgrade ADA ramps.	\$930,000.00 Cost \$744,000.00 Fed. \$186,000.00 State

Division 3

Urban

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
New Hanover Co./ Wilmington U-5534G DIVISION	44096.1.F8, STPDA-0332(048) Hooker Road from Wrightsville Avenue to Mallard Drive / Rose Avenue intersection. \$80,000.00 has previously been approved for preliminary engineering. Additional funds are needed for design contract fees.	\$10,905.00 Cost \$8,724.00 Fed. \$2,181.00 Local
New Hanover Co./ Wilmington U-5534H DIVISION	44096.1.F9, STPDA-0332(049) Hinton Avenue from Park Avenue to Greenville Avenue. \$80,000.00 has previously been approved for preliminary engineering. Additional funds are needed for design contract fees.	\$10,275.00 Cost \$8,220.00 Fed. \$2,055.00 Local
	Safety	
New Hanover Co. SS-4903DF REGIONAL	47645.1.1, HSIP-0133(014) NC 133 (Castle Hayne Road) at SR 1329 (Oakley Road). Funds are needed for preliminary engineering.	\$61,000.00 Cost \$54,900.00 Fed. \$6,100.00 State
Wilmington/ New Hanover Co. SS-4903DH STATEWIDE	47647.1.1, HSIP-0117(040) US 117 / NC 132 (College Road) and SR 2313 (Wilshire Boulevard). Funds are needed for preliminary engineering.	\$14,525.00 Cost \$13,072.00 Fed. \$1,453.00 State
Onslow Co. SS-4903DG STATEWIDE	47646.1.1, HSIP-0258(028) US 258 / NC 24 and SR 1238 (Koonce Fork Road) and Richlands Primary School. Funds are needed for preliminary engineering.	\$7,500.00 Cost \$6,750.00 Fed. \$750.00 State

Division 3 (Continued)

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Sampson Co. W-5703B STATEWIDE	44849.3.2, HSIP-0040(054) I-40 between Johnston County Line and mile marker 344 in Sampson County. Funds are needed for construction for safety improvements.	\$250,000.00 Cost \$225,000.00 Fed. \$25,000.00 State

Division 4

National Highway

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Wayne Co. U-5958 REGIONAL	45871.2.1, NHP-0070(206) US 70 at SR 1719 (Beston Road). Funds are needed for full right of way and utilities.	\$370,000.00 Cost \$296,000.00 Fed. \$74,000.00 State
	Safety	
Johnston Co. W-5601DO REGIONAL	50138.2.120, HSIP-0301(037) US 301 between US 70 in Selma and US 70 Business (Market Street) in Smithfield. Funds are needed for full right of way and utilities.	\$10,000.00 Cost \$9,000.00 Fed. \$1,000.00 State
Johnston Co. W-5704A REGIONAL	44850.3.1, HSIP-0070(204) US 70 Business between SR 1004 (Main Street) and the crossover just east of Wildwood Drive (Combined with W-5704B: US 70 Business between SR 1553 (Shotwell Road) and NC 42 west / SR 1756 (Lombard Street) interchange). Funds are needed for construction based on the estimate from the 12-Month Tentative Letting List published September 12, 2017.	\$1,680,000.00 Cost \$1,512,000.00 Fed. \$168,000.00 State
Nash Co. SS-4904EJ REGIONAL	47648.1.1, HSIP-0058(019) NC 58 at SR 1004 (Taylor's Store Road). Funds are needed for preliminary engineering.	\$3,000.00 Cost \$2,700.00 Fed. \$300.00 State

Division 5

Urban

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Wake Co. U-5515 DIVISION	55056.3.1, STPDA-0527(014) SR 1930 (Stadium Drive) 1933 (West North Avenue) from Capital Boulevard to SR 1954 (North Wingate Street). Funds are needed for construction for complete streets improvements.	\$3,560,000.00 Cost \$2,848,000.00 Fed. \$712,000.00 State
Morrisville/ Wake Co. U-5618 DIVISION	47167.2.1, STBGDA-3014(004) SR 3014 (Morrisville-Carpenter Road) from SR 1613 (Davis Drive) to west of NC 54. Funds are needed for utilities.	\$900,000.00 Cost \$630,000.00 Fed. \$270,000.00 State
	Safety	
Durham Co. W-5601EH DIVISION	50138.3.138, HSIP-1118(007) SR 1118 (Fayetteville Road) at Cook Road. Construction funds are needed for safety improvements.	\$65,000.00 Cost \$58,500.00 Fed. \$6,500.00 State
Vance Co. SS-4905FE DIVISION	47668.1.1, HSIP-1148(008) SR 1148 (Vanco Mill Road) at SR 1538 (Garrett Road) / US 1 Northbound Ramp. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State

NCDOT November 2017 Board of Transportation Agenda Approval of Funds for Specific Federal - Aid Projects

Division 5 (Continued)

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Cary/ Wake Co. SS-4905FC DIVISION	47666.1.1, HSIP-1624(003) SR 1624 (Carpenter Fire Station Road) at Yates Store Road. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Raleigh/ Wake Co. SS-4905FD	47667.1.1, HSIP-1839(002) SR 1839 (Leesville Road) at SR 1840 (Hickory Grove Church Road). Funds are needed for preliminary engineering.	\$3,500.00 Cost \$3,150.00 Fed. \$350.00 State
DIVISION		
	Rail Program	
Wake Co. P-2918 EXEMPT	42801.3.F2, CMS-000S(781) Carolinian / Piedmont between Charlotte and Raleigh continued operation of 3rd daily run. \$15,341,000.00 has previously been approved for construction. Additional funds are needed for the continued operation of the 3rd daily frequency run.	\$6,140,000.00 Cost \$4,912,000.00 Fed. \$1,228,000.00 State

Estimated

NCDOT November 2017 Board of Transportation Agenda Approval of Funds for Specific Federal - Aid Projects

Division 6

Urban

County/PROJ CATEGORY	Description	Cost
Cumberland Co. U-2519AB REGIONAL	34817.3.4, NHP-1118(011) Outer Loop from south of SR 1118 (Parkton Road) to south of SR 1003 (Camden Road) (Combined with U-2519AA: Outer Loop from I-95 to south of SR 1118 (Parkton Road) in Robeson County). Funds are needed for construction based on the estimate from the 12-Month Tentative Letting List published September 12, 2017. This is a fifteen (15) year GARVEE BOND project with \$10,296,000.00 Federal Funds in FY18-FY32, and a three (3) year Cash Flow of \$13,333,000.00 in FY 18; \$13,333, 000.00 in FY 19 and \$13,334,000.00 in FY 20 for State Match. This is a three (3) year Cash Flow project with \$8,333,333.00 in FY 18; \$8,333,333.00 in FY 19; and \$8,333,334.00 in FY 20 in NHPP funds. This is a Design-Build Project.	\$185,000,000.00 Cost \$140,000,000.00 Fed. \$45,000,000.00 State
	Safety	
Bladen Co. SS-4906DD REGIONAL	47669.1.1, HSIP-0041(112) NC 41 and NC 410. Funds are needed for preliminary engineering.	\$1,000.00 Cost \$900.00 Fed. \$100.00 State
Columbus Co. SS-4906DE STATEWIDE	47670.1.1, HSIP-0074(209) US 74 at SR 1506 (Old Boardman Road / Macedonia Church Road). Funds are needed for preliminary engineering.	\$1,000.00 Cost \$900.00 Fed. \$100.00 State
Columbus Co. SS-4906DG DIVISION	47673.1.1, HSIP-1002(052) SR 1002 (Old Lumberton Road) at SR 1005 (Peacock Road). Funds are needed for preliminary engineering.	\$1,000.00 Cost \$900.00 Fed. \$100.00 State
Fayetteville/ Cumberland Co. SS-4906DF REGIONAL	47671.1.1, HSIP-0024(085) NC 24 / 87 (Bragg Boulevard) at Mike Street and Johnson Street. Funds are needed for preliminary engineering.	\$15,000.00 Cost \$13,500.00 Fed. \$1,500.00 State

Town/

Project

Division 6 (Continued)

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Cumberland Co. W-5601FO DIVISION	50138.2.172, HSIP-1831(006) SR 1831 (Baywood Road) at SR 1832 (Murphy Road). Funds are needed for full right of way and utilities.	\$360,000.00 Cost \$324,000.00 Fed. \$36,000.00 State
Cumberland Co. W-5706A DIVISION	44852.2.1, HSIP-1400(010) SR 1400 (Cliffdale Road) from SR 1410 (Bunce Road) westward past Reilly Road to the existing grass median, in Fayetteville. Funds are needed for full right of way and utilities.	\$100,000.00 Cost \$90,000.00 Fed. \$10,000.00 State
Erwin/ Harnett Co. SS-4906DH REGIONAL	47674.1.1, HSIP-0421(092) US 421 (E. Jackson Boulevard) at SR 1703 (Red Hill Church Road / Masonic Road). Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Robeson Co. U-5925 DIVISION	46874.3.1, HSIP-1340(011) SR 1340 (North Odum Street / Prospect Street) from SR 1566 (Corinth Street) to NC 711 (Third Street). Funds are needed for construction for safety improvements.	\$2,077,000.00 Cost \$1,836,600.00 Fed. \$240,400.00 State

Division 7

Congestion Mitigation

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Chapel Hill/ Orange Co. C-5179 EXEMPT	46240.2.1, CMS-0703(025) SR 1750 (North Estes Drive) from NC 86 (Martin Luther King, Jr. Boulevard) to Caswell Drive, Construct five foot sidewalks and five foot bike lanes; from NC 86 (Martin Luther King, Jr. Boulevard) to Elliott Road, construct ten foot multi-use path; intersection improvements at NC 86 (Martin Luther King, Jr. Boulevard) in Chapel Hill. Funds are needed for full right of way and utilities.	\$635,000.00 Cost \$508,000.00 Fed. \$127,000.00 Local
	Safety	
Alamance Co. SS-4907CB DIVISION	47675.1.1, HSIP-1530(006) SR 1530 (Birch Bridge Road) at SR 1515 (Flora Avenue) north of Burlington. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Guilford Co. SR-5001CE DIVISION	40924.3.81, SRS-0710(034) Safe Routes to School-Oak Hill Elementary, Fairview Elementary, John Street Global Studies, Triangle Lake Montessori and Shadybrook Elementary Schools. Funds are needed for construction for sidewalk installation in the vicinity of five schools within the city limits of High Point.	\$500,000.00 Cost \$500,000.00 Fed.
High Point/ Guilford Co. SS-4907CC DIVISION	47676.1.1, HSIP-1193(009) SR 1193 (Baker Road) at East Springfield Road (non-system) in High Point. Funds are needed for preliminary engineering.	\$10,000.00 Cost \$9,000.00 Fed. \$1,000.00 State

Division 8

Surface Transportation

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Moore Co. ER-5600HG REGIONAL	46305.3.41, STBG-0211(042) Medians of NC 211 and US 15-501 in Pinehurst. Funds are needed for construction for tree planting.	\$122,150.00 Cost \$97,720.00 Fed. \$24,430.00 State
	Safety	
Hoke Co. W-5708D REGIONAL	44854.2.4, HSIP-0401(286) US 401 Business at SR 1406 (Rockfish Road). Funds are needed for full right of way and utilities.	\$80,000.00 Cost \$72,000.00 Fed. \$8,000.00 State
Hoke Co. W-5708E REGIONAL	44854.1.5, HSIP-0211(041) NC 211 at SR 1219 (Army / Plank Road). Funds are needed for preliminary engineering.	\$6,000.00 Cost \$5,400.00 Fed. \$600.00 State
Hoke Co. W-5708G REGIONAL	44854.1.7, HSIP-0401(290) US 401 at SR 1411 (North Park Church Road) and SR 1413 (Pittman Grove Church Road) Funds are needed for preliminary engineering.	\$150,000.00 Cost \$135,000.00 Fed. \$15,000.00 State

Division 8 (Continued)

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost	
Sanford/ Lee Co. SS-4908BQ STATEWIDE	47678.1.1, HSIP-0421(093) US 421 Business / NC 87 (Homer Boulevard) from SR 1140 (McDougald Road / Frank Wicker Road) to US 1. Funds are needed for preliminary engineering.	\$32,500.00 \$29,250.00 \$3,250.00	Cost Fed. State
Montgomery Co. W-5708F STATEWIDE	44854.1.6, HSIP-0073(048) I-73 / I-74 / US 220 at several median bridge pier locations in Montgomery County. Funds are needed for preliminary engineering.	\$2,000.00 \$1,800.00 \$200.00	Cost Fed. State
Moore Co. W-5708B REGIONAL	44854.2.2, HSIP-0002(100) NC 2 (Midland Road) at US 1 and NC 2 (Midland Road) at NC 22 (Central Drive). Funds are needed for full right of way and utilities.	\$90,000.00 \$81,000.00 \$9,000.00	Cost Fed. State
Randolph Co. SS-4908BP DIVISION	47677.1.1, HSIP-2114(002) SR 2114 (Providence Church Road) at SR 2116 (New Salem Road). Funds are needed for preliminary engineering.	\$1,000.00 \$900.00 \$100.00	Cost Fed. State

Division 9

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Forsyth Co. SS-4909CB REGIONAL	47679.1.1, HSIP-0158(068) US 158 at SR 2014 (Vance Road) and intersection of US 158 at SR 1965 (Belews Creek Road). Funds are needed for preliminary engineering.	\$10,000.00 Cost \$9,000.00 Fed. \$1,000.00 State
Rowan Co. W-5601GJ REGIONAL	50138.3.193, HSIP-0601(024) US 601 between the municipal limits of Salisbury and the Davie County Line, north of Salisbury. Funds are needed for construction for safety improvements.	\$500,000.00 Cost \$450,000.00 Fed. \$50,000.00 State

Division 10

Congestion Mitigation

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost	
Mecklenburg Co. C-5538 DIVISION	51008.2.1, CMS-1003(154) Charlotte-Intersection of Tuckaseegee / Berryhill / Thrift Roads Funds are needed for full right of way and utilities.	\$662,000.00 Cost \$529,600.00 Fed. \$132,400.00 Local	
Safety			
Anson Co. W-5710W STATEWIDE	44856.1.23, HSIP-0074(208) US 74 from Richmond County line to milepost 11.80; from milepost 1642 to Union County Line. Funds are needed for preliminary engineering.	\$30,000.00 Cost \$27,000.00 Fed. \$3,000.00 State	
Charlotte/ Mecklenburg Co. SS-4910DB STATEWIDE	47681.1.1, HSIP-000S(901) Systemic Smart Crash Cushion Project - I-277, I-77 and US 74. Funds are needed for preliminary engineering.	\$1,000.00 Cost \$900.00 Fed. \$100.00 State	
Charlotte/ Mecklenburg Co. SS-4910DD STATEWIDE	47683.1.1, HSIP-0074(210) US 74 (Independence Boulevard) and Wendover Road. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State	

Division 10 (Continued)

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Mecklenburg Co. W-5710V DIVISION	44856.1.22, HSIP-1102(016) SR 1102 (Youngblood Road) and SR 1105 (Zoar Road) and SR 1106 (Hamilton Road). Funds are needed for preliminary engineering.	\$100,000.00 Cost \$90,000.00 Fed. \$10,000.00 State
Stanly Co. W-5710T DIVISION	44856.1.20, HSIP-1494(003) SR 1494 (West Main Street) from US 52 to Railroad Street in Albemarle. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Union Co. W-5710U DIVISION	44856.1.21, HSIP-1315(020) SR 1315 (New Town Road) and SR 1319 (Ennis Road / Broomes Old Mill Road) near Weddington. Funds are needed for preliminary engineering.	\$50,000.00 Cost \$45,000.00 Fed. \$5,000.00 State

Division 11

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost		
Divisionwide W-5601GV STATEWIDE/ REGIONAL	50138.3.205, HSIP-000S(845) Upgrade guardrail end units at various locations. \$1,600,000.00 has previously been approved for construction. Additional funds are needed for safety improvements.	' '	Cost Fed. State	
Surry Co. W-5601GW STATEWIDE/ REGIONAL	50138.3.206, HSIP-000S(844) Upgrade guardrail end units at various locations. \$525,000.00 has previously been approved for construction. Additional funds are needed for safety improvements.	' '	Cost Fed. State	
Watauga Co. SS-4911AY STATEWIDE	47684.1.1, HSIP-0321(041) US 321 between SR 1209 (Rush Branch Road) and SR 1128 (Kellersville Road / Andy Hicks Road). Funds are needed for preliminary engineering.	\$2,000.00 \$1,800.00 \$200.00		
Bicycle and Pedestrian				
Blowing Rock/ Watauga Co. EB-5527 DIVISION	50043.3.FD1, STPEB-1103(027) Middle Fork Greenway, Phase I, from Tweetsie Railroad to Sterling Creek Park in Blowing Rock. \$375,000.00 has previously been approved for construction. Additional funds are needed for relocation of storm water pipe.	\$25,000.00 \$20,000.00 \$5,000.00		

Division 12

Congestion Mitigation

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Gaston Co. C-5622 EXEMPT	46399.3.1, CMS-0321(035) Highland Branch Greenway, Phase II. Funds are needed for construction for a 10 foot wide greenway trail.	\$420,000.00 Cost \$336,000.00 Fed. \$84,000.00 Local
	Safety	
Alexander Co. SS-4912CK REGIONAL	47689.1.1, HSIP-0064(196) US 64 at SR 1005 (Old Mountain Road). Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Cleveland Co. SS-4912CH REGIONAL	47685.1.1, HSIP-0216(005) NC 216 (Battleground Avenue) at SR 2245 (Bethlehem Road). Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Dallas/ Gaston Co. SS-4912CI REGIONAL	47686.1.1, HSIP-0275(003) NC 275 / NC 279 (Trade Street) at SR 1001 (Oakland Street). Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State

Division 12 (Continued)

Safety

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Gastonia/ Gaston Co. SS-4912CJ REGIONAL	47688.1.1, HSIP-0321(042) US 321 NB Couplet (York Street) at NC 7 (Long Avenue). Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State

Division 13

Appalachian

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost			
Madison Co. R-5779 EXEMPT	44834.2.1, APD-1631(004) SR 1631 (Crossroads Parkway) to SR 1632 (Calvin Edney Road) in Madison County. Funds are needed for full right of way	\$900,000.00 \$900,000.00			
	and utilities.				

Division 14

Safety

Town/ County/PROJ CATEGORY	Project Description	Estimated Cost
Haywood Co. SS-4914DK REGIONAL	47691.1.1, HSIP-0019(059) US 19 (Dellwood Road) at US 276 (Russ Avenue) (East Intersection) near Lake Junaluska. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
Henderson Co. SS-4914DJ DIVISION	47690.1.1, HSIP-1171(059) SR 1171 (Willow Road) at SR 1172 (Hebron Road) in Hendersonville. Funds are needed for preliminary engineering.	\$5,000.00 Cost \$4,500.00 Fed. \$500.00 State
	Bicycle and Pedestrian	
Macon Co. EB-5756 DIVISION	50433.1.1, TAP-1729(004) SR 1729 (Depot Street) from US 441 Business (East Main Street) to SR 1667 (Wayah Street). Funds are needed for preliminary engineering.	\$10,000.00 Cost \$8,000.00 Fed. \$2,000.00 State

REVISIONS TO THE 2016-2025 AND 2018-2027 STIPS HIGHWAY PROGRAM

STIP ADDITIONS

DIVISION 8

* EB-5871 SR 1107 (EAST THIRD STREET), NORTH 5TH AVENUE TO US 64 (EAST 11TH STREET) IN SILER CITY.

PROJ.CATEGORY CONSTRUCT SIDEWALK ON SOUTH SIDE.

DIVISION PROGRAMMED FOR PLANNING AND ENVIRONMENTAL

STUDY ONLY TO EXPEDITE DELIVERY OF NEW STI

PROJECT [16-25 STIP].

DIVISION 10

* B-5988 ANSON	WADESBORO, REPLACE BRIDGE 030316 ON BURNS STREET OVER CREEK.	RIGHT-OF-WAY	FY 2021 - FY 2021 -	\$64,000 \$16,000	(STPOFF) (L)
PROJ.CATEGORY	ADD RIGHT-OF-WAY AND CONSTRUCTION NOT PREVIOUSLY PROGRAMMED.	CONSTRUCTION	FY 2022 - FY 2022 -	\$320,000 \$80,000	(STPOFF) (L)
DIVISION	PREVIOUSET PROGRAININIED.		F1 2022	\$480,000	(L)

* EB-5929 MECKLENBURG PROJ.CATEGORY DIVISION	CHARLOTTE, BELK GREENWAY CONNECTOR PHASE ONE. EAST STONEWALL STREET AT SOUTH DAVIDSON STREET TO SOUTH KINGS DRIVE. ADD PROJECT AT REQUEST OF MPO.	ENGINEERING RIGHT-OF-WAY CONSTRUCTION	FY 2019 - FY 2019 - FY 2020 - FY 2020 - FY 2021 - FY 2021 -	\$97,000 \$24,000 \$69,000 \$17,000 \$1,550,000 \$388,000 \$2,145,000	(STBGDA) (L) (STBGDA) (L) (STBGDA) (L)
* EB-5931	INDIAN TRAIL, NORTH INDIAN TRAIL ROAD. SOUTH	CONSTRUCTION	FY 2018 -	\$2,510,000	(STBGDA)

* EB-5931	INDIAN TRAIL, NORTH INDIAN TRAIL ROAD. SOUTH	CONSTRUCTION	FY 2018 -	\$2,510,000	(STBGDA)
UNION	FORK ROAD TO LIBERTY LANE. CONSTRUCT		FY 2018 -	\$628,000	(L)
PROJ.CATEGORY	COMPLETE STREET.			\$3,138,000	
DIVISION	ADD PROJECT AT REQUEST OF MPO.				

* EB-5933 MECKLENBURG PROJ.CATEGORY DIVISION	DAVIDSON, KINCAID MULTIUSE PATH. EUGENIA STREET AND SPRING STREET TO SOUTH PRONG ROCKY RIVER GREENWAY NEAR DAVIDSON ELEMENTARY. ADD PROJECT AT REQUEST OF MPO.	CONSTRUCTION	FY 2018 - FY 2018 -	\$702,000 (STBGDA) \$175,000 (L)

^{*} INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2016-2025 AND 2018-2027 STIPS HIGHWAY PROGRAM

STIP ADDITIONS

DIVISION 12 * EB-5930 IREDELL PROJ.CATEGORY DIVISION	TROUTMAN, DOWNTOWN SIDEWALK IMPROVEMENTS. RUMPLE STREET FROM US 21/NC 115 TO THOMAS STREET; WAGNER STREET FROM US 21/NC 115 TO WEST AVENUE; TALLEY STREET FROM US 21/NC 115 TO WEST AVENUE. ADD PROJECT AT REQUEST OF MPO.	ENGINEERING RIGHT-OF-WAY CONSTRUCTION	FY 2019 - \$55,000 FY 2019 - \$14,000 FY 2019 - \$72,000 FY 2019 - \$18,000 FY 2020 - \$675,000 FY 2020 - \$169,000 \$1,003,000	(L) (STBGDA) (L) (STBGDA) (L)
* EB-5932 IREDELL PROJ.CATEGORY DIVISION	TROUTMAN, RICHARDSON GREENWAY SOUTH. US 21/NC 115 (SOUTH MAIN STREET) FROM TROUTMAN ELEMENTARY SCHOOL TO JACOBS WOODS SUBDIVISION. ADD PROJECT AT REQUEST OF MPO.	CONSTRUCTION	FY 2020 - \$792,000 FY 2020 - \$198,000 \$990,000	(L)
* I-5992 MECKLENBURG IREDELL PROJ.CATEGORY STATEWIDE	I-77, MILE MARKER 11 TO MILE MARKER 20 AND MILE MARKER 24.5 TO MILE MARKER 37. REHABILITATE PAVEMENT. ADD PROJECT AT REQUEST OF DIVISION	CONSTRUCTION	FY 2018 - <u>\$11,600,000</u> \$11,600,000	(NHPIM)

STIP MODIFICATIONS

DIVISION 5 * U-5501A WAKE PROJ.CATEGORY DIVISION	SR 1650 (REEDY CREEK ROAD), NORTH HARRISON AVENUE TO 600 FT. SOUTH OF WATTS POND LANE. TO REFLECT TOWN'S LATEST PROJECT DELIVERY SCHEDULE, DELAY RIGHT-OF-WAY FROM FY 17 TO FY 18	RIGHT-OF-WAY CONSTRUCTION	FY 2018 - FY 2018 - FY 2018 - FY 2018 - FY 2018 - FY 2018 -	\$540,000 \$135,000 \$200,000 \$50,000 \$3,894,000 \$973,000 \$5,792,000	(STBGDA) (L) (STBGDA) (L) (STBGDA) (L)
* U-5501B WAKE PROJ.CATEGORY DIVISION	SR 1650 (REEDY CREEK ROAD), 600 FT. SOUTH OF WATTS POND LANE TO NE MAYNARD ROAD. TO REFLECT TOWN'S LATEST PROJECT DELIVERY SCHEDULE, DELAY RIGHT-OF-WAY FROM FY 17 TO FY 18	RIGHT-OF-WAY CONSTRUCTION	FY 2018 - FY 2018 - FY 2018 - FY 2019 -	\$484,000 \$121,000 \$250,000 \$6,293,000 \$7,148,000	(STBGDA) (L) (L) (L)

^{*} INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2016-2025 AND 2018-2027 STIPS HIGHWAY PROGRAM

STIP MODIFICATIONS

D	V	S	0	N	7

* EL-4828A MORGAN CREEK GREENWAY, PHASE 1 CONSTRUCTION FY 2018 -\$298,000 (STBGDA) FY 2018 - ___ ORANGE TO ALLOW TOWN ADDITIONAL TIME FOR SECURING \$74,000 (L) PROJ.CATEGORY PERMITS, DELAY CONSTRUCTION FROM FY 17 TO FY \$372,000 18 [16-25 STIP] / ADD CONSTRUCTION IN FY 18 NOT **TRANSITION**

PREVIOUSLY PROGRAMMED [18-27 STIP].

* EL-5101 VARIOUS, PEDESTRIAN AND BICYCLE PROJECTS IN **GUILFORD** THE GREENSBORO URBAN AREA METROPOLITAN PLANNING ORGANIZATION (GUAMPO). PROJ.CATEGORY

ADD CONSTRUCTION IN FY 18 AND FY19 NOT DIVISION

PREVIOUSLY PROGRAMMED AT REQUEST OF MPO.

CONSTRUCTION FY 2018 -\$2,106,000 (CMAQ) FY 2018 -\$4,180,000 (STBGDA)

FY 2018 -\$400,000 (TAP) FY 2018 -\$1,671,000 (L) FY 2019 - \$4,130,000 (STBGDA)

FY 2019 - \$1,033,000 (L) \$13,520,000

* P-2918 PIEDMONT CORRIDOR, TRAIN 74 / 75 OPERATIONS WAKE BETWEEN CHARLOTTE AND RALEIGH, EQUIPMENT

AND CAPITAL YARD MAINTENANCE FACILITY. **GUILFORD** DAVIDSON ADD OPERATIONS FUNDING IN FY 18 NOT

PREVIOUSLY PROGRAMMED. STATE MATCHING ROWAN

FUNDS ARE STATE RAIL FUNDS. **RANDOLPH**

ORANGE DURHAM ALAMANCE CABARRUS MECKLENBURG **PROJ.CATEGORY**

EXEMPT

OPERATIONS FY 2018 - \$10,069,764 (CMAQ)

FY 2018 - \$2,517,441 (S(E))

\$12,587,205

^{*} INDICATES FEDERAL AMENDMENT

SUMMARY: There are a total of 30 agreements for approval by the Board of Transportation.

Statewide

Piedmont & Northern Railway 42893

This Master Rail Agreement covers the installation, upgrades, or replacement of automatic railway-highway grade crossing signals, gates, and traffic control devices at various locations throughout the State. The Master Agreement shall streamline engineering and construction authorizations by eliminating the drafting and executing of individual project agreements. Notification by the Department to the Railroad shall be by an executed authorization for Construction, providing the necessary information as to each project. The Railroad shall be responsible for all maintenance of the devices. The estimated cost shall be determined on the basis of individual projects authorized by the Department.

Division 2

City of New Bern Craven County 49027 This Agreement consists of the abandonment of SR 1111 (Old Airport Road) from a point 0.57 miles north of SR 1116 to a point 0.99 miles south of SR 1116, for a total length of 1.56 miles and all of SR 1997 (Old Airport Road) from Brice Creek to County Line Road, for a total length of 0.55 miles including Bridge #10, and the City of New Bern adding these sections of Old Airport Road to their system in consideration for the Department providing \$687,000 for the resurfacing and/or repair of the specified route. Upon adoption of these sections of Old Airport Road, onto their system, the Municipality shall be responsible for all future maintenance of these sections of Old Airport Road, including Bridge #10. This agenda item supersedes the item that was approved by the BOT on October 5, 2017.

Division 4

Town of Smithfield Johnston County U-3334B 34929.3.3 This Project consists of roadway improvements on SR 1923 (Booker Dairy Road) from SR 1003 (Buffalo Road) to US 301. The Department shall prepare the environmental and/or planning document, project plans and specifications, construct the project, and acquire any needed right of way. The Municipality shall relocate and adjust any municipallyowned utilities. At the request of the Municipality, the Department shall include in its contract the construction of sidewalk along both sides of Booker Dairy Road between Buffalo Road and Bradford Street. The Municipality shall reimburse the Department 30% of the actual cost of the work. The estimated reimbursement from the Municipality is \$56,040.

Division 4. cont.

Town of Selma Johnston County U-5795 44366.3.1 This Project consists of roadway improvements on SR 2302 (Ricks Road) from US 70 to US 301 to widen to three lanes. The Department shall prepare the environmental and/or planning document, project plans and specifications, construct the project, and acquire any needed right of way. The Municipality shall relocate and adjust any municipallyowned utilities. At the request of the Municipality, the Department shall include in its contract the construction of sidewalk along the east and west side of Ricks Road. The Municipality shall reimburse the Department 20% of the actual cost of the work. The estimated reimbursement from the Municipality is \$26,200.

Town of Weldon CSX Transportation, Inc. (CSXT) Halifax County Y-5500DB 45533.1.5 This Rail Agreement is a Crossing Closure Agreement for the permanent closure of the railroad at-grade crossing on the municipal maintained Caroline Avenue (Crossing No. 629 652L, Milepost A, 83.57) in the Municipality. The work will include, but not be limited to, the installation of red diamond "end of road" signage, barricades, landscaping, and the widening and paving of Caroline Avenue from the crossing closure to County Club Road (SR 1641) as defined by project plans. The estimated cost to the Department is \$200,000.

Division 5

City of Raleigh Wake County C-5604OE 43714.2.12 43714.3.12 This Project consists of a two-way separated bike facility on Gorman Street, connecting the Reedy Creek Greenway Trail at Ligon and Sullivan to the Rocky Branch Trail at Hillsborough and Clark Street in Raleigh. The Municipality is responsible for all aspects of the project. The Department shall reimburse 80% of eligible expenses from CMAQ funds up to \$260,000. The Municipality shall provide the 20% non-federal match (\$65,000) for the federal funds authorized and all costs that exceed the total available funding.

Town of Stem Granville County C-5610D 43732.1.5 43732.2.5 43732.3.5 This Project consists of the construction of sidewalks along Tally Ho Street, Franklin Street, Main Street and Creedmoor Road in Stem. The Municipality is responsible for all aspects of the project. The Department shall reimburse 80% of eligible expenses from CMAQ funds up to \$216,000. The Municipality shall provide the 20% non-federal match (\$54,000) for the federal funds authorized and all costs that exceed the total available funding.

Division 5, cont.

North Carolina State University (NCSU) NC Department of Agricultural & Consumer Services (NCDA&CS) Wake County W-5522 50143.3.1 This Project consists of construction of a pedestrian tunnel and installation of additional amenities and landscaping on SR 1656 (Trinity Road) at SR 1658 (Youth Center Drive) intersection in Raleigh in order to connect properties owned by the State of North Carolina. The Department is responsible for all phases of the work and will be responsible for maintenance of the tunnel. NCSU and NCDA&CS will be responsible for maintenance of the tunnel amenities and improvements outside the right of way and the operation, cleanup, repairs and security for the tunnel and the related improvements.

National Railroad Passenger Corporation (AMTRAK) Wake County P-5500 44092 This Sublease Rail Agreement covers the terms and conditions by which the Department shall lease to AMTRAK approximately 7,850 square feet of space in the Raleigh Union Station (RUS). AMTRAK will also have access to the common areas and facilities that will include, but not be limited to, rail tracks, passenger concourse, and platform. The Department will provide electricity, water and sewer service, insurance, and maintenance for the property. The lease period will be for ten (10) years, with the option to extend for two (2) additional ten (10) year terms. The annual fee will be \$50,000 and will be adjusted after each 5 year period, starting from the commencement date. This adjustment will be no more than 2% based on the Consumer Price Index (CPI) from each of the preceding 5 years. AMTRAK will receive credit towards the first annual fee for expenses incurred while moving to the new RUS. A separate lease from the City of Raleigh to the Department must be approved concurrently, so the two can be executed simultaneously.

City of Raleigh Wake County P-5500 44092 This Rail Lease Agreement covers the terms and conditions by which the Department shall lease from the City of Raleigh approximately 21,384 square feet of space in the Raleigh Union Station. The Department will also have access to common areas and facilities that will include waiting area, rail tracks, passenger concourse and platform. The Department will provide electricity, water and sewer service, insurance and maintenance for the property. The lease period will be for ten (10) years, with the option to extend for two (2) additional ten (10) year terms. The initial annual fee will be \$223,250. A separate sublease from the Department to AMTRAK must be approved concurrently, so the two can be executed simultaneously.

Division 5, cont.

National Railroad Passenger Corporation (AMTRAK) Wake, Durham, Alamance and Guilford Counties P-2918 42801 This Rail Agreement covers the terms under which AMTRAK would implement Passenger Information Display Systems (PIDS) at the Cary, Burlington, and Durham stations. This Agreement was previously approved by the Board of Transportation on September 8, 2016, but due to a funding change, it is being re-submitted as noted below. AMTRAK's responsibilities shall include preparing construction documents, procuring the software, hardware and infrastructure, installation, and confirming integration of hardware and software with AMTRAK's real time data system. The Department, utilizing State Funds, shall reimburse AMTRAK 100% of the cost to procure, install. and integrate the PIDS. The estimated cost of the AMTRAK PIDS scope is \$1,260,816. In addition, the Department, through State Funds, shall reimburse AMTRAK monthly operating costs estimated to be up to \$11,067.

North Carolina Wildlife Resource Commission (NCWRC) Wake County This Interagency Agreement is to establish a Non-Game Aquatic Species Program at the Yates Mill Aquatic Conservation Center (YMACC) in the Historic Yates Mill County Park in Raleigh. The Department is providing funding to the NCWRC for the operation and maintenance of the program. The current anticipated funding amount from the Department is \$3,042,000.

Wake County

This Interagency Agreement is to construct an addition and renovations to the Yates Mill Aquatic Conservation Center (YMACC) at the A.E. Finley Center and Park. The County will administer the Project. The Department will provide reimbursement for the actual cost of the addition and renovations. The estimated cost to the Department is \$1,958,000.

Division 6

CSX Transportation, Inc. (CSXT) Town of Pembroke Robeson County P-3309S 32268 This Rail Agreement covers the preparation of a Traffic Separation Study (TSS) within the Municipality along CSXT's A line corridor from Corinth Road (SR 1566, Crossing #629 599C, milepost A 240.73) to Deep Branch Road (SR 1339, Crossing #629 603P, milepost A 242.32), and on the SE line corridor from University Road (SR 1561, Crossing #630 991M, milepost SE 284.88) to Jones Road (SR 1571, Crossing #631 011E, milepost SE 285.79). The Department will be responsible for preparing the study in partnership with the Municipality and CSXT. The Department will pay for the study. The estimated cost of the study is \$150,000.

Division 7

Town of Jamestown Guilford County C-5609F 43731.1.3 43731.2.3 43731.3.3

City of Greensboro Guilford County EL-5101DJ 41823.1.2 41823.3.13

Town of Chapel Hill Orange County U-5543 50109.1.F1 50109.3.1

Division 8

Town of Ellerbe Richmond County 15RE.32 This Project consists of the construction of approximately 2,800 linear feet of sidewalk between Chimney Court and Jamestown Oaks Drive. The Municipality is responsible for all aspects of the project. The Department shall reimburse 80% of eligible expenses from CMAQ funds up to \$540,000. The Municipality shall provide the 20% nonfederal match (\$135,000) for the federal funds authorized and all costs that exceed the total available funding.

This Project consists of the design and construction of the Phase 2 portion of the Downtown Greenway from Gate City Boulevard to Greene Street in Greensboro. The Municipality is responsible for all aspects of the project. This Supplemental Agreement is to increase funding for the project. The Department's original participation was \$693,000. The Department agrees to reimburse the Municipality 80% of eligible expenses with additional STP-DA and TAP funds up to \$7,331,815. The Municipality shall provide the 20% non-federal match (\$1,832,954) for the federal funds authorized and all costs that exceed the total available funding.

This Project consists of variable message signs for traffic management on major corridors in Chapel Hill. The Municipality is responsible for all aspects of the project. This Supplemental Agreement is to add the construction phase and increase the funding for the project. The Department shall reimburse an additional 80% of eligible expenses from STBG-DA funds up to \$851,800. The Municipality shall provide the additional 20% non-federal match (\$212,950) for the new federal funds authorized and all costs that exceed the total available funding. The total available funding from the Department is \$926,800.

This Project consists of the operation of the Rest Area on US 220 in Richmond County. The General Assembly has provided funding for a two-year pilot project to reopen the rest area to be managed and maintained by the Town of Ellerbe. The Department shall provide \$200,000 in operating costs over a two-year period for Fiscal Years 2017–2019. The Town shall be responsible for all operation and maintenance activities at the rest area.

Division 8, cont.

CSX Transportation, Inc. (CSXT) Scotland County C-5600B 50061.1.3

On October 2, 2009, the Department and CSXT entered into a Railroad Master Construction Agreement which detailed the terms and conditions by which CSXT would construct various rail safety improvements within the State of North Carolina. This Addendum No.12 to the Master Construction Agreement covers the grading and construction of bridge and track work needed to support the extension of the Dixie Storage Siding to improve the operational efficiency for CSXT freight trains. In addition to the Dixie Storage Siding extension, the project shall also include improvements to radio controlled switches and track upgrades on the Bladenboro and East Arcadia Sidings. CSXT will perform all of the utility and construction work for the project. The Department will reimburse CSXT all actual eligible costs. The total estimated cost to the Department is \$12,500,000.

Norfolk Southern Railway (NSR) Chatham County Y-5500HA 45533.1.14 This Rail Agreement covers the permanent closure of the at-grade highway-railroad crossing at Beal Road (SR 2141, Crossing #721 039U, milepost CF 120.48). For mitigation of the crossing closure, crossing surface improvements will be made at Alton King Road (SR 2140, Crossing #721 038M, milepost CF 120.50), Fayetteville Road (SR 2144, Crossing #721 041V, milepost CF 120.48), and Gulf Road (SR 2139, Crossing #721 042C, milepost CF 120.48); along with crossing surface improvements, removal of existing abandoned track section, and roadway repair at Gulf Road (SR 2139, Crossing #465 957C, milepost CF 120.60). Work will be performed by NSR and the Department. NSR will reimburse the Department \$4,000 towards the cost of the crossing closure. The Department will pay NSR 100% of the actual material cost for the crossing surface improvements, estimated to be \$25,000. The total estimated cost of the project is \$75,000.

Greensboro-Randolph Megasite Foundation, Inc. Randolph County 47606 This Project consists of completion of the planning and environmental documentation specific to transportation improvements needed for the Greensboro-Randolph Megasite. The Department's original participation was \$500,000. This Supplemental Agreement is to reimburse the County an additional \$500,000 of Contingency funds.

Division 9

Town of Landis Rowan County EB-5813 44665.1.1 This Project consists of greenway construction beginning at Ryder Avenue and finishing at Lake Corriher Wilderness Park in Landis. The Municipality is responsible for all aspects of the project. The Department shall reimburse 80% of eligible expenses from TAP funds up to \$136,000. The Municipality shall provide the 20% non-federal match (\$34,000) for the federal funds authorized and all costs that exceed the total available funding.

City of Salisbury Rowan County C-5603D 43713.1.4 43713.2.4 43713.3.4 This Project consists of construction of sidewalks along Old Concord Road from Ryan Street to Jake Alexander Blvd in Salisbury. The Municipality is responsible for all aspects of the project. The Department shall reimburse 80% of eligible expenses from CMAQ funds up to \$331,200. The Municipality shall provide the 20% non-federal match (\$82,800) for the federal funds authorized and all costs that exceed the total available funding.

City of Winston-Salem Forsyth County 44610 This Project consists of pedestrian improvements on Cloverdale Avenue and Miller Street in Winston-Salem. The Department's original participation was \$1,250,000.00. This Supplemental Agreement is to reimburse the Municipality an additional \$250,000 of Contingency funds.

Division 10

Town of Cornelius Mecklenburg County EB-5817 44837.1.1 44837.3.1 This Project consists of construction of the McDowell Creek Greenway. The Municipality is responsible for all phases of the project. This Supplemental agreement is to increase funding and to change the source of funding. The Department shall participate in an additional amount not to exceed \$200,000 (80%) in STBG-DA funds. The Municipality will be responsible for providing \$50,000 (20%) as their local match. With the additional funding, the Department will reimburse a total of \$1,400,000 in STBG-DA funding (in lieu of TAP-DA funding originally provided) and the Municipality shall provide a 20% match, or \$350,000, and all costs that exceed the total estimated cost of \$1,750,000.

City of Charlotte Mecklenburg County U-5803 44375.2.2 44375.3.2 This Project consists of intersection improvements on SR 2490 (Eastway Drive) and Shamrock Drive. The Municipality is responsible for all phases of the project. The Department shall participate in the actual costs of the project in an amount not to exceed \$8,000,000. Costs which exceed that amount shall be borne by the Municipality.

Division 12

Gaston County C-5606J 43728.1.10 43728.3.10 This Project consists of construction of sidewalk along Main Street/Lowell Spencer Mountain Road from existing sidewalk at the Lowell Municipal limits to the entrance of Poston Park. The County is responsible for all phases of the project. The Department shall reimburse 80% of approved eligible costs from CMAQ funds allocation, not to exceed \$334,379. The County will be responsible for providing the 20% (\$83,595) non-federal match for the CMAQ funds authorized and all costs that exceed the total estimated cost of \$417,974.

Gaston County C-5606K 43728.1.11 43728.2.7 43728.3.11 This Project consists of construction of a greenway from Rankin Lake Park along Long Creek to Gastonia Technology Parkway. The County is responsible for all phases of the project. The Department shall reimburse 80% of approved eligible costs from CMAQ funds allocation, not to exceed \$757,478. The County will be responsible for providing the 20% (\$189,369) non-federal match for the CMAQ funds authorized and all costs that exceed the total estimated cost of \$946,847.

Division 14

City of Brevard Transylvania County EB-5858 47314.3.1 This Project consists of the design and installation of a pedestrian bridge over the Davidson River approximately 0.1 miles north of NC 280/US 64. The Bridge will connect pedestrian foot traffic from US 276 to the greenway. The Department is responsible for all phases of the project. The Municipality shall provide a 20% (\$80,000) non-federal match to the federal funds authorized and all costs that exceed the total estimated cost of \$400,000.

Great Smoky Mountains Haywood County C-5612A 43734.4.3

This Project is for the implementation of the Transportation Choices Public Education Campaign. The Agency shall provide educational programs on the impacts of air pollution on park resources in the Great Smoky Mountains National Park and for limiting those impacts by making wiser transportation choices. The Department shall reimburse 80% of eligible expenses from CMAQ funds allocation not to exceed \$80,000. The Agency shall provide the 20% (\$20,000) non-federal match and all costs that exceed the total estimated cost.

SUMMARY: There are a total 22 of agreements for informational purposes only.

Division 2

Town of Beaufort Carteret County

This Agreement is to allow Disaster Related Debris Removal by the Municipality during a State of Disaster or Imminent Threat of Disaster and/or a State of Emergency. The Municipality shall remove and dispose of disaster related debris on all released State Routes. The Municipality shall apply directly to FEMA for reimbursement of eligible debris removal costs.

Division 3

Brunswick County

This Agreement is to allow Disaster Related Debris Removal by the County during a State of Disaster or Imminent Threat of Disaster and/or a State of Emergency. The County shall remove and dispose of disaster related debris on all released State Routes. The County shall apply directly to FEMA for reimbursement of eligible debris removal costs.

Circle K Stores, Inc. New Hanover County 36249.3840 This Project consists of review and inspection of a traffic signal upgrade at the intersection at US 117/NC 132 (North College Road) and SR 1322 (Bavarian Lane/Murrayville Road) [SIN 03-0303]. The Developer shall reimburse the Department 100% of the cost of the Department's review and inspection of the signals. The estimated reimbursement is \$2,000.

New Hanover County 36249.3837

This Project consists of review and inspection of a traffic signal installation at SR 1219 (South 17th Street) and Greenfield Street related to the New Hanover County Health and Human Services Development. The County shall reimburse the Department 100% of the cost of the Department's review and inspection of the signals. The estimated reimbursement is \$10,000.

S & H Centre Development Corporation New Hanover County 36249.3838 This Project consists of review and inspection of a traffic signal upgrade at US 17 Business (Market Street) and US 117/NC 132 (North College Road)/Gingerwood Drive. The Developer shall reimburse the Department 100% of the cost of the Department's review and inspection of the signals. The estimated reimbursement is \$5,000.

Division 4

North Carolina Department of Natural and Cultural Resources, Division of Parks and Recreation Halifax County 4.204211 This Project consists of the Installation of pipe culvert for crossline at Medoc Mountain State Park. The Department shall be responsible for all phases of the project. The Agency shall reimburse the Department 100% of the cost of the work performed by the Department. The estimated reimbursement from the Agency is \$7,400.11.

City of Wilson Wilson County U-5935 44795.1.1 44795.2.1 44795.3.1 This Project will construct multimodal facilities along the U.S. 301 corridor, including sidewalk gap filling on connecting streets, road resurfacing and rehabilitation, storm water improvements, improvements to major intersections. This Supplemental Agreement is to clarify that the Municipality shall comply with the reporting provisions included in the FHWA FY 2015 TIGER Grant No. 13 agreement approved on August 8, 2017.

Division 5

City of Durham Durham County EB-5514 50030.3.1 This Project consists of construction of bicycle lanes and/or sidewalk along University Drive (SR 2220, NC 751, SR 1183) from SR 2220 (Old Chapel Hill Road) to SR 1158 (W. Cornwallis Road) in Durham. The Municipality is responsible for all aspects of the project. This Supplemental Agreement is to extend the completion date of the Project. The Municipality shall complete the Project by 11/30/2020 in lieu of 6/30/2016.

Barnett Properties Wake County 36249.3729 This Project consists of the installation of a new traffic signal on Cary Parkway at proposed Tesoro Site Driveway/Parkway Office Court in Wake County. The Department will review the traffic signal plans and inspect the traffic signal installation. The Developer shall reimburse the Department 100% of the actual cost of all work performed by the Department. The estimated cost is \$5,000.

WM. G. Daniel & Associates, PA Wake County 36249.3824

This Project consists of one new traffic signal installation and upgrades to two existing traffic signals at 4 locations in Apex. The Department will review the traffic signal plans and inspect the traffic signal installation. The Developer shall reimburse the Department 100% of the actual cost of all work performed by the Department. The estimated cost is \$7,500.

Division 7

Town of Elon Alamance County R-5787B 44917.3.3 This Project consists of upgrading pedestrian curb ramps to current ADA Standards at the intersection of E. Haggard Avenue and O'Kelly Avenue in Elon. The Department is responsible for all phases of the work. Upon completion of the work, the Municipality shall reimburse the Department 20% of the actual cost of the work performed by the Department and shall be responsible for maintenance. The estimated reimbursement from the Municipality is \$6,000.

City of High Point Guilford County SS-4907BV 44950.3.1 This Project consists of safety improvements at the intersection of SR 1552 (Tarrant Road) and SR 1541 (Wendover Avenue) in High Point. The improvements will include the installation of new sidewalk and curb ramps along the western side of Tarrant Road. The Department shall be responsible for all phases of the work. The Municipality shall reimburse the Department a fixed cost of \$110,000 towards the cost of the project and shall be responsible for maintenance of the sidewalk.

Division 8

Village of Pinehurst Moore County ER-5600HG 46305.3.41 This Project consists of installing landscape plantings in the median of NC 211 from Page Road (SR 1208) to NC 5 in Pinehurst. The Department is responsible for all phases of the work. At the end of the one year establishment period, the Municipality shall assume responsibility for all maintenance and replacement of the landscape materials.

Division 9

University of North Carolina School of the Arts (UNCSA) Forsyth County 36249.3831 This Project consists of relocating UNCSA Directional Signs to the new interchange located at US 52/ Research Parkway in Winston-Salem. The existing signs located at US 52 Sprague/Waughtown Street will be removed. UNCSA shall reimburse the Department a fixed cost of \$7,972.36 for the work performed by the Department.

Division 10

ELM Partners2, LLC Cabarrus County 36249.3833 This Project consists of the modification of an existing traffic signal located at Kannapolis Parkway (SR 1430) and Glen Afton Boulevard. The Developer shall reimburse the Department 100% of the cost of the Department's review and inspection of the signal. The estimated reimbursement is \$5,000.

Division 12

Ingles Markets Iredell County I-3819 34192.2.GV4 This Project consists of the construction of a roundabout at US 21 and Free Nancy Avenue for access to the Ingles Development. The Department is responsible for all phases of the project. The Developer shall reimburse the Department 100% of all work performed by the Department. The estimated reimbursement is \$872,126.74.

Alcove-Langtree Properties Iredell County 36249.3835 This Project consists of a proposed traffic signal at SR 1206 (Alcove Road) and Foundation Court (Main Site Entrance) in Mooresville. The Developer shall reimburse the Department 100% of the cost of the Department's review and inspection of the signal. The estimated reimbursement is \$5,000.

Division 13

City of Asheville Buncombe County 47340.3.1 This Project consists of the installation of sidewalk and pedestrian crossings on US 74A (Fairview Road) from Bleachery Boulevard to NC 81 (Swannanoa River Road) in Asheville. The Department is responsible for all phases of the project. The Municipality shall reimburse the Department \$450,000 towards the costs of the project. The \$450,000 payment shall be considered the Municipality's full and complete payment for its participation in the project.

Town of Spindale Rutherford County ER-5600MB 46305.3.42

This Project consists of landscaping plantings at the interchange of US 74A and SR 2169 (Oakland Road) in the Town of Spindale. The Department shall develop the landscape design, prepare plans and site and install the plantings. At the end of the one year establishment period, the Municipality shall assume responsibility for all maintenance and replacement of the landscape materials.

Approval of Municipal Street System Changes

There will be no municipal street system changes presented for approval at the November 2017 Board meeting.

<u>No.</u>		<u>Enacted</u> Page No.
1	Preliminary Right of Way Plans	R-1 - R-3
2	Final Right of Way Plans	R-4 & R-5
3	Revisions of Final Right of Way Plans	R-6
4	Approval of Conveyance of Highway Right of Way Residues	R-7
5	Advance Acquisition of Highway Right of Way	R-8

Preliminary Right of Way Plans

The Preliminary Right of Way Plans for the below projects, including Secondary Roads and Industrial Access Roads, provide for the construction, design, drainage and control of access as shown on the respective plans.

Based upon the recommendations of the Manager of the Right of Way Unit, the Board finds that such rights of way as shown on these preliminary plans and drawings, including existing public dedicated right of way, are for a public use and are necessary for the construction of said projects.

The rights of way for the location, construction, relocation, and control of access of highways embraced in the below projects shall be as shown in detail on the preliminary right of ways plans and drawings for said projects on file in the Right of Way Branch in the Department of Transportation in Raleigh.

The Board finds such right of way acquisition to be necessary and hereby authorizes the Right of Way Branch to acquire right of way on the below projects either by negotiation or by condemnation through the Attorney General's Office.

(Division 2)

Lenoir County; I.D. No. W-5702F; Project No. 44848.2.6: NC 11 at SR 1161 (Albrittons Road/Greene Haynes Road)

Carteret County; I.D. No. W-5702E; Project No. 44848.2.5:

US 70 at SR 1124 (Howard Avenue/Nine Foot Road); US 70 at SR 1140 (Roberts Road) and US 70 at SR 1141 (Hibbs Road)

(Division 4)

Johnston County; I.D. No. W-5601DO; Project No. 50138.2.120:

US 301 between US 70 in Selma and US 70 Business (Market Street) in Smithfield

Wayne County; I.D. No. U-5958; Project No. 45871.2.1:

US 70 to SR 1719 (Beston Road)

Johnston County; I.D. No. R-5817; Project No. 46989.2.1:

NC 210 at SR 1162 (Black Creek Road)

Wayne County; I.D. No. U-5938; Project No. 45888.2.1:

US 13 (Berkeley Boulevard) at SR 1003 (New Hope Road)

Preliminary Right of Way Plans (continued)

(Division 4) (continued)

Johnston County; I.D. No. U-5999; Project No. 47117.2.1:

Kellie Drive from North of SR 1923 (Booker Dairy Road) to SR 1103 (Buffalo Road)

(Division 5)

Person County; I.D. No. B-5322; Project No. 46036.2.1:

Bridge No. 51 over Richland Creek on SR 1343

Person County; I.D. No. B-5145; Project No. 42306.2.1:

Bridge No. 50 over South Hyco Creek on SR 1343

Wake County; I.D. No. B-5161; Project No. 42336.2.1:

Bridge No. 362 over Beaver Creek on SR 1162

Wake County; I.D. No. U-5501B; Project No. 45488.2.4:

Cary – SR 1650 (Reedy Creek Road) from 600 feet South of Watts Pond Lane to NE Maynard Road

Granville County; I.D. No. B-5320; Project No. 46034.2.1:

Bridge No. 96 over the Tar River on SR 1139

Wake County; I.D. No. U-5618; Project No. 47167.2.1:

SR 3014 (Morrisville-Carpenter Road) from SR 1613 (Davis Drive) to West of NC 54 in Morrisville

(Division 6)

Cumberland County; I.D. No. W-5601FO; Project No. 50138.2.172:

SR 1831 (Baywood Road) at SR 1832 (Murphy Road)

Cumberland County; I.D. No. W-5706A; Project No. 44852.2.1:

SR 1400 (Cliffdale Road) from SR 1410 (Bunce Road) westward past Reilly Road to the existing grass median in Fayetteville

Robeson County; I.D. No. B-5706; Project No. 45660.2.1:

Bridge No. 135 over Aaron Swamp on SR 2519 (South Robeson Road)

(Division 7)

Guilford County; I.D. No. B-5351; Project No. 46065.2.1:

Bridge No. 237 and Bridge No. 242 over Deep River in High Point

Rockingham County; I.D. No. B-4805; Project No. 38575.2.1:

Bridge No. 9 over a prong of Troublesome Creek on SR 2406

Guilford County; I.D. No. B-4958; Project No. 40150.2.1:

Bridge No. 106 over Reedy Fork Creek on SR 2128

Preliminary Right of Way Plans (continued)

(Division 7) (continued)

Orange County; I.D. No. C-5179; Project No. 46240.2.1:

Construct a ten foot pathway, five foot sidewalks and four foot bike lane – North Estes Drive in Chapel Hill

(Division 8)

Lee County; I.D. No. R-3830; Project No. 38887.2.3:

NC 42 from US 421 to SR 1579 (Broadway Road) in Sanford and SR 1579 from NC 42 to SR 1538 (East Harrington Avenue)

Hoke County; I.D. No. W-5708D; Project No. 44854.2.4:

US 401 Business at SR 1406 (Rockfish Road)

Moore County; I.D. No. W-5708B; Project No. 44854.2.2:

NC 2 (Midland Road) at US 1 and NC 2 (Midland Road) at NC 22 (Central Drive)

Hoke County; I.D. No. W-5708A; Project No. 44854.2.1:

US 15-501 at SR 1225 (Ashemont Road)

(Division 10)

Cabarrus County; I.D. No. W-5710C; Project No. 44856.2.3:

SR 2180 (Lane Street/Jackson Park Road) from US Main Street to a point just West of I-85 Ramps

Mecklenburg County; I.D. No. C-5538; Project No. 51008.2.1:

Charlotte – intersection of Tuckaseegee/Berryhill/Thrift Roads

Stanly County; I.D. No. W-5710D; Project No. 44856.2.4:

NC 24/27 and SR 1258 (Newt Road) near Albemarle

(Division 12)

Cleveland County; I.D. No. U-5775; Project No. 50186.2.1:

US 74 Business (Marion Street) at intersection of US 74 Business (Marion Street) and NC 150 (Cherryville Road)

(Division 13)

Madison County; I.D. No. R-5779; Project No. 44834.2.1:

Extend SR 1631 (Crossroads Parkway) to SR 1632 in Madison County

Final Right of Way Plans

Right of way acquisition in accordance with the preliminary right of way plans on file in the Right of Way Unit has been determined to be necessary for public use and was authorized by the Board. Certain changes in the right of way have necessitated alteration of the preliminary right of way plans. Final plans have been prepared and provide for the construction, design, drainage and control of access for these projects. The Board finds that such rights of way and control of access as shown on the final plans are for a public use and are necessary for construction. The sections of roads which were shown on the preliminary plans as sections of roads to be abandoned are hereby abandoned and removed from the State Highway System for Maintenance upon the completion and acceptance of the project.

The rights of way for the location, design and construction of highways embraced in the following projects shall be as shown in detail on the final plans for said projects as follows:

(Division 3)

Project No. 46018.2.1; Pender County; I.D. No. B-5304:

Grading, drainage, paving and structure on Bridge No. 203 over Sill's Creek on SR 1324 (Crooked Run Road) with the right of way indicated upon the final plans for said project.

(Division 7)

Project No. 46061.2.1; Alamance County; I.D. No. B-5347:

Grading, drainage, paving and culvert on Bridge No. 170 over a prong of Big Alamance Creek on SR 1145 (Pond Road) with the right of way indicated upon the final plans for said project.

(Division 10)

Project No. 32638.2.2; Anson County; I.D. No. B-2506:

Structure, grading, paving and drainage on Bridge No. 08 over Brown Creek on SR 1627 with the right of way indicated upon the final plans for said project.

(Division 11)

Project No. 39897.2.1; Wilkes County; I.D. No. B-4978:

Grading, drainage, paving and structure on Bridge No. 28 over South Prong Lewis Fork Creek on SR 1154 (Mt. Pleasant Road) with the right of way indicated upon the final plans for said project.

Final Right of Way Plans (continued)

(Division 14)

Project No. 38376.2.1; Cherokee County; I.D. No. B-4462:

Drainage, grading, paving and structure on Bridge No. 148 over Persimmon Creek on SR 1127 (Bell Hill Road) with the right of way indicated upon the final plans for said project.

Revisions of the Final Right of Way Plans

Right of way acquisition in accordance with the final right of way plans for the following projects has been determined to be necessary and authorized by the Board. Plans are on file at the Office of the Secretary to the Board of Transportation as an addendum to the minutes of the meetings hereinafter indicated.

Certain changes in right of way, construction and drainage easements, and control of access have been necessitated by alterations in the construction plans of these projects.

Amended plan sheets for these projects have been prepared which provide for changes of certain right of way areas, construction and drainage easements and control of access.

The Board finds that the revised areas of right of way, construction and drainage easements and control of access, as shown on the amended plan sheets hereinafter set out, are for a public purpose and are necessary for the construction of projects.

The right of way, construction and drainage easements and control of access are hereby revised as shown on the plan sheets incorporated herein as an addendum, said projects, date of original final approval, and revised right of way, easements and access being as follows:

(Division 6)

Project No. 36492.2.2; I.D. No. U-4444B; Cumberland County:

Final Right of Way plans approved on the minutes of the November 8, 2012 Board of Transportation Meeting. Revised additional right of way, easements or control of access shown on plan sheet(s) 9A as presented at the November 2, 2017 Board of Transportation Meeting.

Approval of conveyance of Highway Right of Way Residues

It is hereby resolved, based upon the recommendation of the Manager of the Right of Way Unit, that the following highway right of way conveyances are approved:

(Division 10)

Project 8.U671607, Parcel 011, Valleydale Road and Fred D. Alexander Blvd Mecklenburg County

Conveyance of an approximate 1.890-acre residue area to the City of Charlotte, for \$66,500.00.

Advance Acquisition of Highway Right of Way

Upon recommendation of the Manager of the Right of Way Unit, the Board has been requested to authorize the acquisition of the following properties through negotiation or condemnation for purposes of highway construction in order to prevent undue hardship on property owners or to protect the right of way corridor from development prior to regular project approval. The Board finds such acquisitions to be necessary, and hereby authorizes the Right of Way Branch to acquire said properties either by negotiation or by condemnation through the Office of the Attorney General.

Division 2

Property of Mary W. Faircloth I.D. No. R-2511, Parcel #900 WBS 35494.2.1, F. A. Project N/A, County of Beaufort

Division 8

Property of Cedar Grove Baptist Church I.D. No. R-5726, Parcel 900 WBS 50218.2.1, F. A. Project N/A, County of Moore

Division 9

Property of Thim Setty a/w Shanta I.D. No. R-2247CB, Parcel #900, WBS 34409.2.7, F. A. Project N/A, County of Forsyth

Property of Jeffrey Wall a/w Amber I.D. No. U-5760, Parcel #900, WBS 46381.2.1, F. A. Project N/A, County of Forsyth

Property of Stephania Lovette Bell I.D. No. U-2579AB, Parcel #925, WBS 34839.2.4, F. A. Project N/A, County of Forsyth

APPROVAL OF ADVANCE ACQUISITION FOR HIGHWAY RIGHT OF WAY 5 PROJECT(S) \$0.00

TOTAL: \$66,500.00

October 17, 2017

MEMORANDUM TO: Board of Transportation

FROM: Transportation Planning Division

SUBJECT: Submission of an Amendment to the Burlington-Graham MPO

Comprehensive Transportation Plan for Mutual Adoption by the Board of

Transportation

The Transportation Planning Division has worked cooperatively with the Burlington-Graham MPO on an amendment to their Comprehensive Transportation Plan (CTP). The plan was adopted by the Burlington-Graham MPO on October 17, 2017.

The plan is based on an analysis of existing and projected travel and land use, public involvement and field investigations of recommended improvements. It is located on the internet at:

https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study_id=Burlington-Graham

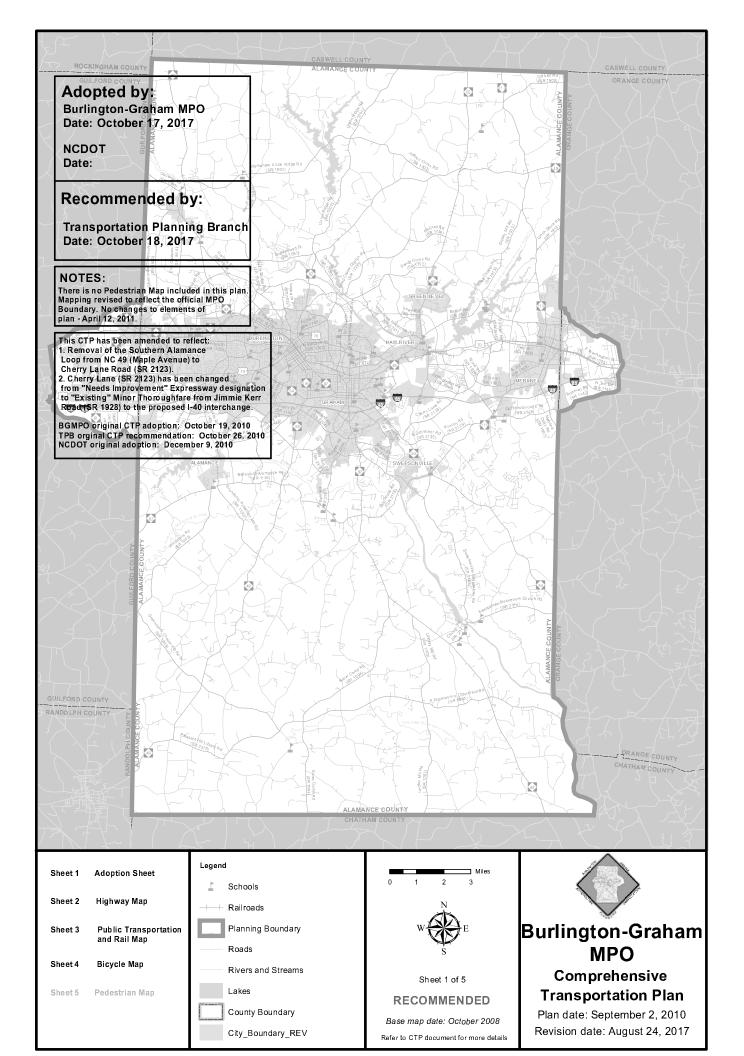
The Transportation Planning Division recommends the mutual adoption of the amended Burlington-Graham MPO Comprehensive Transportation Plan as shown on the attached map, with a recommendation date of October 18, 2017.

Sincerely,

Jamal Alavi, P.E.

Director, Transportation Planning Division

Attachment



October 17, 2017

MEMORANDUM TO: Board of Transportation

FROM: Transportation Planning Division

SUBJECT:

Submission of the Wilkes County Comprehensive Transportation Plan for

Mutual Adoption by the Board of Transportation

The Transportation Planning Division has worked cooperatively with Wilkes County on the development of a Comprehensive Transportation Plan (CTP). The plan was adopted by Wilkes County on September 19, 2017, the Town of Wilkesboro on September 11, 2017, the Town of North Wilkesboro on September 5, 2017, and the Town of Ronda on September 12, 2017. It is pending endorsement by the High Country RPO in December 2017.

The plan is based on an analysis of existing and projected travel and land use, public involvement and field investigations of recommended improvements. It is located on the web at:

https://connect.ncdot.gov/projects/planning/Pages/CTP-Details.aspx?study_id=Wilkes County

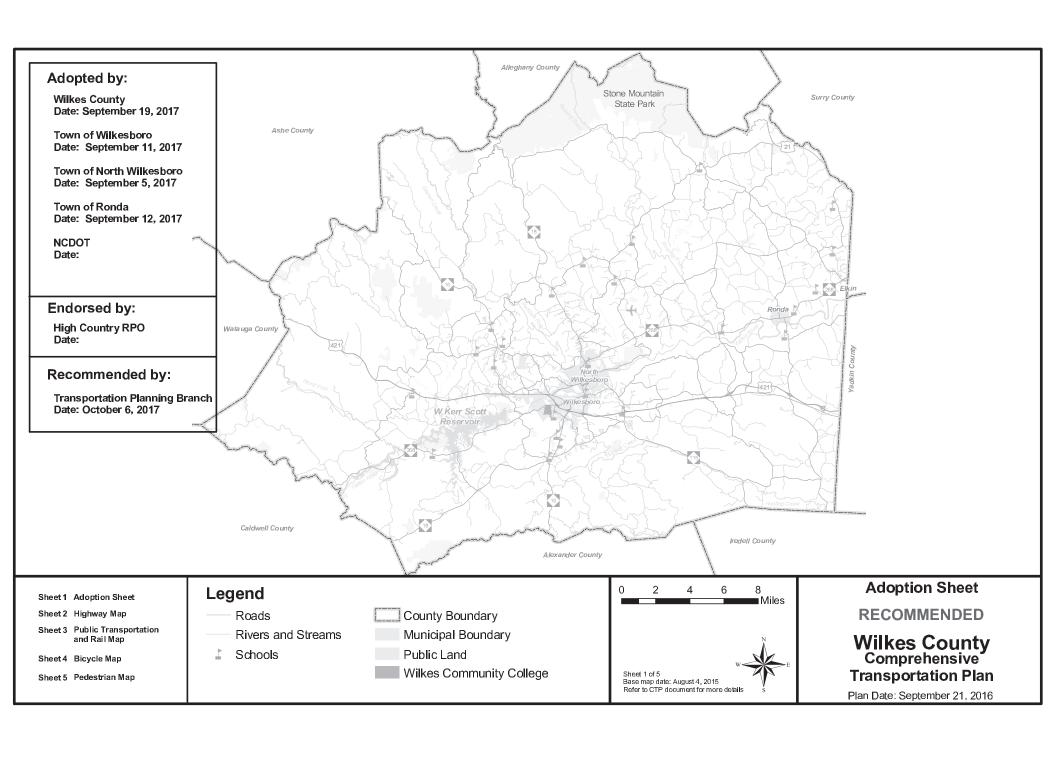
The Transportation Planning Division recommends the mutual adoption of the Wilkes County Comprehensive Transportation Plan as shown on the attached map, with a recommendation date of October 6, 2017.

Sincerely,

Jamal Alavi, P.E.

Director, Transportation Planning Division

Attachment



NORTH CAROLINA BOARD OF TRANSPORTATION

There will be no Item V submitted to the Board for approval at the November 2017 Board meeting.

November 2, 2017 Page 1 of 1



RESOLUTION FOR L. TODD COOK

WHEREAS, L. Todd Cook was a Davidson County Deputy Sheriff who was killed in the line of duty on January 27, 2000; and

WHEREAS, it is the desire of the Davidson County community and the family of Deputy Cook to honor his sacrifice and service by naming a bridge in his honor; and

WHEREAS, this effort to name a bridge in honor of Deputy Cook has his family's full support; and

WHEREAS, it is the desire of the family and the community that the bridge named in his honor be in close proximity of the newly erected Sherriff's Office as a remembrance to Deputy Cook and reminder to all law enforcement to "always have your guard up and be ever vigilant"; and

WHEREAS, the Abbots Creek Bridge #123, on U.S. Hwy 64 is already constructed and located less than a mile from the Sherriff's Office; and

WHEREAS, the Abbots Creek Bridge #123, on U.S. Hwy 64 is a prominent artery through the county and is not formally named; and

WHEREAS, the Davidson County community strongly supports the naming of this bridge as the Deputy Todd Cook Bridge; and

WHEREAS, the Davidson County Board of Commissioners passed a resolution by unanimous decision as part of the application process as an illustration of public support; and

WHEREAS, the Davidson County Board of Commissioners respectfully requested that the North Carolina Board of Transportation name Abbots Creek Bridge #123, on U.S. Hwy 64 as the Deputy Todd Cook Bridge.

NOW, THEREFORE, BE IT RESOLVED:

That the North Carolina Board of Transportation names the Abbots Creek Bridge #123 on U.S. Hwy 64 as the *Deputy Todd Cook Bridge*.

That appropriate signs will be erected at a suitable time.

Adopted this the 2nd day of November 2017 by the North Carolina Board of Transportation.

muchael 5. to

Secretary of Transportation





















Financial Update

As of September 2017

David Tyeryar, Chief Financial Officer

November 1, 2017

Financial Update SFYTD 2018 as compared SFYTD 2017

	Moi	nth ove	r Montl	<u> 1</u>		Year to	o Dat	e		
Dollars in Millions	Septem	ber '17	Septer	mber '16	Septe	ember '17	Sept	ember '16	\$ C	hange
Collections	\$	442	\$	540	\$	1,356	\$	1,455	\$	(100)
Expenditures		523		554		1,394		1,406		(12)
Net Change	\$	(81)	\$	(14)	\$	(39)	\$	49	\$	(88)
					Septe	ember '17	Sept	ember '16		
Cash Balances:							-			
Trust Fund					\$	1,722	\$	1,448		
Highway Fund*						325		296		
Totals					\$	2,047	\$	1,744		

^{*}Excludes bond proceeds held by Trustee & GARVEE Debt Service Reserve

Revenue Summary September 2017

(\$ in Millions)

					<u> </u>			Year Ov	er Yea	ar		Ш	SFY Bu	dget
	_	tember 2017	_	tember 2016		17-2018 Actual		16-2017 Actual		\$	%	1	Annual Budget	%
State & Federal Collections:														
Highway Fund *	\$	191.1	\$	202.0	\$	552.2	\$	564.2	\$	(12.0)	-2%	1	2,191.0	25%
Highway Trust Fund *		129.9		132.3		387.8		384.5		3.3	1%		1,547.1	25%
Total State Funds		321.0		334.3		940.0		948.7		(8.7)	-1%	\$	3,738.1	25%
Federal Funds/Participation **		106.7		154.8	l	332.7		365.5		(32.8)	-9%	1	1,044.9	32%
GARVEE Reimbusement/NCTA		14.4		50.7	匚	82.9		141.0		(58.1)	_	\perp	N/A	N/A
Total	\$	442.1	\$	539.9	\$	1,355.6	\$	1,455.2	\$	(99.6)	-7%	\$	4,783.0	28%
					_							_		
					ㄴ			Year Ov	er Yea	ar		\vdash	SFY Bu	dget
	Sep	tember	Sep	tember	20	17-2018	20:	16-2017				1 -	Annual	
* Memo		2017		2016		Actual		Actual		\$	%		Budget	%
Highway Fund & Trust Fund Details														
Motor Fuel Taxes	\$	186.3	\$	177.7	\$	514.5	\$	501.4	\$	13.2	3%	\$	1,961.8	26%
Highway Use Tax		64.8		68.6	l	200.4		200.3		0.1	0%	1	820.8	24%
DMV/Other Revenue		67.7		86.3	l	220.6		243.8		(23.2)	-10%	1	939.8	23%
Investment Income		2.2		1.8	$oxed{oxed}$	4.5		3.3		1.2		\perp	15.6	N/A
Total	Ś	321.0	\$	334.3	\$	940.0	Ś	948.7	\$	(8.7)	-1%	\$	3,738.1	25%

^{**}Estimated Federal Revenue including the FAST ACT is \$1,160 million

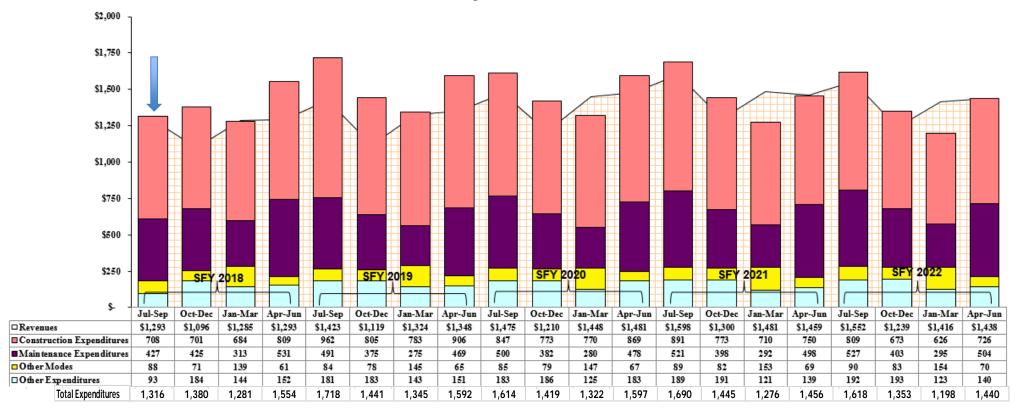
Expenditure Summary September 2017 (\$ in millions)

						Year Over Year SFY Annual Bu			Budget				
	Sept	ember-17	Sep	tember-16	1	17-2018 Actual		6-2017 ctual		\$	%	2017-2018 Budget	%
State & Federal Funded Programs:													
Construction	\$	228.3	\$	216.0	\$	655.1	\$	671.8	\$	(16.7)	-2%	\$ 2,319.7	28%
Maintenance		137.3		128.0		410.9		380.4		30.5	8%	1,353.5	30%
Public Transportation		7.6		14.4		31.0		27.2		3.8	14%	131.8	24%
Other Modal/Other Programs		15.8		17.7		35.9		43.2		(7.3)	-17%	246.2	15%
Administration		21.4		24.2		(4.9)		4.2		(9.1)	NA	322.7	-2%
Municipal Aid		73.8		73.6		73.7		73.6		0.2	0%	147.5	50%
Transfers to Other Agencies		0.3		3.8		13.9		11.1		2.8	NA	61.0	23%
Total Expenditures	\$	484.5	\$	477.6	\$:	1,215.6	\$1,	,211.4	\$	4.2	0%	\$ 4,582.4	27%
GARVEE/NCTA/Special Iniatives	Ś	38.4	\$	76.7	\$	178.7	\$	195.0	Ś	(16.3)		200.6	
OANVEL/NOTA/Special Illiatives	ş	30.4	ş	70.7	Ş	1/0./	Ş	133.0	Ş	(10.5)		200.0	
Total	\$	522.9	\$	554.3	\$:	1,394.3	\$1,	,406.4	\$	(12.1)		4,783.0	

Revenue and Expenditure Variances as of September 2017

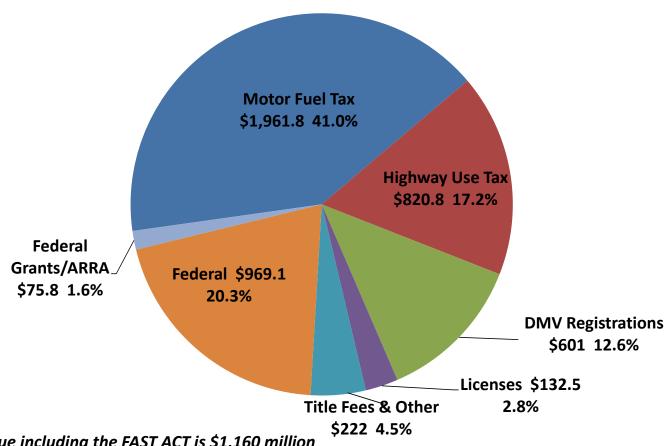
EXPENDITURES		
State & Federal Funded		
Programs:	Variance >5%	Reason for Variance
Other Modal/Other Programs	<10%>	Aviation expenditures are down due to
		the non disbursement of new funding
		provided for capital improvements to
		commercial airports.
Administration	<27%>	Admin is down due to the IT
		carryforward. FY17 IT carryforward was
		\$67.8M.

60 Month Revenue & Expenditure Projections as of September 2017



NCDOT Revenue Sources SFY2018 - \$4.8 Billion

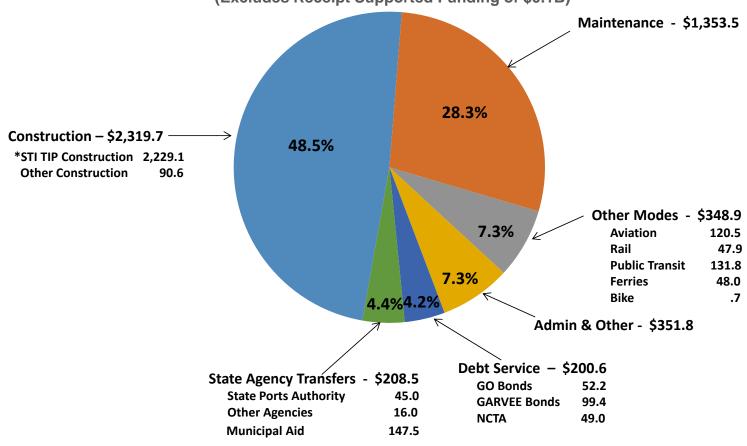
(Excludes Receipt Supported Funding of \$0.1B)



*Estimated Federal Revenue including the FAST ACT is \$1,160 million

Uses of 2017-18 NCDOT Appropriations Total Funding = \$4.8 Billion

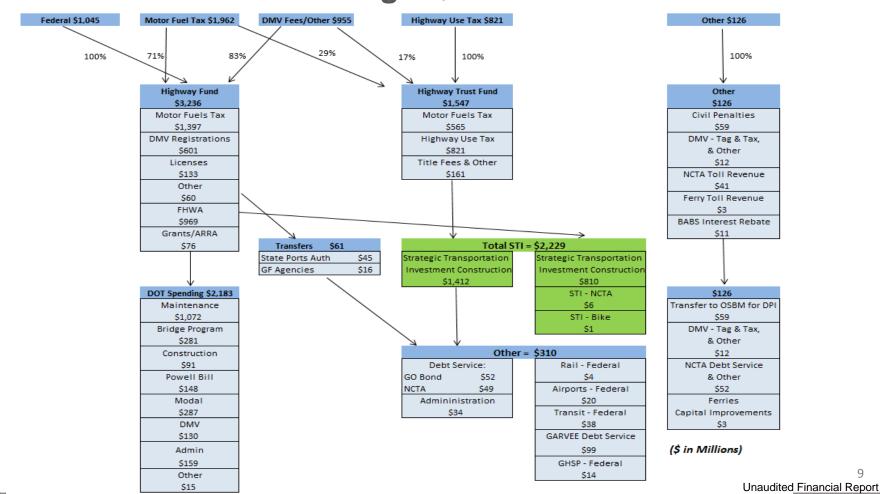
(Excludes Receipt Supported Funding of \$0.1B)



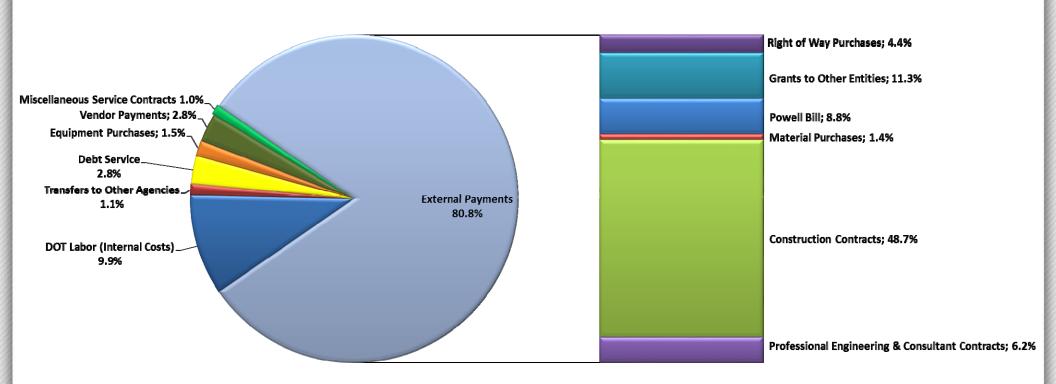
(\$ in millions)

Unaudited Financial Report

SFY2018 NCDOT Sources and Uses Total Funding = \$4.9 Billion



NCDOT Expenditures SFY2018 as of September 30, 2017





North Carolina Department of Transportation Transportation Program Management Unit - Value Management Innovative Technologies and Products Awareness Report November 1, 2017

PRODUCT INNOVATION – ACOUSTASHIELD

Carsonite's AcoustaShieldTM Sound Barrier System is a noise abatement product for use along transportation corridors. NCDOT considers noise abatement when traffic noise impacts are identified on projects that build on new location, add new lanes, add interchanges, or re-align a road. Feasible and reasonable (and in some cases, practicable) abatement, usually in the form of noise walls, is then incorporated into project design. Noise walls help reduce the noise levels experienced by homes, schools, parks, and other noise-sensitive land uses adjacent to a highway project. This product is a lightweight composite material that can be stacked and installed by a small crew without heavy lifting equipment. The planks stay in place through a tongue-and-groove system and can be cut in the field. AcoustaShieldTM product's lightweight design can facilitate its use on bridges. These innovative characteristics save the Department time and money.



Installed along a transportation corridor.

This sound barrier can be customized to fit the sound absorption needs by using unfilled or filled planks with fiberglass insulation. When planks include a fiberglass screen, the screen prevents insects from nesting inside the plank and causing degradation. The composite material is made of continuous glass fiber reinforcement and is resistant to the elements, UV rays, and freeze-thaw cycles. The unfilled version of this product is accepted for use as a field trial and is being reviewed for use as a part of the Greensboro Urban Loop project in Guilford County.

For more information visit: http://www.carsonite.com/products/sound-barriers.

TECHNOLOGY HIGHLIGHT - ANYRISK

ANYRISK is a new safety program that was developed by NCDOT to improve worker safety. Any NCDOT employee or contractor can anonymously report on a hazard, near miss, or at-risk behavior. The submitted information can be done from a computer, tablet, or smart phone and can be called in through the 24-hour hotline.

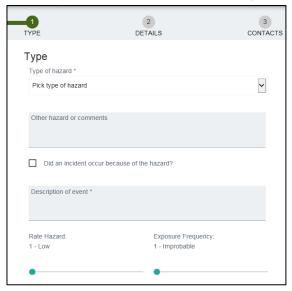


Image of first page of submission.

Once the ticket has been submitted, it is immediately sent to the Safety Supervisor for that Division or Business Unit. The Safety Supervisor can then share the ticket with the more immediate staff closest to the issue and the problem can be solved in a quick and decisive way. ANYRISK is NCDOT's first true offline-capable mobile responsive tool. ANYRISK submitters in rural, low connectivity, areas won't have to worry about losing their information when submitting forms – ANYRISK will hold it until the user gets enough signal to send it in. This tool does not replace workplace injury reporting – it is an enhancement to the Department's safety program. The data collected from the ANYRISK program will inform the Department where hazards are continuously present in terms of geographical area, type of work, time of day, and type of injury. By collecting this information, the Department can make positive changes that may prevent these hazards from reoccurring which will improve the safety in the Department while also saving time and money. It is projected to have a Return on Investment of 5 (five) years. It is being rolled-out to all employees this month, November 2017.

This innovation was developed internally within the Department by NCDOT employees, spearheaded by Rob Barfield and Jarvis Gray. Visit https://connect.ncdot.gov/anyrisk/Pages/default.aspx.



ECONOMIC DEVELOPMENT AND INTERGOVERNMENTAL RELATIONS MEETING MINUTES

Hugh Overholt, Andy Perkins, Cullie Tarleton,, John Pope, Terry Hutchens, Tracy Dodson

DATE:	10/4/17	TIME:	3:40 pm	LOCATION:	150
MEETING (CALLED BY		Chairwoman Valerie J	ordan	

AGENDA TOPICS

BOARD ATTENDEES

MEETING CALL TO ORDER AND APPROV.	AL OF SEPTEMBER 6TH MINUTES – CHAIRWOMAN VALERIE JORDAN			
DISCUSSION SUMMARY	Chairwoman Jordan called the committee to order, presented roll call, and asked for a motion to approve the minutes as distributed.			
ACTIONS TAKEN	A motion to approve the September 6 th 2017 EDIR committee meeting minutes as distributed was made by Ms. Jordan, motion was moved and seconded. The committee approved unanimously.			
2. OVERVIEW OF GLOBAL TRANSPARK (GT	P) – Allen Thomas, Global Transpark Director			
DISCUSSION SUMMARY	Mr. Thomas gave an update highlighting GTP's mission and how their division operates by air, land and sea. He discussed their participation with the Rail Division and discussed the Transload distribution Center to be built this year that will assist with getting supplies delivered quicker and assist with retention.			
ACTIONS TAKEN	No action taken.			

3. OVERVIEW OF ECONOMIC DEVELOPMEN	T PARTNERSHIP OF NORTH CAROLINA (EDPNC) – JOHN LOYACK, GLOBAL BUSINESS SERVICES VP
DISCUSSION SUMMARY	Mr. Loyack discussed how EDPNC connects with NCDOT. He highlighted their five focus areas of the business. EDPNC collaborates with NCDOT, NCDEQ, NCCCS, NC commerce and NC Works Regional Operations. He highlighted the regional managers assigned to each prosperity zone and mentioned how DOT has impacted some of those companies. He highlighted two recent project expansions. One expansion was Revlon in Granville County and Fibertex personal Care in Randolph County, which is a Danish company that moved to the US because of our transportation logistics. Mr. Loyack gave an overview showing the company's performance and how well they are doing because of the collaboration with DOT partners.
ACTIONS TAKEN	No action taken.

4. OVERVIEW OF THE NC DEPARTMENT OF	COMMERCE - WILLIAM MILLER, DEPUTY SECRETARY
DISCUSSION SUMMARY	Mr. Miller gave an update on three departments that report directly to the Department of Commerce (Employment Security, Economic Development, Workforce Solutions) Together they work to create better jobs and get better skills and assistance with placing citizens in better paying jobs. Their upcoming projects include working with grade school and college students to explore what their interests are in the workforce and develop a strategy that would assist them with finding employment when they are ready. Their two main priorities are education and infrastructure. There has been collaboration in the past with DOT and the Transportation Secretary on infrastructure needs and job recreation.
ACTIONS TAKEN	No action taken



ECONOMIC DEVELOPMENT AND INTERGOVERNMENTAL RELATIONS MEETING MINUTES

5. FACILITATED DISCUSSION - CHAIR VAL	ERIE JORDAN, VICE CHAIR HUGH OVERHOLT AND CHIEF DEPUTY SECRETARY DAVID HOWARD
DISCUSSION SUMMARY	 Hugh Overholt expressed having the GTP and EDPNC's presentation presented before the full board. Hugh Overholt mentioned that there is need for a cultural change and better jobs. This should be done in consideration of what is needed in the industry. William Miller expressed that some of their challenges come from not having enough natural gas that will allow them to do manufacturing in certain areas. Allen Thomas suggested inviting students to the GTP site to see how they operate as a way to assist with preparation for future jobs. Mr. Thomas also suggested connecting with the military on job assistance as a way of keeping jobs in NC. Allen Thomas mentioned that DOT must work on having a reputation of moving quickly in emergency cases. Cullie Tarleton mentioned that NC has the first Community College System in the Country that assists with creating specific training to help with job placement. John Pope mentioned that there is a need for skilled people in trades. Tracy Dodson asked how often is inadequate infrastructure a part of the process and how difficult is it to overcome. John Loyack suggested having a full needs assessment of the type of infrastructure is needed.
ACTIONS TAKEN	No action taken

Adjourned 5:00



ECONOMIC DEVELOPMENT AND INTERGOVERNMENTAL RELATIONS (EDIR) AGENDA

BOARD OF TRANSPORTATION NOVEMBER 1, 2017

TIME: 3:40

LOCATION: Room 150

Торіс	PRESENTER	Тіме
Call to Order Roll Call Declaration of Quorum Approval of October 4, 2017 Meeting Minutes	Chair, Valerie Jordan	3:40-3:45
Introduction of panel discussion – The Future of Advanced Technology and Transportation	Chief Deputy Secretary, David Howard	3:45-3:50
Turnpike Authority Presentation	Beau Memory, Executive Director	3:50-4:20
SAS Presentation	Eric Hunley, Senior Manager	4:20-4:50
Comments and Wrap up	Chair, Valerie Jordan	4:50-4:55
Adjourn	Chair, Valerie Jordan	4:55-5:00

EDIR AGENDA November 1, 2017



SAS Overview

November 1, 2017

Eric Hunley



SAS History

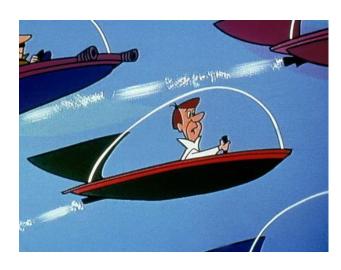


In the beginning

- USDA Research Grants (1966)
- National Institute of Heath (analyze agriculture data)
- Statistical Analysis Software
- Incorporated in 1976

Today and into the Future

- Data for Good
- Internet of Things
- Event Stream Processing
- Smart Cities/Counties/States
- The SAS Platform









Customers in 149 countries at 83,000 sites

35% MARKETSHARE



SAS Government Customers
All 50 US state governments
90%+ of the US federal agencies

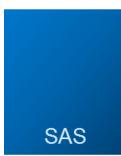
SAS Advanced Analytics Lab for Government

OVEY 400 high level SAS experts



Reinvestment :: of 2016 REVENUE





12.5%

Industry Average



Focus on Education









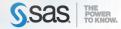




NEW ERA OF INFORMATION PROCESSING

INFORMATION MOVE ANALYSIS TO DATA SOURCE

ANALYZE BEFORE DATA IS STORED - KEEP WHAT IS RELEVANT STREAMING DATA













Connected Car/ Transportation





Insurance











Retail



Building Management



Manufacturing



Intelligence for the Connected world

Connected Car



Predict issues in the fleet before failures occur and provide new value added services. SAS for IoT Analytics uses data vehicle sensors and customer information to develop and deploy models that provide proactive information leading to better customer service.



Connected Customer



Provide your customers with the right content and offers in real time. SAS for IoT Analytics leverages data from connected devices to predict customer preferences, in real time. The result is timely suggestions and offers customers are more likely to accept.

> Global Telecommunications Company

Connected Health



Improve patient care and drive better patient outcomes. SAS for IoT Analytics allows health care organizations to leverage electronic medical recorders with health sensors to establish optimal care and monitor conditions in real – time to minimize risks.



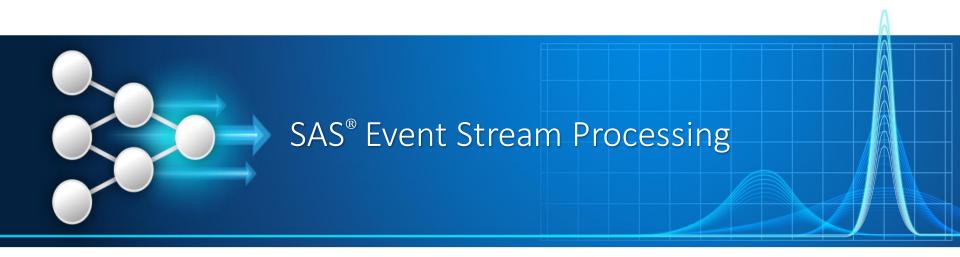
Connected Factory



Identifies hidden
patterns that predict
failures improving
production yield and
product quality. SAS for
IoT Analytics leverages
equipment sensor and
tag data to develop and
deploy early warning
models.









SAS® EVENT STREAM PROCESSING

KEY TAKEAWAYS

Fast — Millions of events/second – sub-millisecond latency on commodity hardware

Agile – From lightweight embedded technology to cloud distributed architecture

Flexible – Flow Based *programing* Modeling for fast adaptation to change

High End Analytics — SAS® most advanced analytics and machine learning

Analytics at the Edge – Brings analytics at the closest of the event source.

Enterprise Class – Seamless integration with existing IT architecture and open source

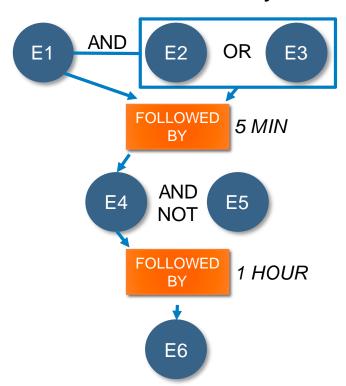


SAS® EVENT STREAM PROCESSING

DESIGN COMPONENTS PATTERN WINDOW



"Detect when event A is followed by event B and not Event C in a 3min time frame"



Build complex network of events using temporal conditions Multiple events in can produce one event out

	Г:		+
All of these ▼ Time limit:	18000	Seconds ▼ ②	
All of these	nput window:	Source 🔻	
Any of these			
Not this			
Is this		▼ ▼ 'USD'	▼ x=y/z
In the following order, all of these		▼ > ▼ 10000	▼ XzŽ
Does not occur in this sequence	nput window:	Source 🔻	
Where all of these:			
broker		▼ ▼ 'WallStreetWonder'	▼ №

SAS® EVENT STREAM PROCESSING

SAMPLE USE CASES



- Clickstream analysis
- Optimize user experience
- Real-time marketing and advertising



- Real-time transaction analysis
- User behavior detection
- Customer profile correlation
- Real-time alerts and case management



- Real-time sensors survey
- Real-time anomaly detection
- Critical asset monitoring
- Activity triggers & instruction



- Real-time transaction analysis
- User behavior detection
- Customer profile correlation
- Real-time alerts and case management



- Real-time governed operational decisions
- Real-time tactical directives to systems and employees



Capital Markets

- Continuous calculations & risk monitoring
- Reduce time from trading to reporting



Real-time contextual marketing

BUSINESS ISSUE

- Needed a solution for real-time campaign management (anytime, anywhere market challenges)
- Current process was extremely manual and resulted in high-latency reporting
- Lacked advanced analytical capabilities and was limited in terms of real-time capabilities

RESULTS

- Contextual real-time analysis of the streaming call data records (CDRs) - 20,000+ requests per second
- The right offer at the right time with the right channel
- Enhanced the accuracy of predictions and decisions





Predictive Asset maintenance

BUSINESS CHALLENGE

- Predict maintenance needs of individual trucks before failures occur
- Proactively service trucks at opportune time
- Provide new service offering with high fleet SLA

SOLUTION

- Now monitoring data from 60+ sensors / truck
- Integrated data with product details, warranty claims, and related data sources
- Analytic models predict the likelihood of specific failures within 30 days with 90% accuracy
- Better root cause insight led to higher productivity









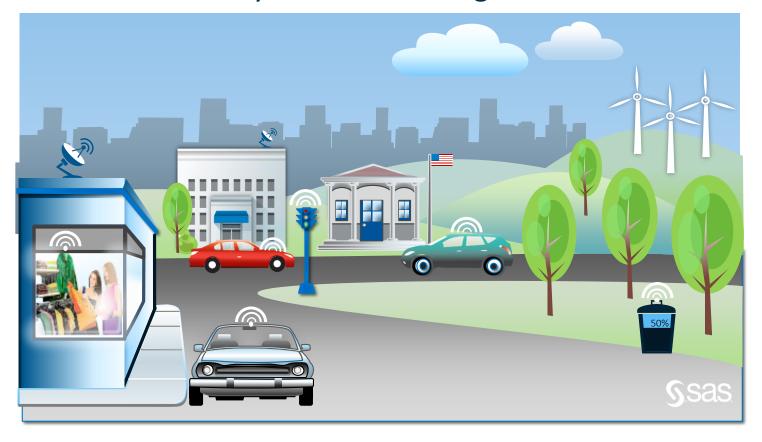
SMART Initiatives

Technology Trends





Sensors Everywhere – Leverage or not???

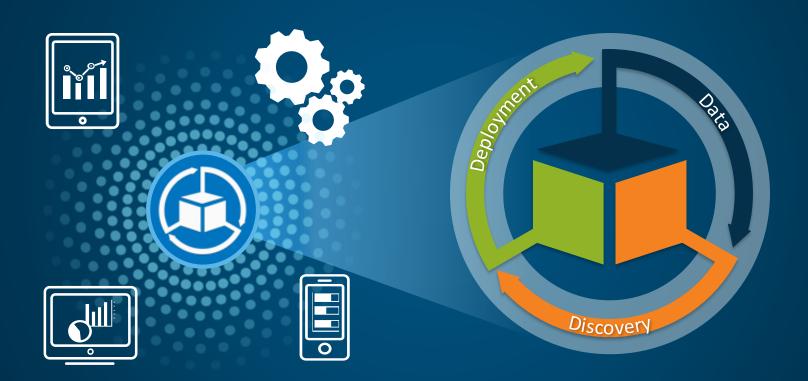








The SAS Platform

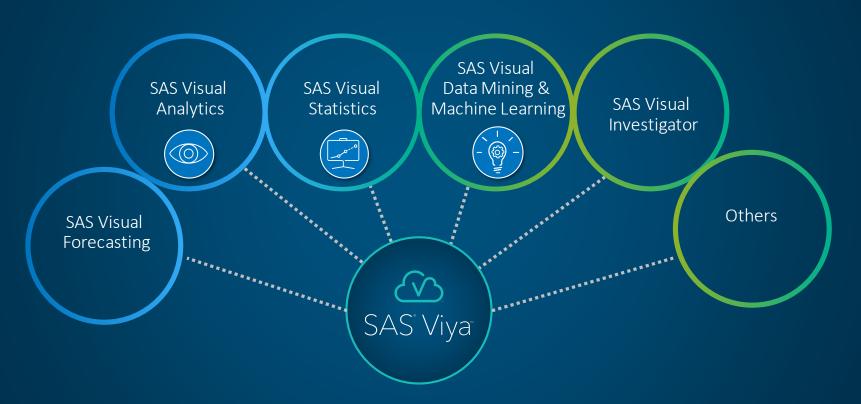




Inside the SAS Platform



SAS[®] Viya[®] Product Suite





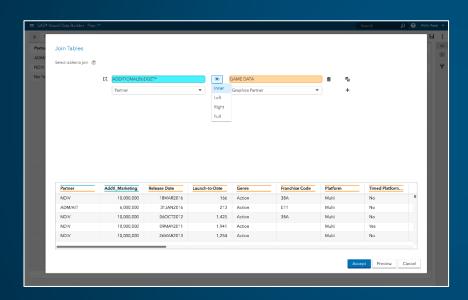
SAS[®] Visual Analytics







Data Preparation

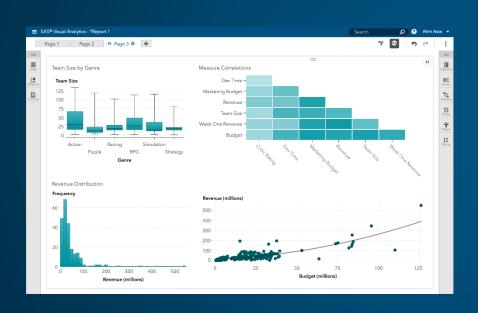


- Access to different data sources
- Table and column profiling
- Filter data and column transformations
- Visual joins





Visual Exploration

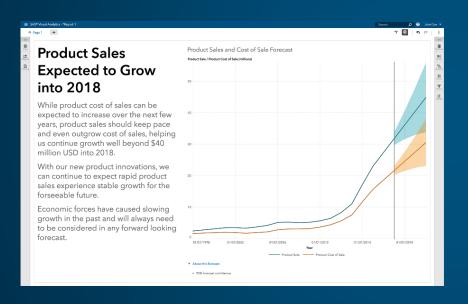


- Discover relationships, trends, outliers
- Smart autocharting
- Analytics driven visualizations
- Publish any visualization as a report object.





Self-Service Analytics

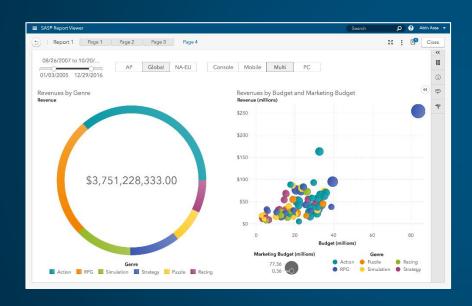


- Descriptive statistics
- Forecasting and scenario analysis
- Decision trees
- Text analytics





Interactive Reporting

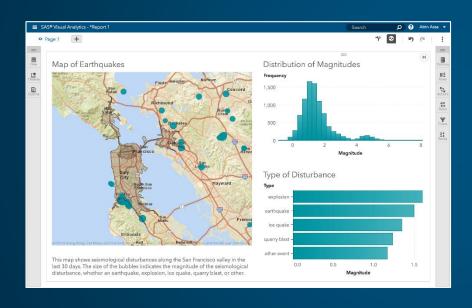


- Responsive and precise layouts
- Dashboard creation
- Filter and prompt controls, report formatting for user interactivity
- Distribute and share





Location Analytics



- Geographical Maps
- Drive-time analysis
- Drive-distance analysis







SAS in Transportation – US Government



























SAS in Transportation - International













THANK YOU























Economic Development & Intergovernmental Relations

Beau Memory

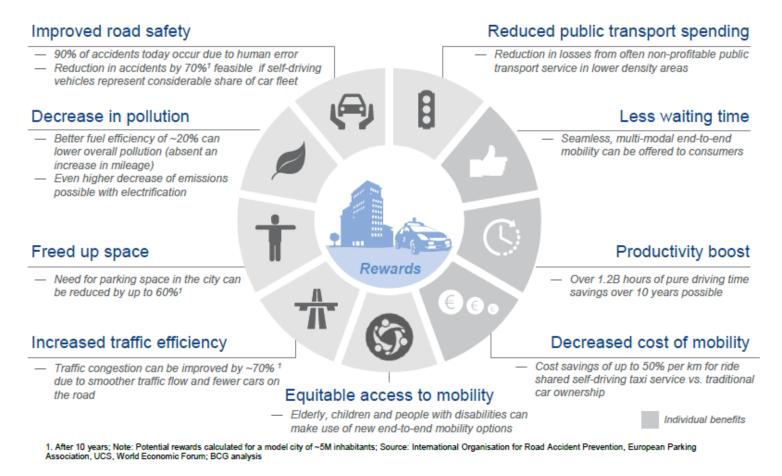
November 1, 2017

Topics

- Autonomous Vehicles
- Tri-Protocol Technology
- Wrong-Way Driver Detection & Prevention

Autonomous Vehicles

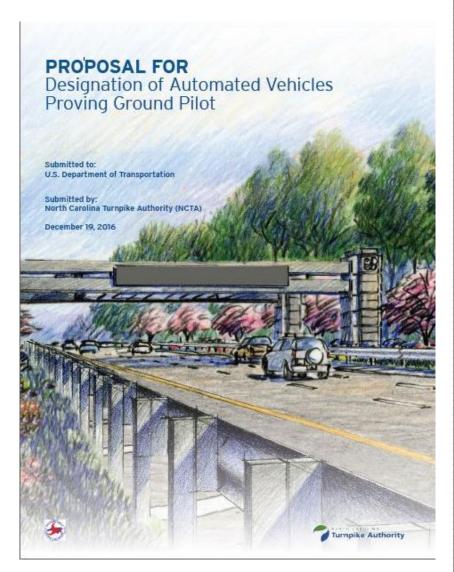
Why Autonomous Vehicles?



Overall: It's about safety

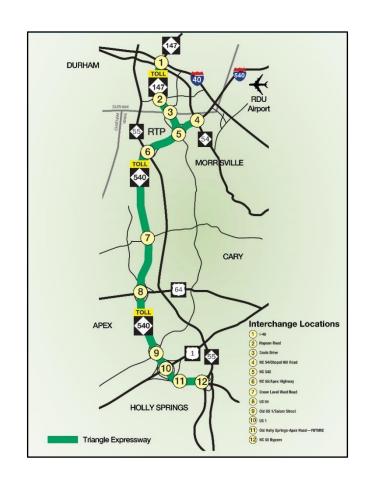
Triangle Expressway

- Advertisement 11/22/2016
- Proposal submitted 12/19/2016
- One of ten sites chosen
- 64 proposals received
- Why pursue?
 - Safety of our customers is paramount
 - Support our customer base
 - We have the infrastructure to support this technology



TriEx as a Testing Ground

- Triangle Expressway is an ideal testing ground
 - Second All-Electronic Toll facility in US
 - First new toll road designed as AET from inception
 - 18.8 mi, six-lane, 70 mph full access, controlled facility
 - 10 interchanges and 18 AET tolling points
 - Parallel facility creates loop & a Connected Corridor (NC 55)



Turnpike Readiness

- Ability to test
- Ability to share data
- Designated Safety
 Officer and Systems
 currently in place
- Community Engagement
- Diverse research partnerships

Research & Partnerships

















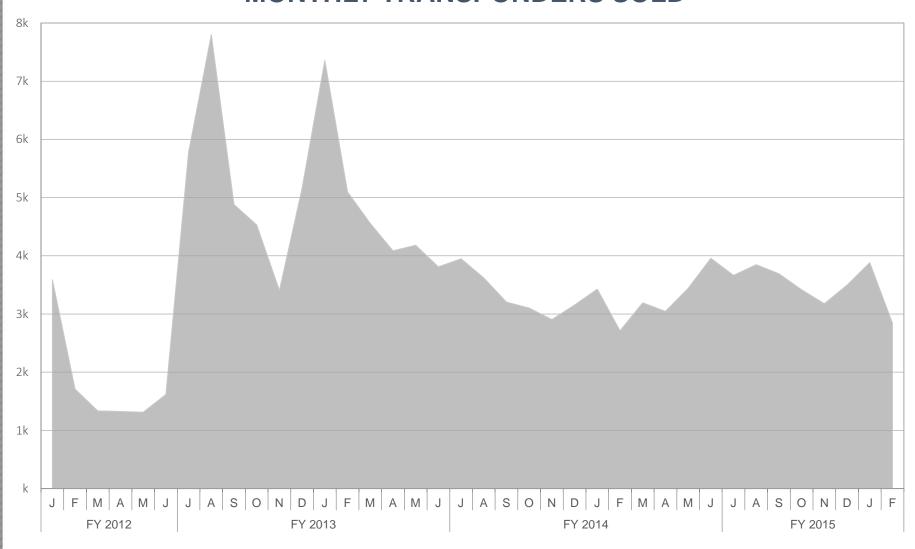
Next Steps

- Memorandum of Agreement with USDOT
- Develop a proposal to attract auto industry testing in North Carolina
- Developing marketing plan and materials to attract Autonomous Vehicle testing to North Carolina

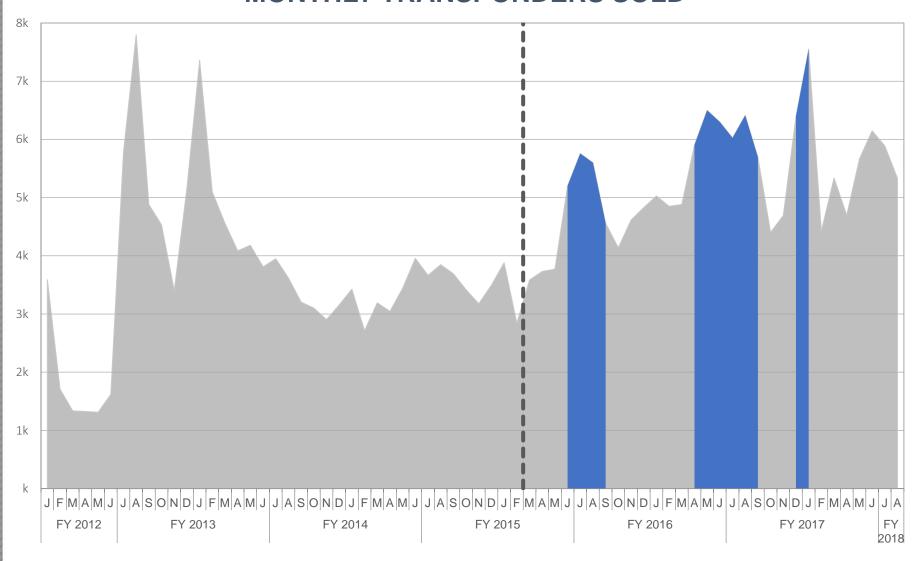


Tri-Protocol Technology

MONTHLY TRANSPONDERS SOLD



MONTHLY TRANSPONDERS SOLD



Leading up to March 2015...

- Reader Protocols: TDM (E-ZPass) & SeGo
- Customer Price vs. Cost to NCTA
 - Sticker Transponder: \$5.00 (Cost: \$9.37)
 - Hard Case Transponder: \$20.00 (Cost: \$23.67)
 - Exterior Transponder: \$25.00 (Cost: \$24.68)
- Transponder sales: 3,471 per month average

The Process

- Request for Information (October 2015)
- Request for Proposals
 - Accelerated Development, 3 categories
 - Tri-Protocol Reader Equipment
 - E-ZPass Transponder
 - Low Cost Transponder
- Procurement (August February)
- Execution
 - Back Office System Modifications
 - Roadside Toll Collection Systems Modifications
 - Customer Service Center & Communications Modifications





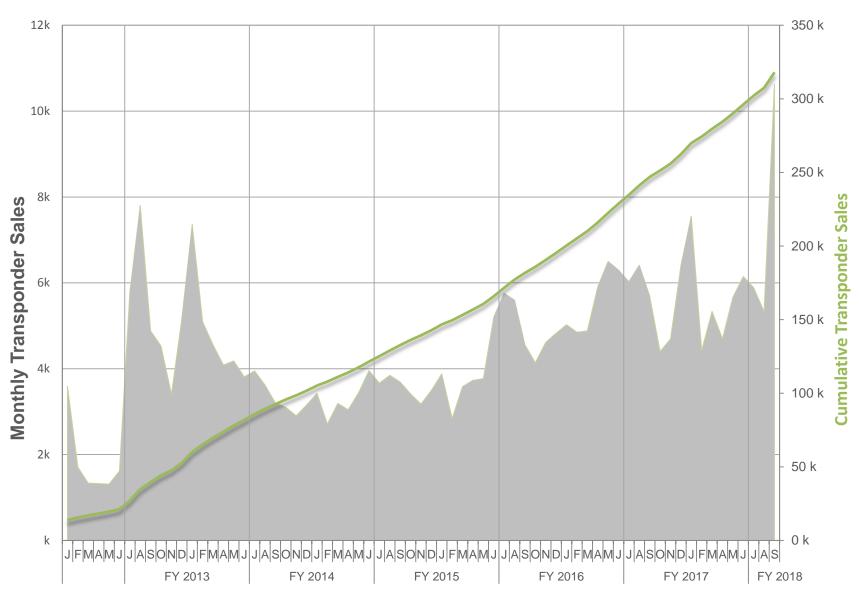
Results

- New equipment on Triangle Expressway
- Offer free and low-cost transponder options
- Increased transponder sales and penetration
 - Over 10,000 sold in September
- Tri-Protocol reader ability
 - TDM, SeGo, now 6C
 - First in the nation





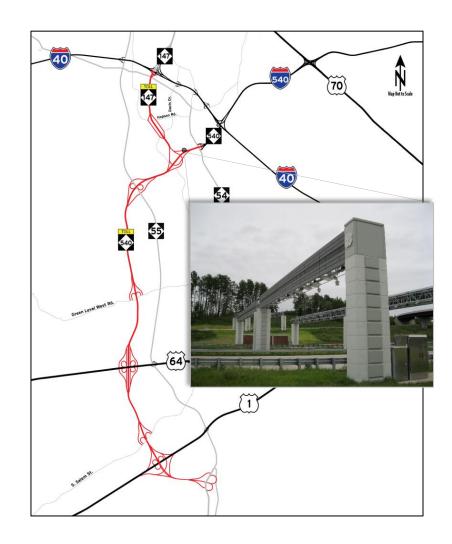
TOTAL TRANSPONDERS SOLD



Wrong-Way Driver (WWD) Detection & Prevention

Triangle Expressway Program

- All-electronic tolling facility
- Average Weekday Traffic = 49,800 at busiest section
- 18 Toll Zones
 - All equipped to detect wrong-way drivers
 - Uses roadside tolling system
- Average of 3 wrong-way drivers detected monthly
- No wrong-way driving crash since opening



Triangle Expressway Program

- Detected at toll zone 5-2
 - Toll NC-540 Southbound
 - North of Green Level West interchange
- Point of origin Green Level West interchange

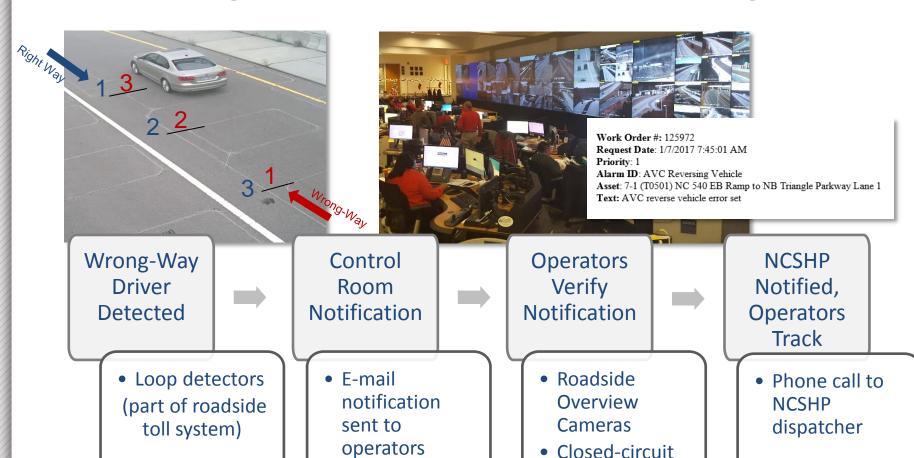
Right Way

T18 - 5.2 - 4 - 3 - 2 - 1 - 0
Wednesday, January 04, 2017 05:33:07

Toll Zone
5-2

TV cameras

Triangle Expressway Program

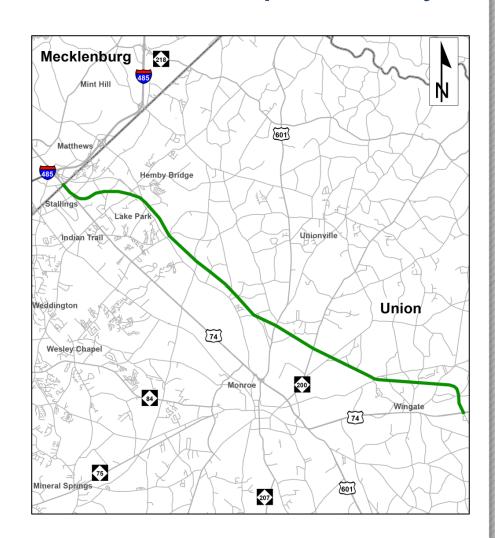


Lessons Learned to Date

- Notification time
 - 90+ seconds for control room notification email to arrive
- Notification sources
 - Tolling and ITS networks are not integrated
 - Notification source is limited to e-mail only
- Manual verification required
 - No visual data in initial notification

Potential Solutions for Monroe Expressway

- Similar greenfield project to Triangle Expressway
- All-Electronic Tolling Facility
- 19.8 miles long
- 14 mainline Toll Zones
 - Currently set up to detect wrongway drivers with roadside toll system



Potential Solutions for Monroe Expressway



Wrong-Way Driver Detected

Loop

detectors at

mainline toll

zones AND

radar at

ramps

Wrong-Way
Alert to
Driver



 Wrong-way signs light up to alert wrong-way driver Control
Room
Notification
& Verification

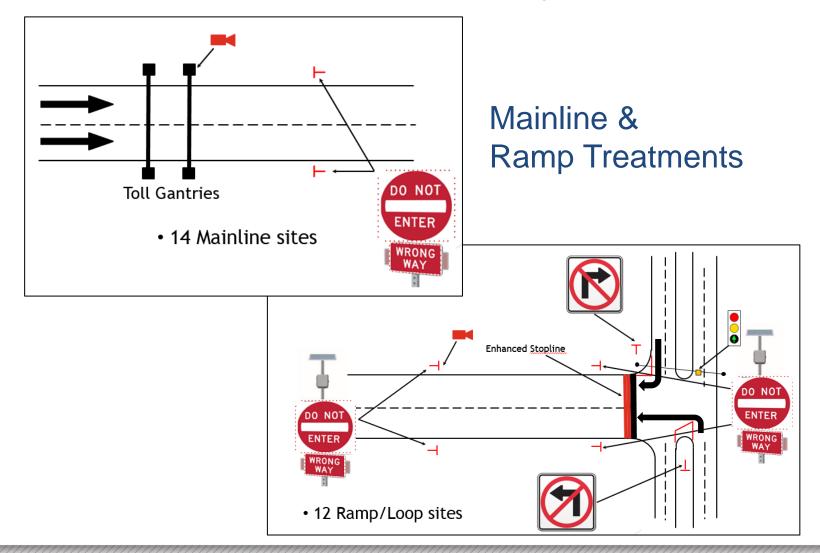
- E-mail, pop-ups, & video notification sent to all responders and to video screens
- Review video to confirm location and vehicle type and vehicle behavior

Operators
Monitor
Situation
Until
Resolved

- Comms with Emerg. Resp.
- Visual Tracking
- DMS updated

^{*}Monroe Expressway conceptual detection and notification system flowchart

Potential Solutions for Monroe Expressway



Program Implementation

- In process of selecting test sites on Triangle Expressway based on wrong-way driving data
- Proceeding with design of program for Monroe Expressway in parallel
- Procure and deploy Triangle Expressway test sites in 2017
- Take lessons learned and revise Monroe Expressway and Triangle Expressway plans/program
- Deploy Monroe Expressway program in 2018
- Deploy Triangle Expressway (entire) and Complete 540 program in 2019-2021

Thank You



FUNDING APPROPRIATIONS STRATEGIES COMMITTEE (FAST)

DATE: October 4, 2017	IME: 3:40pm LOCATION: EIC
.	
MEETING CALLED BY	Vice Chair Nina Szlosberg-Landis
BOARD ATTENDEES	Michael Fox, Tony Lathrop, David Tyeryar, Jack Debnam, Nina Szlosberg-Landis, Landon Zimmer, Grady Hunt

AGENDA TOPICS

1. RISK MANAGEMENT – ROBIN BARFIELD		
DISCUSSION SUMMARY	Robin Barfield provided an update on the Safety Management System Pilot Project that began a few months ago. He discussed how the Department needs a central collection/suppository location to track all OSHA items, identify strengths and weaknesses, provide interface, good for accountability and timeliness. Keep up with safety meeting agenda, meetings, etc. This is a 24-month project that is expected to save money and help standardize the way we do business. He provided an update on Workers Compensation claims in the Department. He noted that in 2011 the length of time for a case was capped at up to 500 weeks. An attorney is now on board to help settle more cases. The Department currently has \$10 million in old cases essentially dealing with \$4 million a year in cases. Robin Barfield also provided an update/overview of Safety Risk Management (SRM), which provides safety engineering, administrative, training, and consultative services across the Department. SRM identifies and analyzes accidents, injuries, and identifies trends and practices. SRM manages the claims of NCDOT injured employees to include return to work and incident reduction initiatives. He noted that John Taylor is the new Industrial Hygiene Consultant. He discussed the Hazard Alert System – Accident and injury information to poison management. If we see a trend or something serious, we send to all Division Engineers and safety staff. Robin Barfield also discussed the Return to Work Program and the Incident Reduction Committees.	
ACTIONS TAKEN	N/A	

2. Cash Management Model Program – Michelle Overby	
DISCUSSION SUMMARY	Michelle Overby provided an update concerning the Cash Management Program. In 2002, SB 1005 created financial management policy taking us from pay as you go to cash flow. The Cash model was originally developed in 2003. Originally only had a 12-month outlook. Enhancements have a 3-5-10 year outlook. In 2014, rules and legislative restraints were



FUNDING APPROPRIATIONS STRATEGIES COMMITTEE (FAST)

ACTIONS TAKEN	Current projects consists of four main factors: Baseline billing amount, seasonality factor, trend factor, and reconciliation constant. The NC Comprehensive Plan is in place, which gives economic indicators that lead into the NC Transportation Plan. The Department is looking ahead to 2040 and working on the 2050 plan, which covers a 30-year period. The STIP is a 10-year plan and updated every two years.
	She discussed Cash flow vs Budget – Can start three projects at once, pay as you go. This helps reduce costs by considering construction inflation, provides flexibility to substitute projects, and stabilizes construction contract award schedules, and provides greater control over timing. This helps avoid significant costs. North Carolina is one of the first states to have a cash flow budgeting system. In 2014, the Department hired SAS to further enhance our cash model.
	updated and now have a 15-20% per cash target of total appropriations from Highway Fund and Highway Trust Fund including Powell Bill. She noted that the Department reports annually to the JLTOC. In 2014 a new balance ceiling of \$1B was put into place. The Law specifies that if the cash balance exceeds the ceiling, the Department must report its compliance plans with the General Assembly and Fiscal Research.

3. Transportation Funding – Burt Tasaico

Burt Tasaico provided a Transportation Funding Update. He noted that the House Select Committee is studying long-range transportation funding needs. Secretary Trogdon laid out his long-term vision.

Chairman Lathrop noted that he forwarded an article to Burt Tasaico's published in the *Wall Street Journal* where China will move ahead with electric vehicles. China's plans to have all electric vehicle sales by 2025 or 2030.

DISCUSSION SUMMARY

Burt Tasaico noted that the Federal Government has not figured out how to keep up with this demand for transportation needs and fuel consumption. The President's 10-year outlook includes a quick solution where there would be 40% reduction in Federal Funding (which is \$400m to NC). He noted that the purchasing power from the federal gas tax, which has not been changed since 2003, has decreased over time. This is using the consumer price index, and if we match this to the construction cost index the loss will be much greater.

The current program consists of 80% federal funding and 20% state funding. There is a possibility that this could be changed to 20% Federal Funded and 80% State Funded.

A typical driver pays \$395 in federal and state gas taxes per year, per vehicle. He noted the need for more transportation revenues.



FUNDING APPROPRIATIONS STRATEGIES COMMITTEE (FAST)

|--|

4. JULY 2017 MEETING MINUTES	
DISCUSSION SUMMARY September 2017 FAST Meeting Minutes	
ACTIONS TAKEN	Approved Unanimously

5. MEETING ADJOURNED – CHAIR TONY LATHROP	
DISCUSSION SUMMARY Chair Tony Lathrop adjourned meeting at 5:00pm	
ACTIONS TAKEN	N/A



FUNDING APPROPRIATIONS STRATEGIES (FAST) COMMITTEE AGENDA

BOARD OF TRANSPORTATION NOVEMBER 1, 2017

TIME: 3:40pm-5:00pm

LOCATION: EIC

Торіс	PRESENTER	TIME
Call to Order	Tony Lathrop, Chair	3:40pm
Roll Call		
Declaration of Quorum		
Approval of October 2017 FAST Meeting Minutes		
Quarterly Financial Report for September 2017	David Tyeryar	3:50pm
TIP Program Development	Van Argabright	4:00pm
Adjourn	Tony Lathrop, Chair	5:00pm



HIGHWAYS COMMITTEE MEETING MINUTES

MEETING CALLED BY	Chairman Tarleton
BOARD ATTENDEES	Committee: Chairman Cullie Tarleton, Vice-Chairman John Pope, Landon Zimmer, Grady Hunt, Gus Tulloss, Terry Hutchens, Patrick Molamphy, Jack Debnam

AGENDA TOPICS

1. Approval of September Minutes		
DISCUSSION SUMMARY Motion to approve made by Board Member Pope, seconded by Board Member Zimmer.		
ACTIONS TAKEN	Motion to approve minutes as written passed unanimously.	

	inotion to approve minutes as written passed difaminously.	
2. PROJECT SPOTLIGHT: US 221 IN ASHE AND WATAUGA COUNTIES - MICHAEL PETTYJOHN, P. E., NCDOT DIVISION 11 ENGINEER		
DISCUSSION SUMMARY	Mr. Michael Pettyjohn, Division 11 Engineer, provided a presentation on the US 221 widening projects in Ashe and Watauga Counties. The improvements to US 221 include widening the existing two-lane facility to a four-lane divided highway from US 421 in Deep Gap to US 221 Business/NC 88 in Jefferson. The total length of the US 221 projects is 16.1 miles. The corridor improvements are anticipated to improve traffic flow, increase capacity, reduce crashes, and improve connectivity to the area. Ashe County is the largest Christmas tree producer in the United States. It is also home to the only cheese factory in North Carolina. Ashe County also has a GE Aviation plant. The improvements to US 221 are anticipated to improve economic development in Ashe County. From an environmental perspective, the US 221 improvements used a best fit design in order to minimize environmental impacts. There will be an interchange added at US 421 and US 221 in order to increase safety due to an environmental issue with dense fog. Much of the corridor widening involves smoothing out curves and reducing grade inclines, which will provide greater sight distance. The projects feature a large amount of grading work. The US 221 projects are key to the High Country and connecting Boone with Jefferson. It is the main corridor for Ashe County commuters and commercial vehicles.	
ACTIONS TAKEN	N/A	
3. NCDOT'S UTILIZATION OF RAMP METERING – JOEY HOPKINS, P. E., NCDOT DIVISION 5 ENGINEER		
DISCUSSION SUMMARY	Division 5 Engineer, Mr. Joey Hopkins presented information on NCDOT's first installation of on- ramp signals (ramp metering). In September, NCDOT implemented on-ramp signals along I-540 westbound in Division 5. The on-ramp signals were installed at the following interchanges: • Falls of the Neuse Road • Six Forks Road • Creedmoor Road • Leesville Road	



HIGHWAYS COMMITTEE MEETING MINUTES

	Prior to the on-ramp signal installation, NCDOT outreached to the public through brochures, web sites, an informational video, and public meetings.
	In 2013, a Ramp Metering Feasibility Study was performed for Durham and Wake Counties. Seventy-seven sites were identified as part of the study, with 21 of the sites being identified as suitable for on-ramp signals. In March 2014, an operational analysis to the feasibility study was performed for 4 locations along westbound I-540.
	Benefits of on-ramp signals include: more reliable travel times, reduced congestion, fewer collisions, and emission reduction. In other cities, the on-ramp signal installations have shown decreased travel time, crash rates and crash frequencies while travel speed and vehicle volumes have increased.
	For the I-540 installations, NCDOT anticipates a 20% reduction in annual delay which equates to 14,000+ vehicle hours and an annual financial benefit to motorists of \$300,000.
	Concerns with on-ramp signals include: uncertainty about operation, traffic back-ups onto side streets, traffic diversions to side streets, and negative impacts to travel time. Solutions to these concerns include public outreach efforts; signing; design and signal timing; and ongoing monitoring.
ACTIONS TAKEN	N/A

4. Preparing for Autonomous Vehicles, Pavement Markings – Kevin Lacy, P. E., State Traffic Engineer, NCDOT TRANSPORTATION MOBILITY AND SAFETY Mr. Kevin Lacy, NCDOT State Traffic Engineer, provided a presentation about preparing for autonomous vehicles with pavement markings. Autonomous vehicles use various navigation technology including: High Resolution Mapping, Machine Vision, GPS and other signals, Road Fingerprinting, Crowd Sourcing and Connected AV Infrastructure. Machine Vision technology includes LIDAR, cameras, sensors, etc. NCHRP 20-102 was implemented to study the Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies. Task Order 20-102(06) focused on Road Markings for Machine Vision. This includes the development of minimum performance levels for pavement marking (retroreflectivity), use of LIDAR/Camera system, study of pavement marking lines, and tests in wet, dry, day and night conditions with varying types of markers, pavement uniformity, vehicle speed and other impacts. Based on a 2017 audit, NCDOT's pavement markings indicate that overall 46.3% of NCDOT's **DISCUSSION SUMMARY** routes pass the minimum retroreflectivity of 100. On interstate routes, 90.5% of the routes are passing. On primary routes, 80.5% are passing. On the secondary routes, 27.1% pass the minimum reflectivity of 100. Roughly 12,000 to 15,000 miles of the total state system is not marked due to subdivision streets or unpaved roadways. NCDOT has reviewed the cost and service life of different pavement marking types. NCDOT is also considering how pavement marking items of work are incorporated into contracts such as larger standalone contracts for pavement markings versus line items in resurfacing contracts. Current efforts to address this issue include: HB 469 established the Fully Autonomous Vehicle Committee, the establishment of better guidelines through the NCHRP research. **ACTIONS TAKEN** N/A



HIGHWAYS COMMITTEE MEETING MINUTES

5. Study Fee Structure for Services Performed by the Division of Highways – Patrick Norman, P. E., Director of Highway Operations, Chief Engineer's Office		
Mr. Patrick Norman, Director of Highway Operations, discussed the 2017 Legislative requiremen for the Board to study the fee structure for services performed by the Division of Highways (Section 34.14 of S.L.2017-257). The study is due January 1, 2018. The study will identify the number of times each service was performed, the amount of fees that were charged or could have been charged, the cost incurred by the Department for performing the services and, if applicable, the reason for not charging fees. During the December Board meeting, the study will be presented with topics discussed as needed prior to voting on the study. A timeline to complete the study and the similar study from 2014 were distributed to the committee members. Additional information will be distributed to members of the Board regarding this study.		
ACTIONS TAKEN	N/A	



HIGHWAYS COMMITTEE AGENDA

BOARD OF TRANSPORTATION NOVEMBER 1, 2017

TIME: 2:10 PM - 3:30 PM

LOCATION: 150

Торіс	PRESENTER	Тіме
Call to Order Roll Call Declaration of Quorum Approval of October 4, 2017 Meeting Minutes	Cullie Tarleton, Chair	2:10 pm
Division 1 – Outerbanks Bridge Projects	Jerry Jennings, P. E., Division Engineer, Division 1	2:15 pm
Innovative Intersection Design	Joseph Hummer, P. E., State Traffic Management Engineer, Transportation Mobility and Safety	2:45 pm
Study Fee Structure for Services Performed by the Division of Highways	Tim Little, P. E., Chief Engineer	3:05 pm
Other Discussion	Cullie Tarleton, Chair	3:20 pm
Adjourn	All	3:30 pm



NORTH CAROLINA

Department of Transportation



















Alternative Intersections and Interchanges

Joe Hummer, PhD, PE State Traffic Management Engineer November 1, 2017

What Should We Do?

- Median?
- Bypass?
- Widen?
- Interchanges?
- Traffic eng.?
- ITS?
- Transit?
- Demand management?



Market Street, Wilmington

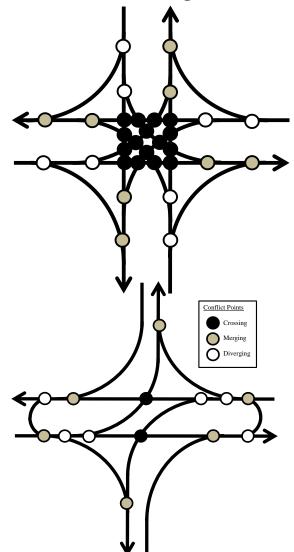
Alternative Designs

- Published
- Installed somewhere
- Researched
- Supported by FHWA
- Starting to appear in professional manuals

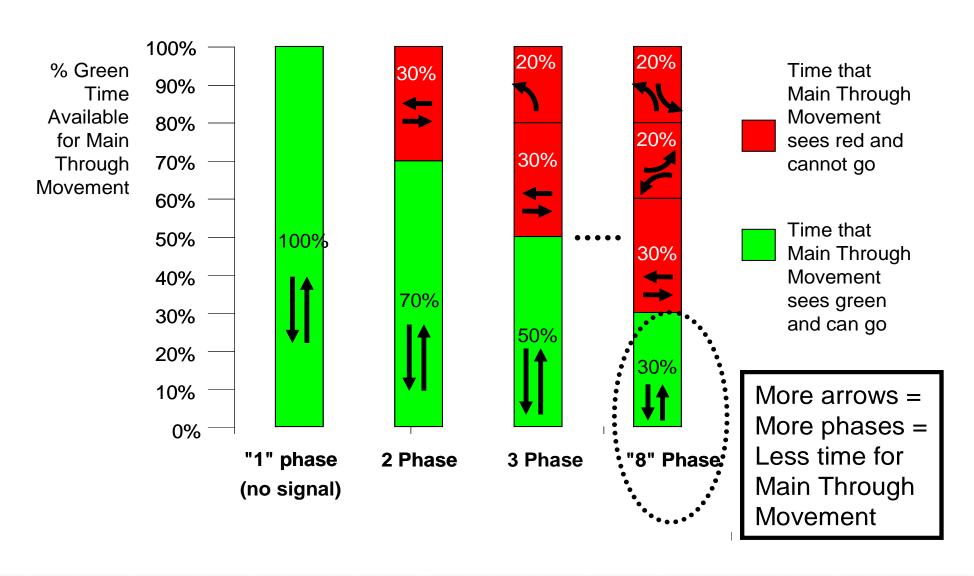


Why They Work--Theory

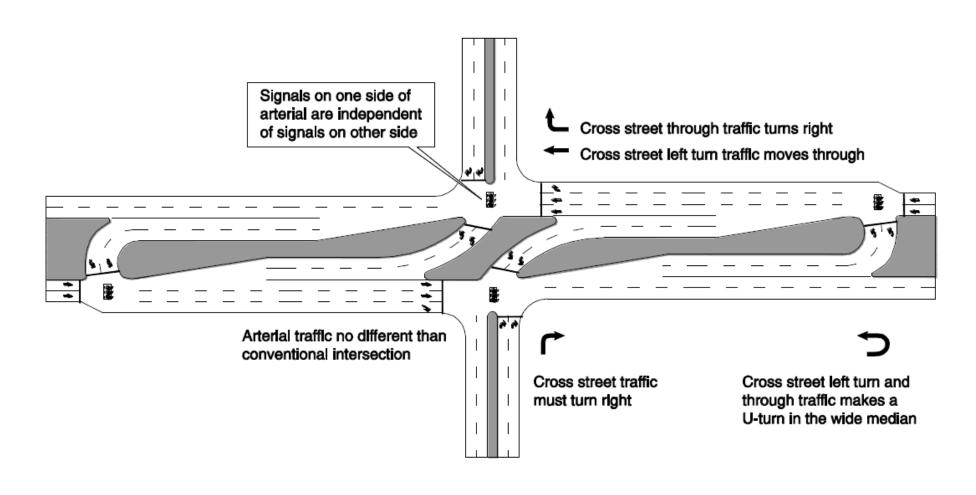
- 1. Minimize conflict points
- 2. Separate conflict points
- 3. Favor through movement
- 4. Use half signals
- 5. Minimize signal phases



Fewer Phases Better



Where Arterial Meets Minor Street-Superstreet



Superstreet Flexibility

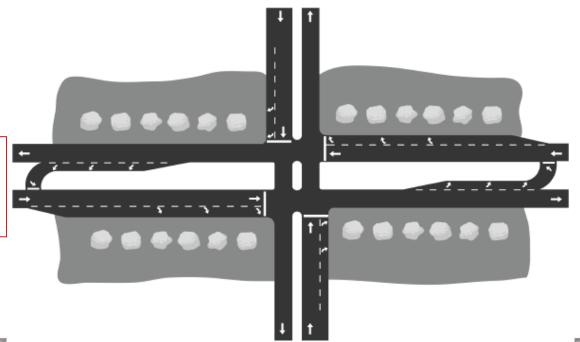
- Add crossovers
- Move crossovers
- Add signals
- Emergency or farm vehicle crossovers
- Allow left turn from side street
 - If well spaced
- Allow full movement signal
 - If well spaced

Where Two Arterials Meet— Median U-Turn

- Good capacity
- Excellent safety record
- Good for pedestrians

Weakness: Needs

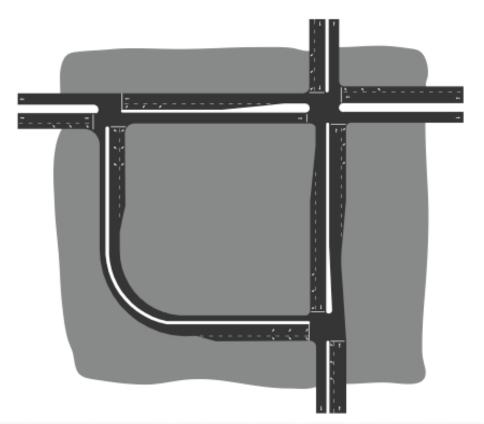
low left turn demand



Where Two Arterials Meet— Quadrant Roadway

- Excellent capacity
- Good for pedestrians
- Good for business access

Weakness: Potential driver confusion



Where Two Arterials Meet—Continuous Flow Intersection



Continuous Flow Intersection Capacity

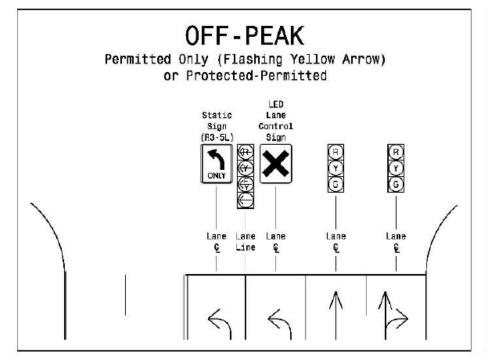
- Highest of any at-grade design
 - Comparable to grade-separated solutions
- Example NC-54 at Cary Parkway
 - Conventional v/c = 1.27
 - Median u-turn v/c = 1.01
 - Quadrant v/c = 0.89
 - CFI v/c = 0.72
 - Grade-separated intersection v/c = 0.6 to 0.7

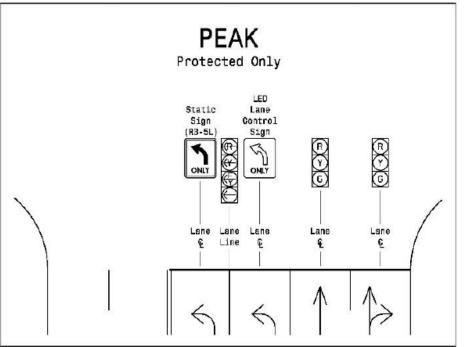
Weaknesses:

Pedestrians, business access

Where Two Arterials Meet—Variable Number of Left Turn Lanes

- Reduce delay in off-peak times
- Only where permissive left turns can be made safely



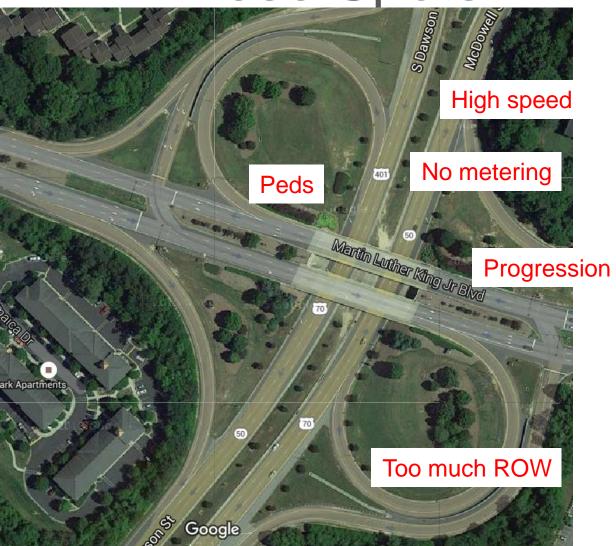


Where Two Arterials Meet—Grade-Separated Intersections

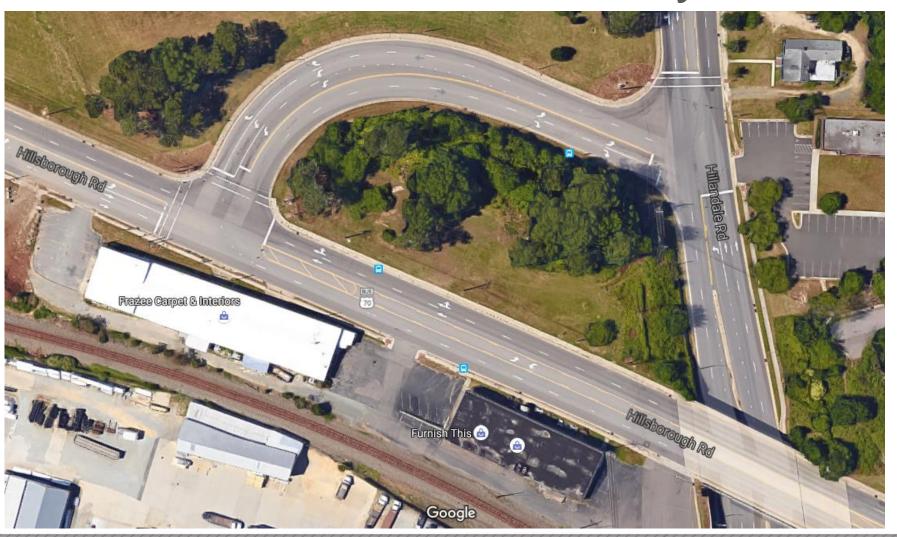
We usually use interchanges



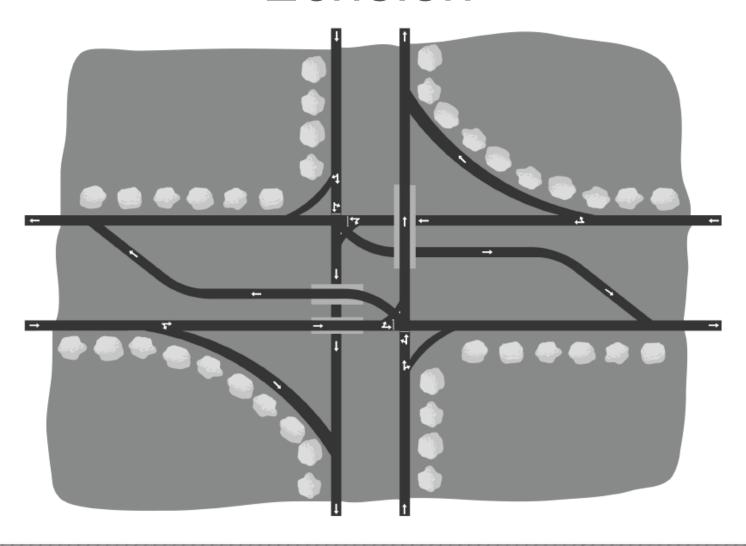
Problems with Interchanges In These Spots



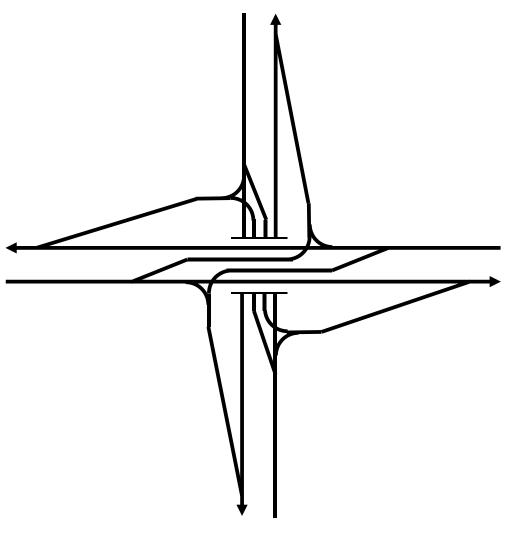
Grade-Separated Intersections Quadrant Roadway



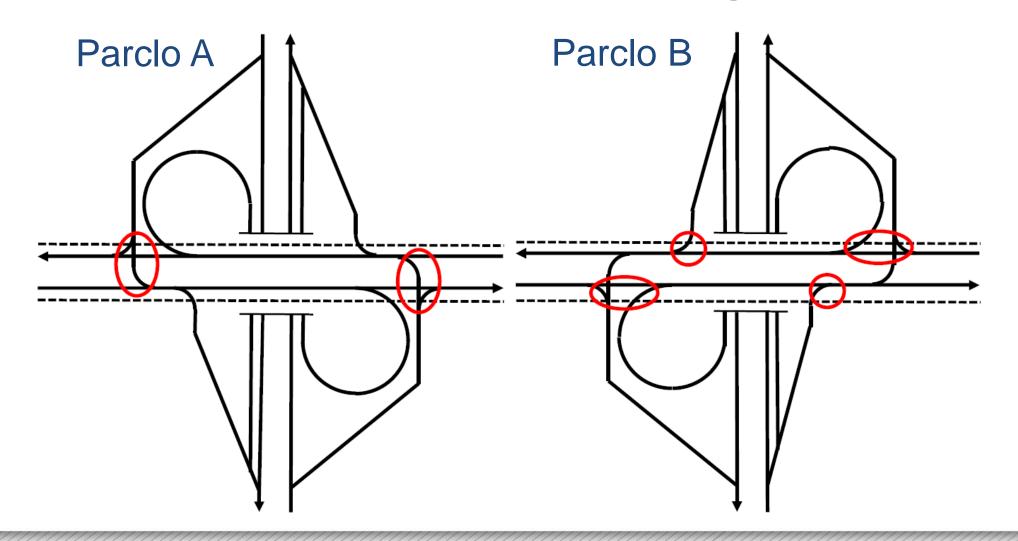
Grade-Separated Intersections Echelon



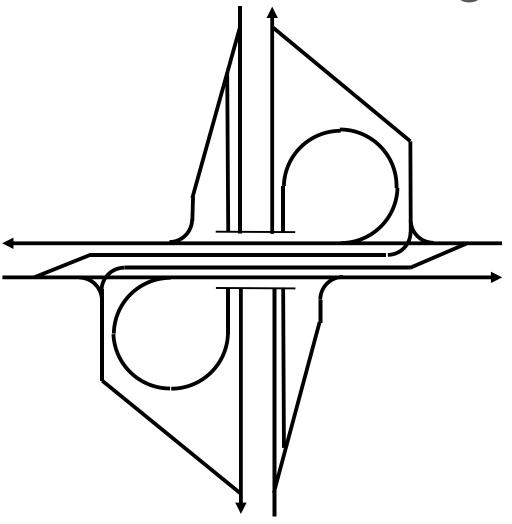
Grade-Separated Intersections Double Contraflow



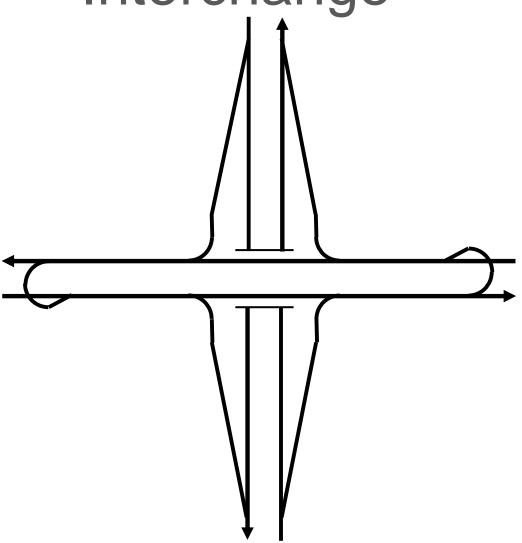
Where a Freeway Meets an Arterial— Parclo B Interchange



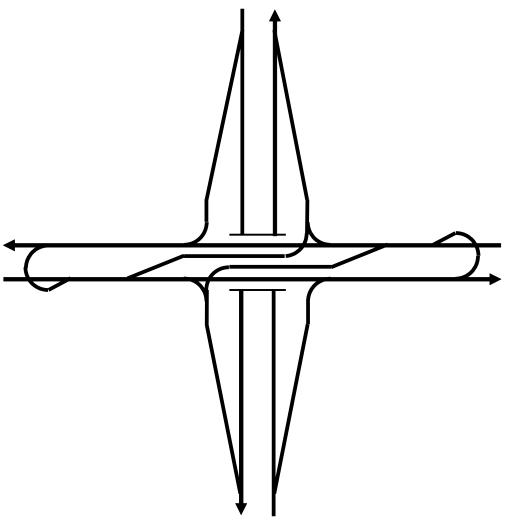
Where a Freeway Meets an Arterial— Folded Interchange



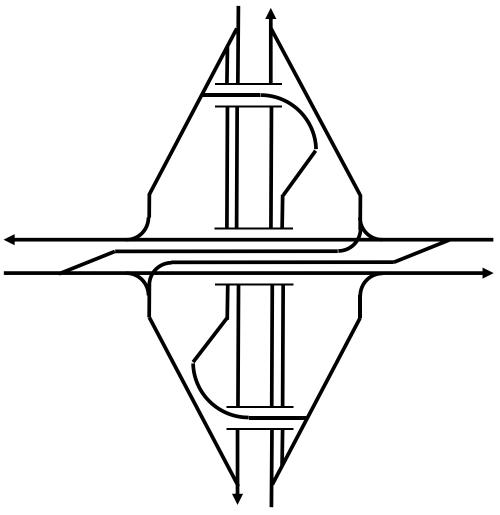
Where a Freeway Meets an Arterial—FRE Interchange



Where a Freeway Meets an Arterial— Synchronized Interchange



Where a Freeway Meets an Arterial— Milwaukee B Interchange



Summary

- Alternative designs offer hope in tough places
 - Theoretical support
 - Empirical evidence
- None is perfect or universal
- Intersections
 - Superstreets for major-minor junction
 - Median u-turn, quadrant, or CFI for major-major
 - Variable number of left turn lanes

Summary

- Grade-separated intersections
 - Where arterial meets arterial
 - Where we need a bridge
 - Avoid problems caused by interchanges
 - Lots of good options
- Interchanges
 - Where freeway meets arterial
 - Parclo B best standard solution
 - Lots of new ideas

Thank You!

- We appreciate your support as we try to match the right design to the right spot
- Joe Hummer
 - 919-814-5040, jehummer@ncdot.gov





NORTH CAROLINA

Department of Transportation

















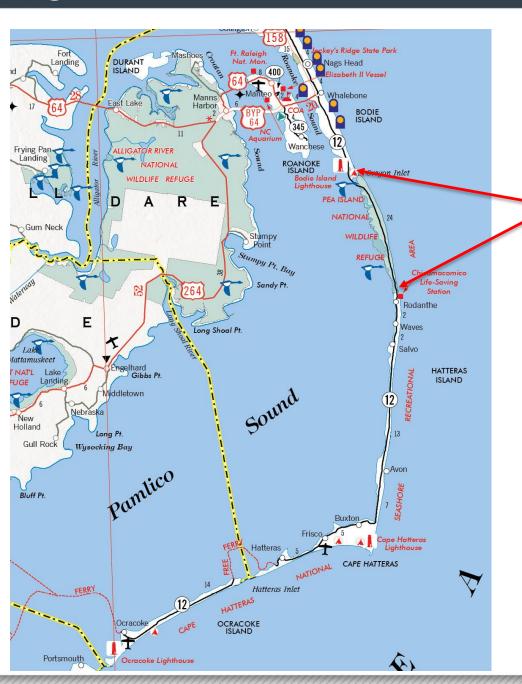


Outer Banks Project Updates:

Bonner Bridge, Pea Island and Rodanthe

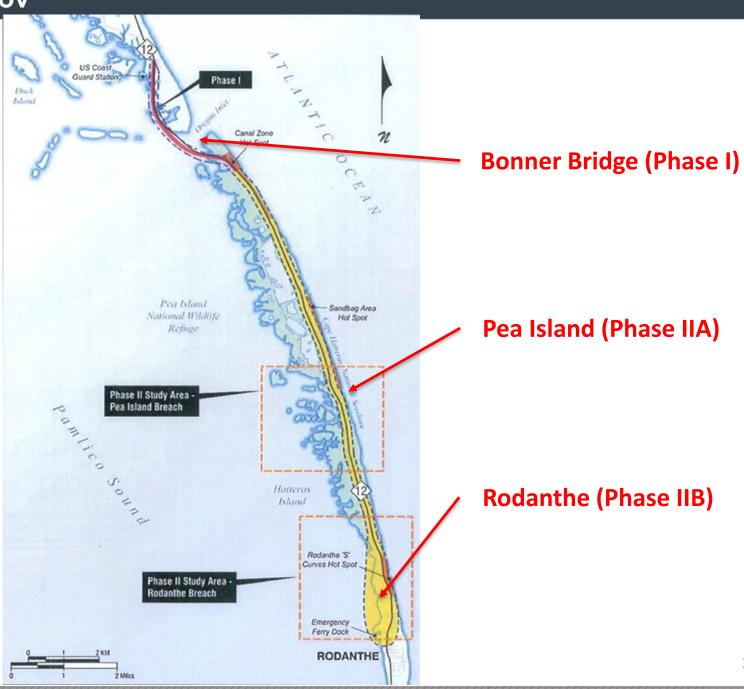
Jerry D. Jennings, PE - Division Engineer November 1, 2017

ncdot.gov

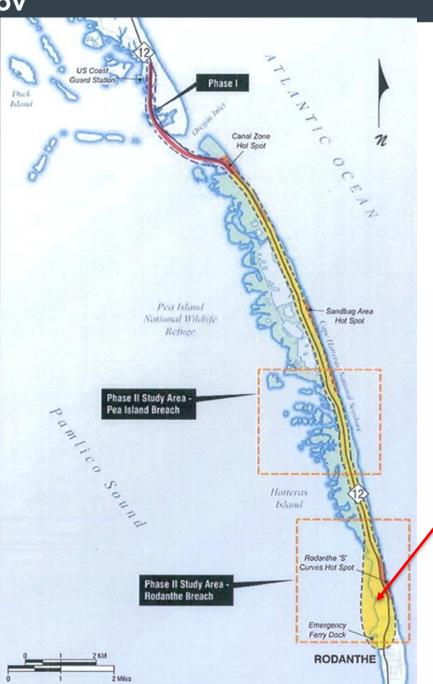


B-2500 Project Locations

ncdot.gov



ncdot.gov



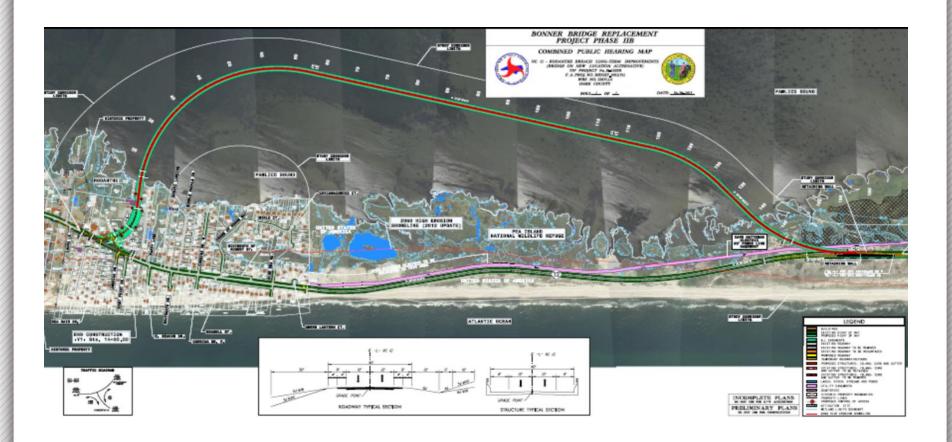
Rodanthe (Phase IIB)

- Historical "hot spot"
- Breach formed during Hurricane Irene in August 2011
- Roadway reconstructed and sandbags placed
- Further damage from Hurricane Sandy in October 2012
- Beach nourishment completed September 2014





- Planning for long term solution has been underway for several years
- Preferred alternative selected in June 2015
- Record of Decision approved in December 2015
- Includes 2.4 mile long "jug handle" design



- Design-build contract awarded to Flatiron Constructors in January 2017
- RK&K is the lead design firm
- Contract amount of \$145 million
- Design and preliminary work underway
- Onsite construction to begin in early 2018
- Completion in 2020



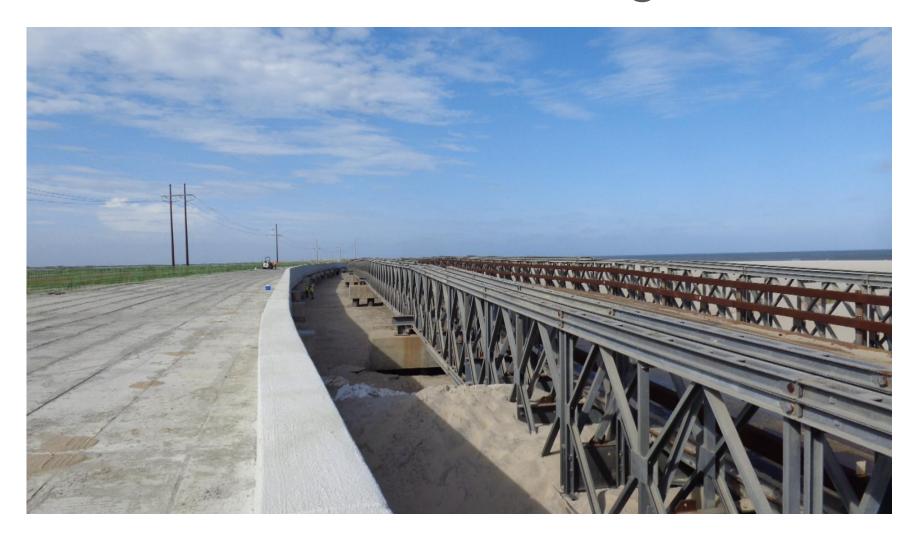
Pea Island (Phase IIA)

- Historical area of "New Inlet"
- Breach formed during Hurricane Irene in August 2011
- 660 ft. temporary steel bridge constructed
- Further damage from Hurricane Sandy in October 2012





- Contract awarded to T. A. Loving Co. in November 2015
- Bid was \$14.3 million
- Includes 1/2 mile long interim concrete structure
- Department to pursue interim bridge and reevaluate long term solution as part of Bonner settlement agreement
- Onsite construction began in March 2016

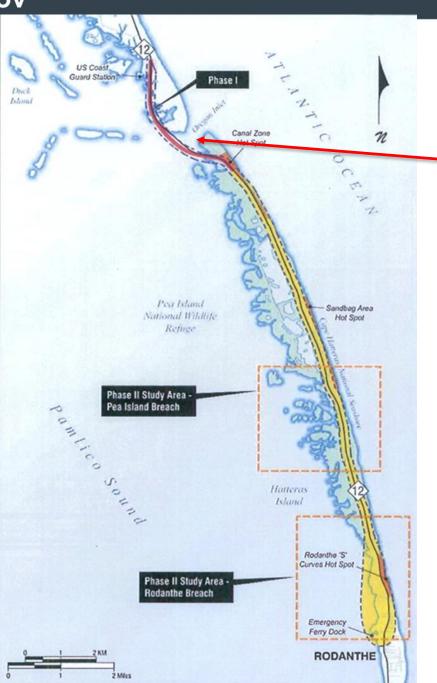






Status:

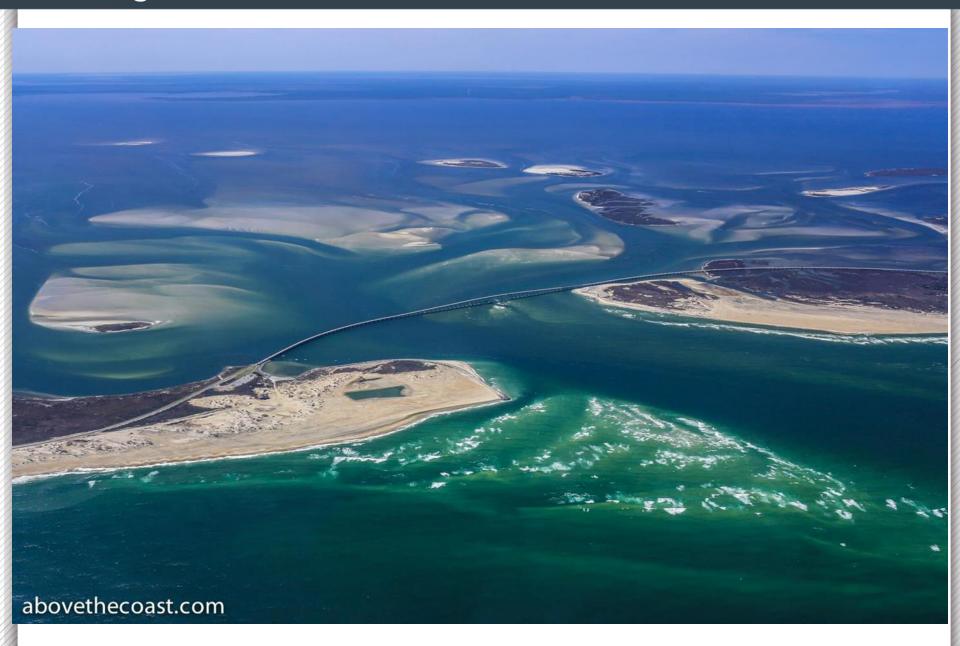
- 74% Complete
- Traffic should be placed on new bridge by early Nov.
- Demolition of existing bridge to follow
- Project completion by end of year
- Will be the "Captain Richard Etheridge Bridge"



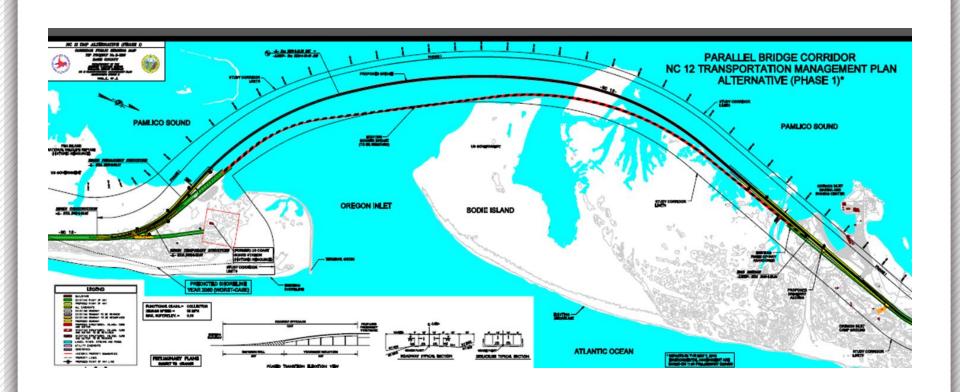
Bonner Bridge (Phase I)

Bonner Bridge Replacement Timeline:

- Bonner Bridge opened in 1963.
- Many projects to maintain & protect existing bridge.
- Design-build contract for replacement was awarded to PCL Civil Constructors, Inc., in July 2011.
- HDR Engineering, Inc. of the Carolinas- lead design firm.
- Settlement agreement reached in 2015.
- Total revised contract amount of \$250 million.



Bonner Bridge Replacement



Comparison of Existing Bridge to the New Bridge

	Old	<u>New</u>
Bridge length (miles)	2.4	2.8
Number of bents	207	83
Number of spans in navigation zone	3	11
Navigation zone width (ft.)	502	3550
Navigation channel width (ft.)	130	300
Design lifespan (years)	30	100

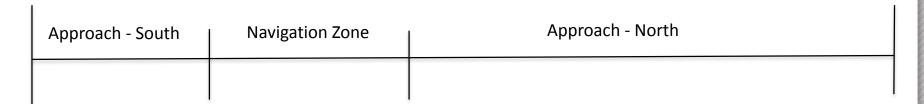


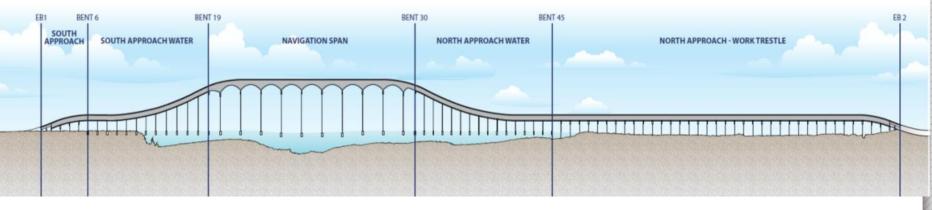
Design Visualization Becoming Reality



- Onsite Activities Begin: March 2016.
- Total Contract Expenditures to Date: \$149.7 Million; Approx. 60% Complete
 - Includes design, construction support, and materials fabrication.
- Construction Activities Approx. 50% Complete.
- Substantial Completion: November 2018.
- Contract Completion: September 2019.

Work Areas of Project





- Approaches: 71 spans 160 ft. to 182 ft. wide.
 - 72 bents: 2 styles of foundations: 54" cylinder pile with precast cap & 36" square pile with cast in place footing, precast columns & cap.
 - Concrete girders and cast in place deck.
- Navigation Zone: 11 spans 200 ft. to 350 ft. wide.
 - 11 bents: 36" square pile with cast in place footing and precast columns.
 - Precast box segments

Pile Driving: 36" Square Precast Prestressed Piles In Navigation Zone & Transition Approaches







- 338 of 532 piles installed to date. Avg. Length 130 ft. (weigh 60 65 tons or approx. 1,050lbs/LF)
- 17 of 37 bents completed with 10 to 30 piles/bent.
- 68,000 ft. of these piles used (~13 miles)

Pile Driving: 54" Cylinder Precast Prestressed Piles In Approaches to High Rise.







- 86 of 138 piles installed to date.
- 110 to 130 ft. long.
- 28 of 44 bents completed.
- 18,800 ft. of these piles used (~3.5 miles)

Girders: Approaches







Prestressed Precast Concrete Girders:

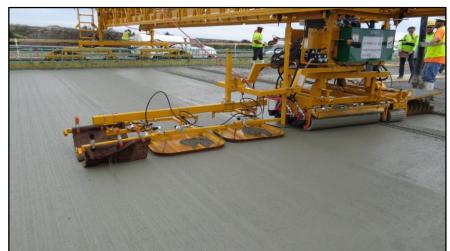
- 106 of 303 girders set.
- 26 of 71 spans set.
- 96" tall.
- 160 to 182 ft. long.
- 100 tons (requires two cranes to set)
- Delivered by truck and barge.
- 46,700 ft. used (~9 miles)

Cast In Place Decks: Approaches









- 23 of 71 decks cast; stainless reinforcing steel
- Approx. 225 CY per deck (Total 18,000 CY of concrete in decks)
- Cast In Place Deck Area = 480,950 SF or 11.04 acres.

Cast In Place Decks: Approaches









- Clear deck is 40 ft. wide: Two 12 ft. lanes and two 8 ft. shoulders.
- Bridge rail is bicycle safe: 54" tall.

Cast In Place Footings: Navigation Zone



- 14 of 37 footings cast.
- Up to 640 CY of concrete in each.
- Up to 8 ft. thick.
- Largest approx. 50ft x 50ft
- Utilize stainless steel reinforcing.
- Concrete delivered to existing bridge deck and discharged into 8CY bucket.
- Ocean water circulated inside concrete to cool the mass.
- Up to 16 hours to place concrete.





Columns: Navigation Zone & Approaches







- Cast in place stub
- Precast sections:
 - 4Ft to 12 Ft tall
- Post tensioned with 2.5 inch diameter stainless steel bars.
- 23 of 48 sections set.

Box Segments: Navigation Zone









- 90 of 264 box segments set. Segments cast in Chesapeake VA.
- 8 to 19 ft. tall; 5 to 14 ft. long; about 100 tons each
- Two bearings assemblies per bent.

Box Segments: Navigation Zone



 Initial segments set with crane to form Pier Table.

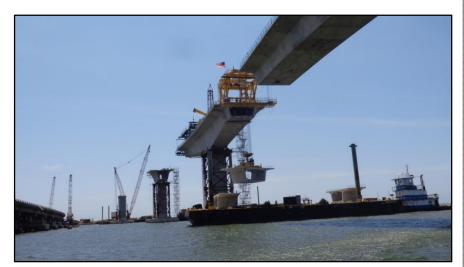


Box Segments: Navigation Zone









- Segment lifters positioned on Pier Table.
- Shuttle barge positioned below lifter, segment is lifted & connected to alternating sides.
- Balanced Cantilever Erection.

Box Segments: Navigation Zone









Permanent threaded rods and cables (i.e. Tendons) installed at each pair of segments.

Box Segments: Navigation Zone









- Tendons installed though all segments @ each stage
- 18 to 22 5/8" diameter strand bundled into a Tendon.
- Tendons are stressed to approx. 900,000 lbs. post tensioning.

Box Segments: Navigation Zone



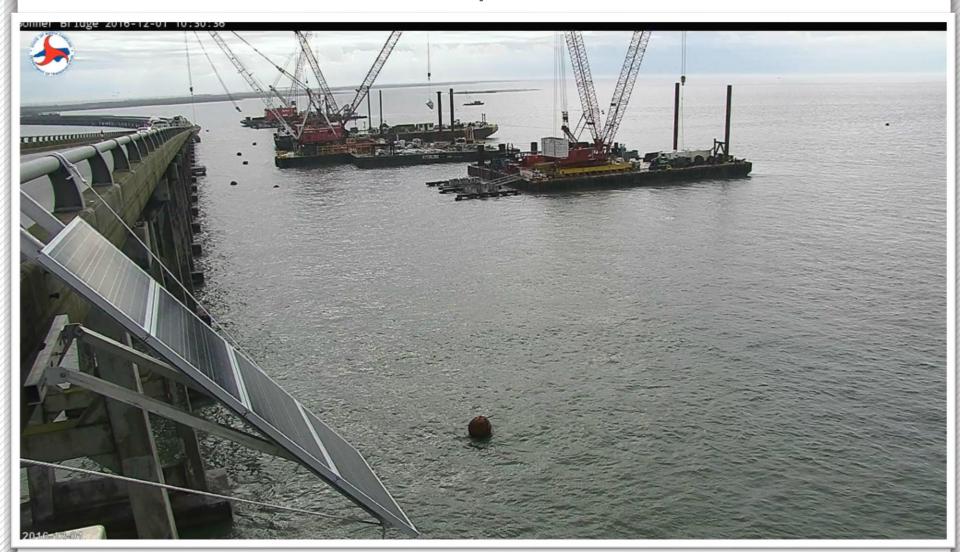




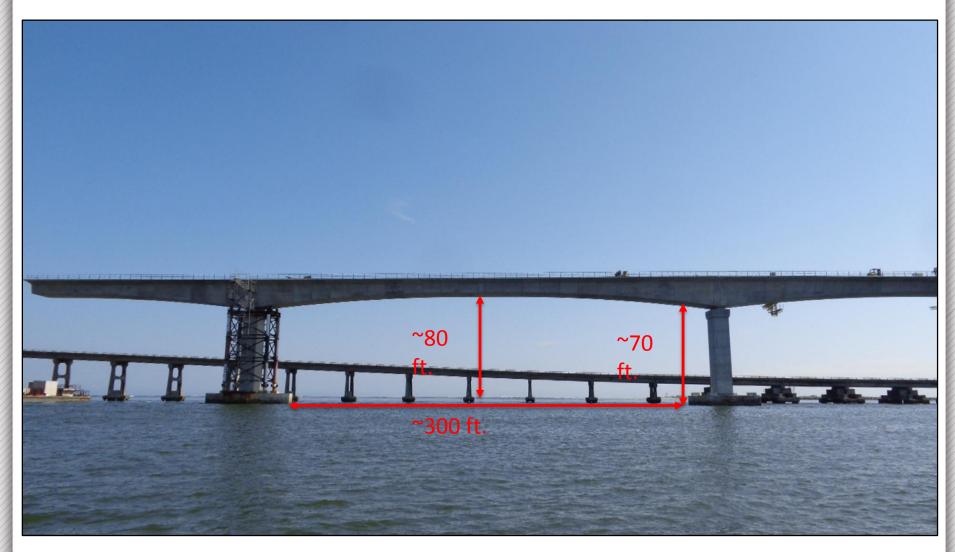


• Cantilevers placed with an approx. 4ft gap for cast in place closure pour.

Time Lapse Video



Channel Width: Navigation Zone



Seven spans with horizontal & vertical clearances for navigation.

Box Segments: Navigation Zone



Box Segments: Navigation Zone



Drone Video





Dare County Update Video



Questions?



MULTI-MODAL TRANSPORTATION COMMITTEE MEETING MINUTES

DATE: 10/4/2017 TIME	2:10	LUCATION:	EIC
MEETING CALLED BY	Chairman Andrew Perkins		
BOARD ATTENDEES	Tracy Dodson, Tony Lathrop	, Hugh Overholt,	Nina Szlosberg-Landis, Valerie Jordan

AGENDA TOPICS

1. MEETING CALL TO ORDER AND APPROVAL OF SEPTEMBER 6, 2017 MINUTES					
Chairman Perkins called the committee to order, presented roll call and asked for a motion to approve the minutes as distributed.					
ACTIONS TAKEN	A motion to approve the September 6, 2017 Multi-Modal Transportation committee meeting minutes as distributed was made by Ms. Nina Szlosberg-Landis and seconded by Ms. Tracy Dodson. The committee approved unanimously.				

2. Funding Items (Aviation, Public Transportation, Rail)				
DISCUSSION SUMMARY	Information was presented by Transit Directors for the Committee's approval.			
ACTIONS TAKEN	 Motion to approve Aviation Funding Item was made by Ms. Tracy Dodson and seconded by Mr. Anthony Lathrop. Motion to approve Public Transportation Funding Item was made by Mr. Anthony Lathrop and seconded by Ms. Nina Szlosberg-Landis. Motion to approve Rail Funding Item was made by Ms. Nina Szlosberg-Landis and seconded by Mr. Anthony Lathrop. All approved unanimously.			



MULTI-MODAL TRANSPORTATION COMMITTEE MEETING MINUTES

3. Multi-Modal Transportation Updates – Julie White					
	Deputy Secretary White updated the committee on:				
	Goals of the Committee were discussed with Chair Perkins and Vice Chair Dodson to increase funding for the Public Transportation and Bicycle and Pedestrian Divisions, and to increase awareness for all modes.				
	Ms. White announced that Aldea Douglas is acting Director for the Bicycle and Pedestrian Division until a new director is hired.				
	Allan Paul is the acting Director for Rail until a new director is hired. Gave a great tour of the Raleigh Union Station to the House Select Committee on Strategic Transportation Planning and Long Term Funding Solutions.				
DISCUSSION SUMMARY	Public Transportation had their Annual Conference which was extremely well done and offered tremendous training opportunities.				
	Ferry Division evacuated 898 people and 495 vehicles during Hurricane Irma. They provided Ms. White and two legislative fiscal research members a tour of operations and facilities; the NCGA Program Evaluation Division provided a review of the division that was very favorable.				
	Ms. Nina Szlosberg-Landis requested to hear from some of the Division Engineers on input with regard to Bicycle and Pedestrian and Public Transportation gaps and needs and would like Chief Engineer Little to canvas the divisions and to discuss how we are doing with the Complete Streets plan.				
	Mr. Hugh Overholt encouraged Public Transportation to improve branding and Ms. Collins concurred				
ACTIONS TAKEN	.N/A				

4. FERRY PRESENTATION – "HATTERAS TO OCRACOKE PASSENGER FERRY" BY ED TIMONEY				
	Mr. Thomas opened the presentation with a high level review of the passenger ferry program.			
DISCUSSION SUMMARY	Mr. Timoney presented a comprehensive program detailing the timeline, plans, and progress of the new Passenger Ferry services.			
	Jed Dixon reported on development of a Stakeholder Committee with a first meeting planned for 10/18/17 and will continue on a bi-monthly schedule.			
	Concerns regarding ADA compliance were expressed as well as sidewalks, ROW acquisition, and how to provide for the influx of pedestrians once they arrive on the island.			
ACTIONS TAKEN	N/A			



MULTI-MODAL TRANSPORTATION COMMITTEE MEETING MINUTES

5. Comments and Wrap-Up					
DISCUSSION SUMMARY	Ms. Nina Szlosberg-Landis requested a moment for Lisa Riegel of BikeWalk NC to promote the upcoming Summit that will be held in Wilmington, NC on the weekend of November 3-4.				
ACTIONS TAKEN	N/A				

Adjourned: 3:40



MULTI-MODAL COMMITTEE AGENDA

BOARD OF TRANSPORTATION NOVEMBER 1, 2017

TIME: 2:10

LOCATION: EIC

Торіс	PRESENTER	TIME
Call to Order		
Roll Call		
Declaration of Quorum	Chairman Perkins	2:10 -2:15
Approval of October 4, 2016 Meeting Minutes		
Funding Items (Aviation, PTD, Rail)	Multi-Modal Transportation Directors	2:15 – 2:20
Multi-Modal Transportation Update	Julie White	2:20 – 2:25
Rail Division Presentation – "Rail Division Report to the Multi-Modal Committee"	Allan Paul	2:25 - 3:20
Adjourn	Chairman Perkins	3:20 – 3:30



MULTI MODAL COMMITTEE AVIATION DIVISION REPORT SUBMITTED BY: BOBBY WALSTON

BOARD OF TRANSPORTATION NOVEMBER 1, 2017

PROJECTS (Provide status/update for top 3-5 projects in respective mode)

- Aviation Funding Beginning October 30 through November 15, NCDOT leadership will be meeting with each NC Commercial Service Airport to discuss FY18 & FY19 entitlement funds. There are 10 Commercial Service airports in our state. If a Board Member has any CS Airport in their division, they will receive an invite to attend the meeting.
- Aircraft Fleet Plan Study The Division is currently reviewing the draft executive report. Final Report will be
 released this month. This information will be used in the overall analysis to determine the appropriate aircraft
 fleet.
- Per direction of the General Assembly, the Sikorsky S-76 is being actively marketed by a contracted aircraft broker.
- Aviation Safety & Education Partnered with RDU to host the largest single aviation event in the history of the Division – Wings of Freedom Tour, October 19-22. There was a B-17, B-24, B-25, and a P-51 on display and providing rides along with several aviation displays. This event was a huge success! Over 11,000 people attended over the four day event.
- The unmanned aircraft systems (UAS) Program Office completed regional drone workshops in Charlotte, Asheville, Wilmington, and the Triad area. The focus of the events are to educate the public of the beneficial uses of drones while highlighting the rules and regulations around safe use. The workshops attracted over 500 participants from a variety of backgrounds including government, commercial, and hobbyist. The workshop series will continue in the beginning of 2018 at new locations, to include Raleigh and Elizabeth City.
- The UAS Program Office has issued over 2,000 NC UAS Operator permits.

BUDGET UPDATES (Provide budget reporting pertinent to respective mode)

- Aviation's STI program has converted from a 90/10 (State/Local) match program to 100% State funded program. We have reimbursed nearly \$400k in local match funds across completed or open Aviation STI projects.
- Rising construction costs are affecting many of our projects requiring us to add additional funding to existing grants.

ANNOUNCEMENTS

(Share updates on announcements/upcoming events in respective mode)

NEW

Upcoming Commercial Service Airport Tours:

- October 30 Charlotte-Douglas
- November 6 Wilmington
- November 7 Raleigh-Durham
- November 8 Concord, Asheville
- November 9 Greensboro
- November 15 Pitt-Greenville, New Bern, Jacksonville
- TBD Fayetteville

UPCOMING

- Construction is beginning this week at Rutherford County airport on major airfield pavement improvements. It's important as a gateway to the 2018 World Equestrian Games.
- Executing the new airport safety inspection contract to complete critical inspections on behalf of FAA. Each year the division completes 1/3 of the State's airports.
- November 15 Wildlife at Airports Hazard Training at Rocky Mount-Wilson Airport



MULTI MODAL COMMITTEE AVIATION DIVISION REPORT SUBMITTED BY: BOBBY WALSTON

MEETINGS ATTENDED (List any key meetings attended this month)

Presentations were made at the following meetings:

- October 10 Attended and supported a State Bureau of Investigation workshop in Charlotte to provide UAS expertise to attendees.
- October 11 Attended and supported the North Carolina Aviation and Aerospace Workforce Summit held at the Carolina's Aviation Museum in Charlotte.
- October 12 Held our fourth and final UAS Workshop of the year in Thomasville at Davidson Community College. Workshop covered more on drone use and requirements for surveying and construction related applications.
- Attended and provided updates at three North Carolina Airports Association Region meetings across the state – October 13 - Johnston County Airport, October 20 - Washington-Warren Field, October 27 – Concord Regional.



MULTI MODAL COMMITTEE BICYCLE AND PEDESTRIAN DIVISION REPORT SUBMITTED BY: ALDEA DOUGLAS

BOARD OF TRANSPORTATION NOVEMBER 2, 2017

PROJECTS (Provide status/update for top 3-5 projects in respective mode)

- 2018 Bicycle and Pedestrian Planning Grant Initiative. Applications are now being accepted. The deadline for application, to be submitted electronically, is Thursday, Nov. 9 at 5 p.m. Award recipients will be notified by March 2018
- Collaborative Approach to Advance Complete Streets Initial kick off meeting held 10/10/17
- Isothermal Regional Bike Plan This plan will produce a bicycle plan for the four county region consisting of Cleveland, McDowell, Polk and Rutherford Counties. The study area also include the communities served by the Isothermal Planning and Development Commission and will improve local and regional bicycle transportation in the area. The 3rd steering committee meeting was held in October in Spindale.

BUDGET UPDATES (Provide budget reporting pertinent to respective mode)

No new updates

ANNOUNCEMENTS

(Share updates on announcements/upcoming events in respective mode)

NEW

- Helmet Initiative Applications will be accepted in late October to receive bicycle helmets. In 2017, 85 applicants received over 4,100 helmets throughout the state.
- <u>Safety City</u> Watch For Me NC has a presence at the NC State Fair again this year.

UPCOMING

Bike/Walk NC Summit – Nov 2-4, 2017

MEETINGS ATTENDED (List any key meetings attended this month)

Presentations were made at the following meetings:

- Southeast Greenways and Trails Summit Oct 1-3, 2017
- Walk to School Day October 4, 2017

Key meetings attended

- Proposed Rule Changes Meeting Bike and Ped Oct 16, 2016
- NC STIC and National STIC Network Meeting Oct 19
- Vision Zero Task Force Oct 26
- ARTS & Health Matters Collaborative Oct 31, 2017



MULTI MODAL COMMITTEE BICYCLE AND PEDESTRIAN DIVISION REPORT SUBMITTED BY: ALDEA DOUGLAS

	\sim		1110	UGH1	$\overline{}$
	1 10	INICE	1 H()	1 I (- H	•
\mathbf{v}	\mathbf{v}			uaiii	

•



MULTI MODAL COMMITTEE FERRY DIVISION REPORT SUBMITTED BY: HAROLD THOMAS

BOARD OF TRANSPORTATION NOVEMBER 1-2, 2017

PROJECTS (Provide status/update for top 3-5 projects in respective mode)

- Passenger Ferry Project
 - Boats: Armstrong Marine ordered the major equipment (engines and water jets). Detailed engineering is 85% complete. Delivery date established for 1 June 2018
 - Terminals:
 - Construction Re-Bid planned for the passenger shelter, parking and bathrooms. Initial Bid opening on 9.20.17 saw only one submission, significantly higher than the engineer estimate
 - CAMA, USACE, DWQ permits expected mid-October.
 - Floating Dock design complete
 - o <u>Transit:</u> Tram procurement IFB set for advertisement in Oct. Manufacturing estimated at 90-120 days
- Platen #5 Project
 - Concrete Deck structural design 75% complete. Stormwater, electrical and compressed air design 50% complete. Design plans due 30 November 17

BUDGET UPDATES (Provide budget reporting pertinent to respective mode)

- FY 18
 - o Period Expenditures \$10,220,229.66
 - Vessel Replacement Accounts Balance Forward \$ 9.555748.58
 - Shipyard Improvement Account Balance Forward \$ 1,059004.39

ANNOUNCEMENTS					
(Share updates on announcements/upcoming events in respective mode)					
<u>New</u>	<u>Upcoming</u>				
 Bollinger Shipyard awarded contract for new class ferry for \$9.7 million 	•				

MEETINGS ATTENDED (List any key meetings attended this month)

Presentations were made at the following meetings:

Dare County Waterways meeting 10/9, Senior management meeting 10/10, Ped exit conference 10/3,
 Passenger Ferry Stakeholder meeting 10/18 and Carteret County Tourism meeting 10/17

CLOSING THOUGHTS



MULTI MODAL COMMITTEE FERRY DIVISION REPORT SUBMITTED BY: HAROLD THOMAS

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION FERRY DIVISION MONTHLY UPDATE REPORT FOR Sep 2017

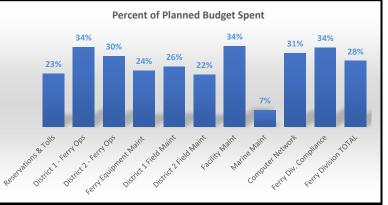
Ridership (Vehicles)						
Ferry Routes Sep 2017 Sep 2016 DELTA FY17 YTD FY16 YTD DELTA						
Currituck - Knotts Island	1,842	2,037	-9.6%	3,036	3,112	-2.4%
Hatteras - South Dock	23,214	38,276	-39.4%	88,336	108,424	-18.5%
Swan Quarter - Ocracoke	3,257	4,081	-20.2%	8,203	8,796	-6.7%
Cedar Island - Ocracoke	4,105	6,312	-35.0%	11,030	13,328	-17.2%
Aurora - Bayview	3,895	4,509	-13.6%	8,438	9,089	-7.2%
Cherry Branch - Minnesott	16,135	19,671	-18.0%	40,260	41,345	-2.6%
South Port - Fort Fisher	17,877	24,274	-26.4%	47,953	51,202	-6.3%
Emergency Ferry Rt.			N/A			N/A
Monthly Total	70,325	99,160	-29.1%	207,256	235,296	-11.9%

97.4%

Budget (Operations & Maintenance)						
	FY2017			Expenditures		
Departments	9,	Spending Plan		Spending Plan through Sep		rough Sep 2017
Reservations & Tolls	\$	356,074.00	\$	80,929.07		
District 1 - Ferry Ops	\$	10,398,483.00	\$	3,539,988.04		
District 2 - Ferry Ops	\$	8,049,597.00	\$	2,433,925.26		
Ferry Equipment Maint	\$	13,270,111.00	\$	3,172,526.20		
District 1 Field Maint	\$	481,520.00	\$	123,338.59		
District 2 Field Maint	\$	591,042.00	\$	131,467.74		
Facility Maint	\$	409,097.00	\$	140,519.53		
Marine Maint	\$	1,238,433.00	\$	87,057.37		
Computer Network	\$	344,000.00	\$	108,352.83		
Ferry Div. Compliance	\$	1,188,495.00	\$	402,125.03		
Ferry Division TOTAL	\$	36,326,852.00	\$	10,220,229.66		

94.9%

Schedule Maintained



-1.5%

\$0.00

Estimate \$500,000.00

Status of Capital Reserves Funds					
Routes	WBS	WBS Balance as of	Sep 2017		
FER Sys Cptl All Routes	16SP.501.1	\$	273,746.50		
FER D1 Currituck-Knotts Island Cap Reserve	16SP.511.1	\$	29,349.54		
FER D1 Hatteras Inlet Cap Reserve	16SP.512.1	\$	258,165.31		
FER D1 Swan Quarter - Ocracoke Island Cap Reserve	16SP.513.1	\$	1,792,423.86		
FER D1 Ocracoke Island of OI-Cedar Island Cap Reserve	16SP.514.1	\$	1,604,642.62		
FER D2 Pamlico River Route Cap Reserve	16SP.521.1	\$	32,771.92		
FER D2 Cherry Branch - Minnesott Beach Cap Reserve	16SP.522.1	\$	168,085.63		
FER D2 Cedar Island of OI - Cedar Island Cap Reserve	16SP.523.1	\$	1,604,672.64		
FER D3 South Port - Fort Fisher Cap Reserve	16SP.531.1	\$	3,791,890.56		
FER Shipyard Capital Reserve	16SP.43	\$	1,059,004.38		
Total		Ś	10.614.752.96		

Missed Trips Summary for Month Reporting							Shipyard Capital Reserve Brief		
Ferry Routes	Scheduled	Missed	Α	В	С	D	Expenditures	Sep 2017	Cumulative
Currituck - Knotts Island	342	28	26			2	16SP.43.1	\$4,700.31	\$766,977.08
Hatteras - South Dock	2,112	289		143		146	Receipts	Sep 2017	Cumulative
Swan Quarter - Ocracoke	230	23	4	1		18	16SP.43.2	\$285.77	\$1,816,127.24
Cedar Island - Ocracoke	280	21	6			15			
Aurora - Bayview	420	13	4	9					
Cherry Branch - Minnesott	1,620	115	75	40			Commitment Line Items Value		Value
South Port - Fort Fisher	952	40	24	2		14		•	
Monthly Total	5,956	529	139	195	0	195			

Missed Trips Legend: A-Weather, B-Mechanical, C-Inspections, D-Other

Updates or Comments

Other Missed Trips: HURR Maria-HIO(144), SQ(8), CIO(15), SW(16); Crew Shortage-SQ(2)

VSL Transport-SP(40); Personnel CKI(2)

Passenger Ferry Project: Terminal construction to be re-bid. Permits expected this month

Platen #5 Project: Concrete structural design 75% complete

+	
NORTH CAROLINA FERRY SYSTEM	

Replace 30 year old c	hiller & boiler system	\$200,000.00
Pending Receipts	Amount	
		Nothing Compares
		NORTH CAROLINA

Total Commitments

Upcoming priorities

Water tower restoration





















Introduction to NCDOT's Rail Division

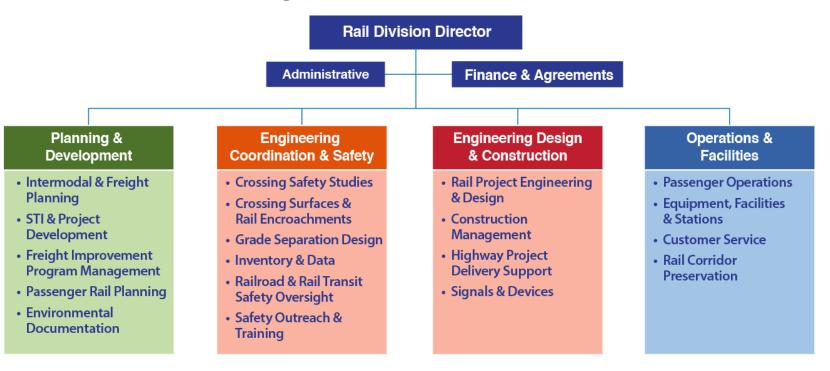
Allan Paul, Acting Director, Rail Division

November 1, 2017

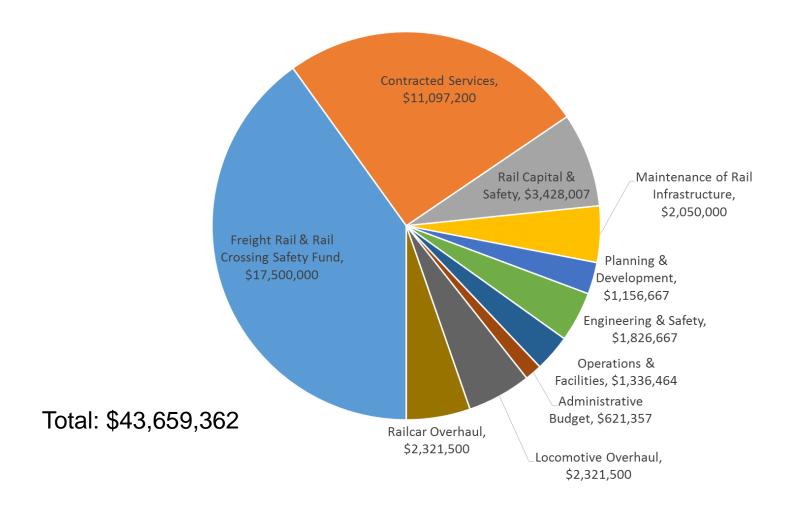
Rail Division Mission

Established in 1977, the NCDOT Rail Division's mission is the safe and efficient movement of people and goods on North Carolina's railroads through freight, passenger and safety programs, supporting job creation and economic growth.

Staff includes: 43 State Employees 51 Consultants 23 Mechanical Contract Personnel 22 NCDOT Station Attendants 139 Employees



Rail Division State Funding Sources – SFY 2018



Federal Funding Sources

Section 130

Annual allocation, public rail/highway at-grade crossing projects

CMAQ (Congestion Mitigation & Air Quality Improvement) Improvement projects, passenger service



Passenger service support

HSIP (Highway Safety Improvement Program) Crossing Safety Projects based on selection



Relocated Spring Street crossing improves safety in Old Fort

INFRA (Infrastructure for Rebuilding America)
Rail infrastructure improvements, competitive grants

SP&R (State Planning and Research Funds)
Studies, modeling and crossing safety database

TIGER (Transportation Investment Generating Economic Recovery)



Meherrin River Bridge on NCVA modernized

New Federal Railroad Administration Grants

Rail Division

CRISI

(Consolidated Rail Infrastructure & Safety Improvements)

Fed-State
Partnership for
State of Good
Repair

Restoration & Enhancement

Rail Division Federally Funded Projects

CMAQ

Piedmont Operations & Capital Improvements \$6M-\$15M/year

Queen City Express service improvement @ Laurinburg \$13.9M

TIGER

Raleigh Union Station \$38M

• Charlotte Gateway Station \$30M

Section 130

Many projects per year \$6M+/year

SP&R

Many studies per year (specific project budgets vary)
 \$1M-\$2M/year

Rail Division Federal Funding Opportunities

USDOT Flexible Funding

- TIGER: Transportation Investments Generating Economic Recovery
 - Includes flexible applicant and project structure terms
 - Typical grant is \$5M-\$25M
 - NCDOT applied for 3 projects in 2017, totaling \$57M in Federal funds
 - FFY 2017: \$500M, FFY 2018: proposed at \$0 (US House) or \$500M (US Senate)
- INFRA: USDOT Multimodal Freight Investment program
 - New guidance for FFY 2017 grants, applications due 11/2/2017
 - Formerly 'FASTLANE' in FFY 2016
 - FFY 2017: \$710M, FFY 2018: \$810M-\$855M
- Identifying project matching funds outside of STI process results in application readiness challenges

Rail Division Federal Funding Opportunities

FHWA State Formula Funding

- 23 U. S. C. 130: "Section 130"
 - Funds for elimination of hazards at railway-highway crossings
 - Rail Division prioritizes projects and cooperates with railroads to improve or close crossings
 - Highway Trust Fund provides match

Highway Safety Improvement Program (HSIP)

- NCDOT Transportation Mobility and Safety prioritizes projects
- NCDOT Rail Division identifies and submits projects for potential HSIP funding

Surface Transportation Block Grants – Directly Attributable (STBGDA)

- Funds are distributed directly to Metropolitan Planning Organizations (MPOs). Each MPO may designate funds to projects of local interest.
 - Example: Charlotte Gateway Station Phase 1 (\$15M STBGDA)

Rail Division Federal Funding Opportunities

FRA FAST Act Grant Funds

- Consolidated Rail Infrastructure and Safety Improvements (CRISI)
- Federal-State Partnership for State of Good Repair (SOGR)
- Restoration and Enhancement Grants

Funding levels:

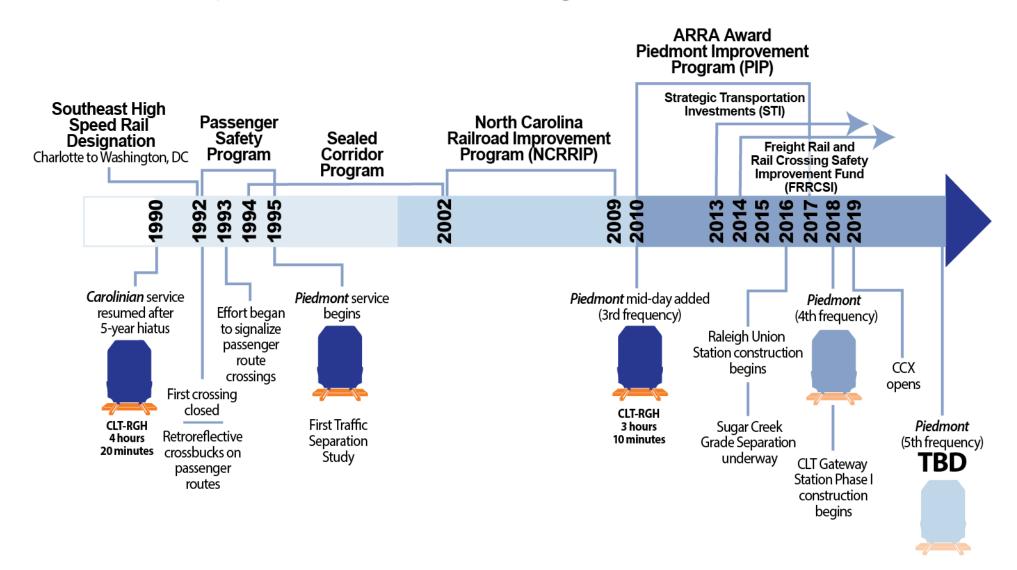
	FFY 2017	FFY 2018 House	FFY 2018 Senate
CRISI	\$68M	\$25M	\$92.5M
SOGR	\$25M	\$500M*	\$26M
Restoration & Enhancement	\$10M	\$0	\$5M
		*COCD 2019 House proposal directed to NV/NI Catoway	

^{*}SOGR 2018 House proposal directed to NY/NJ Gateway

FRA Notice of Funding Opportunity (NOFO)

- These programs were funded in FFY 2017, but a NOFO or other specific criteria information has yet to be published.
- Grant funds may be designated to particular projects: New York/New Jersey 'Gateway' program and Gulf Coast service restoration

Major Improvement Programs & Initiatives



Rail Division's #1 Priority is Safety Focus on Grade Crossing Safety and Public Education

- Sealed Corridor Program on high volume, high speed routes
- Crossing Warning Device improvements and new technology
- Traffic Separation Studies
- Crossing Closures and Consolidations closed over 300 to date
- Safety education through BeRailSafe program

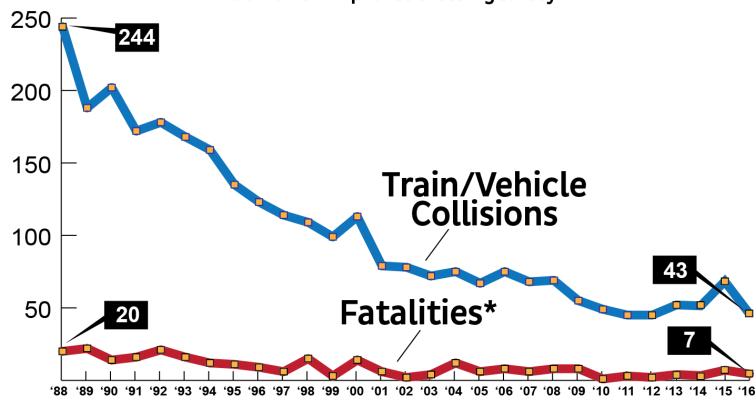




Crossing Improvements make Highways and Railroads Safer

Train-Motor Vehicle Collisions

Grade crossing incidents have declined in North Carolina as NCDOT improves crossing safety

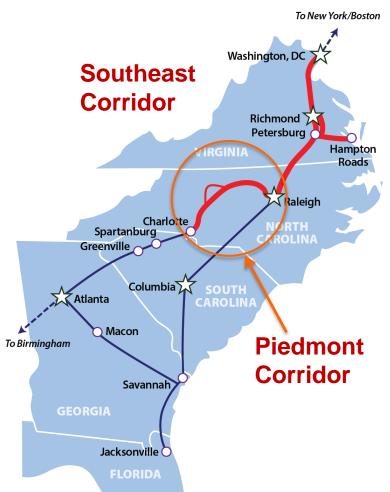


Piedmont Corridor – Part of Federal Southeast Corridor

1992 – Federal Railroad Administration designated Piedmont Corridor between Charlotte and Raleigh as part of Southeast High Speed Rail Corridor

- NC By Train Service
- Important Freight Corridor
- Portion of North Carolina
 Railroad Company Corridor

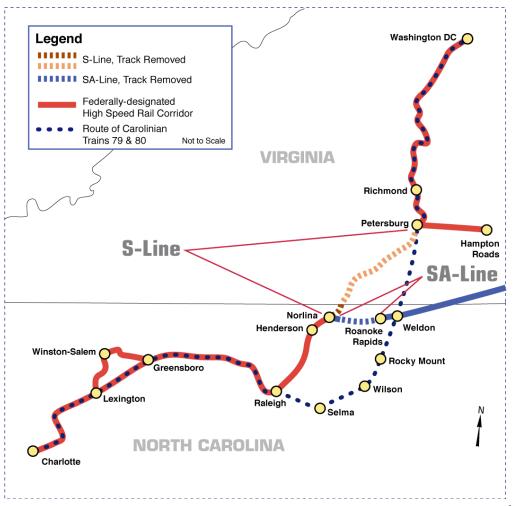
This designation opened the door to substantial funding opportunities such as ARRA, Congestion Mitigation and CMAQ



S-Line Acquisition Critical for Growth of Passenger and Freight Service in Southeast

S and SA-Lines owned by CSX

- NCDOT and CSXT will negotiate the acquisition of S-Line and SA-Line; CSXT will retain freight rights
- NCDOT appraisal for NC portion of S-Line is complete – \$807K;
 SA-Line – \$1.3M
- NCDOT is working with CSXT on an option agreement to formalize next steps
- VA is pursuing phased framework agreement with CSXT with the donation of the corridor to be CSXT's match for infrastructure improvements





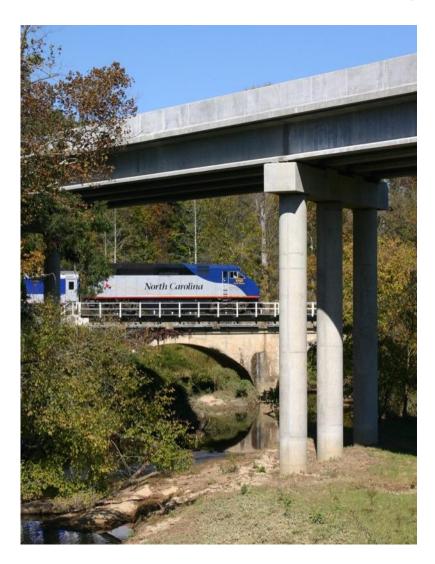
\$520 Million ARRA Grant Award Funds Piedmont Improvement Program

2010 – NCDOT awarded \$520 million in FRA ARRA grants

- Largest single improvement to NC rail infrastructure in modern times
- Targeted capacity and safety projects based on application for funding
- Funding required all work be completed and reimbursed by September 30, 2017
- Began capacity modeling to confirm number of round trip passenger trains
 - Integrated freight and passenger needs
 - -Projected current and future traffic
 - New passenger service minimizes impact to existing and future freight operations
 - -2 additional round trips possible



Piedmont Improvement Program (PIP) 2010-2017





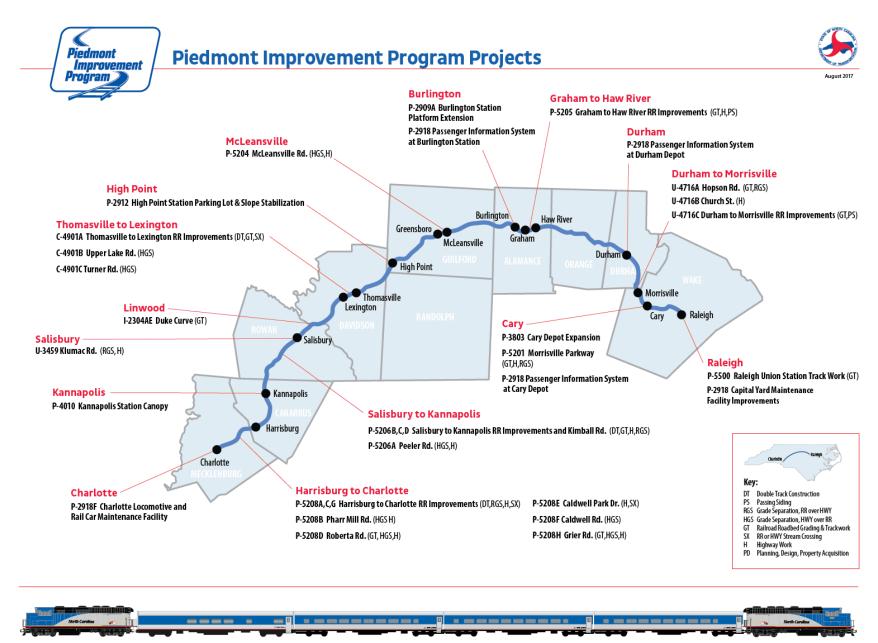






30 Distinct Projects

- 27 miles second main track and
 5 miles passing sidings
- 12 grade separations
- Over 40 at-grade crossings closed
- Over 30 curves improved for increased operating speeds
- Additional passenger equipment
- Improved stations, platforms



PIP NC By Train Fleet and Station/Platform Projects







PIP Track Improvements/Grade Separations









Raleigh Union Station opens February 2018

NCDOT and City of Raleigh aligned needs, plans and funding

- Multimodal facility in downtown Raleigh's Warehouse District
- Will accommodate current and future demand for intercity passenger rail, commuter rail, buses, taxis, bicycles and other forms of transportation
- Moves passenger operations off freight mainline, improving freight operations
- North Carolina's first fully-ADA compliant high level platform



Charlotte Gateway Station (CGS)

- Busiest station in NC with 200,000+ passengers/year
- City is pursuing two-phase approach to advance the project and relocate Amtrak service to uptown by 2024
- Funding partners:
 - -USDOT
 - NCDOT Strategic Transportation Investment (STI)
 - City of Charlotte
 - P3 procurement city seeking private development partners to design and construct the permanent passenger/ multi-modal station



Charlotte Gateway Station Visualization
One Possible Option

Charlotte Gateway Station Phase I Construction begins 2018

Phase I Project Elements:

- Build four new bridges at West 4th, Trade, 5th and 6th Streets
- Build two 2,000 foot station tracks, separating passenger from freight operations
- Build a high-level boarding platform and canopy
- Improve freight traffic flow to the Intermodal Facility at Charlotte Douglas International Airport

Phase 1 Status and Timeline:

- Engineering / Approvals / Agreements Underway
- Complete Utility Relocations Early 2018
- Phase 1 Construction –

Contract Bids - February 2018

Begin Construction – April 2018

Complete Construction – 2021

Phase II Station 3P construction:

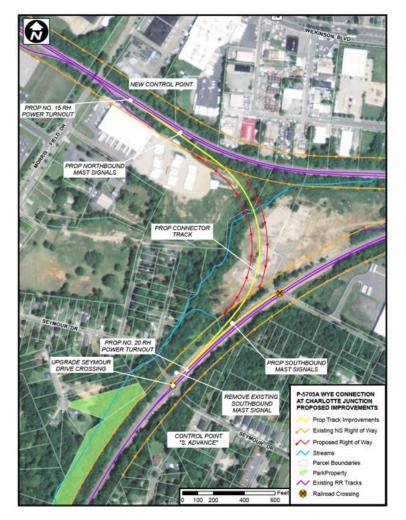
Begins Spring/Summer 2018



Charlotte Junction Improvement Project

Another Critical Component for CGS

- Construction of connection track at Charlotte Junction
- Result of capacity modeling for CGS
- Eliminates time-consuming and inefficient movements for intermodal/freight trains from NS R-Line to NS Intermodal Facility at Charlotte Douglas International Airport
- Allows for the turning of Carolinian terminating in Charlotte from the NCDOT Locomotive and Railcar Maintenance Facility
- Construction Begins late 2018
- Completion 2019



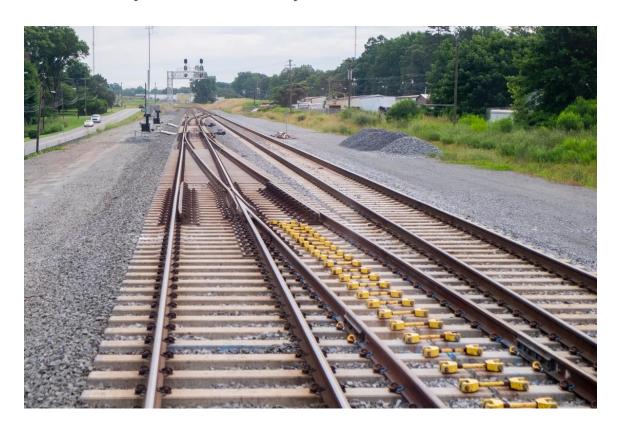
Sugar Creek Road Grade Separation

- Improves efficiency, safety and mobility on one of North Carolina's busiest rail corridors
- Eliminates busiest at-grade crossing on the NCRR between Charlotte and Raleigh
 - 30+ NS freight trains per day
 - Eight Amtrak trains per day
- Creates a safe way for pedestrians and motorists to access CATS Blue Line Extension Sugar Creek Station
- Cost: \$40.4M
- Status: Completion Spring 2018



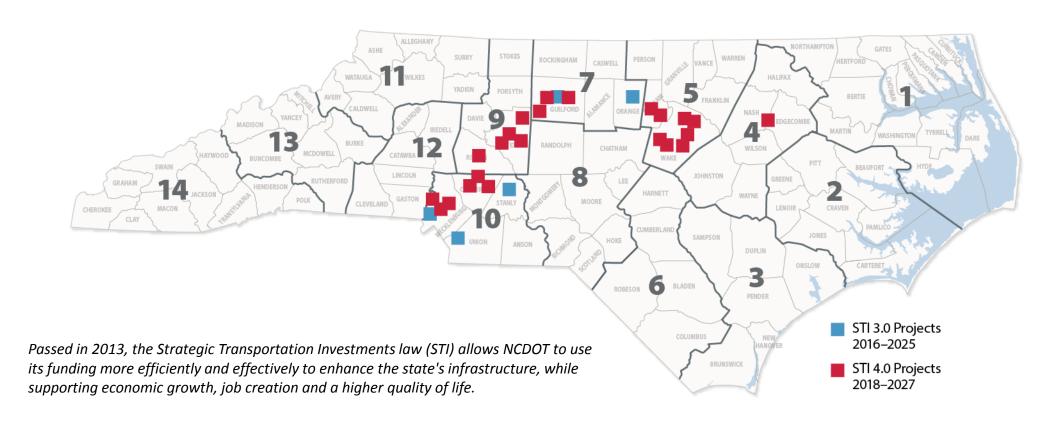
Strategic Transportation Investments (STI) Rail Projects

- 2013 State Law changed transportation funding formulas
- Allows NCDOT to use its funding more efficiently and effectively
- Data driven process
- Funding available to projects on Class 1 railroads
- Funded projects include:
 - Terminals
 - Passing sidings
 - Connection Tracks
 - Grade separations
 - Stations
- \$455M Funded Projects in 4.0



Strategic Transportation Investments (STI) Rail Projects

Projects are submitted by local planning organizations (MPOs/RPOs) and NCDOT Highway Divisions for 2018-2027 funding commitment.



Carolina Connector Intermodal Terminal (CCX)

- \$270M state-of-art terminal and freight rail infrastructure will pull together various NC transportation systems and serve as a global logistics resource
- Improves access to domestic and international markets
- Scheduled to open late 2019
- STI contribution: \$100M





North Carolina Ports has secured reliable and cost-competitive intermodal service at the Port of Wilmington

The Queen City Express offers:

- Daily shuttle service between Wilmington and Charlotte to create a reduced cost for cargo destined for/or originating in the Greater Charlotte region
- Best-in-class transit times:
 Wilmington to/Charlotte overnight
- Direct, future access to CCX hub



Queen City Express in Operation

The Service consists of:

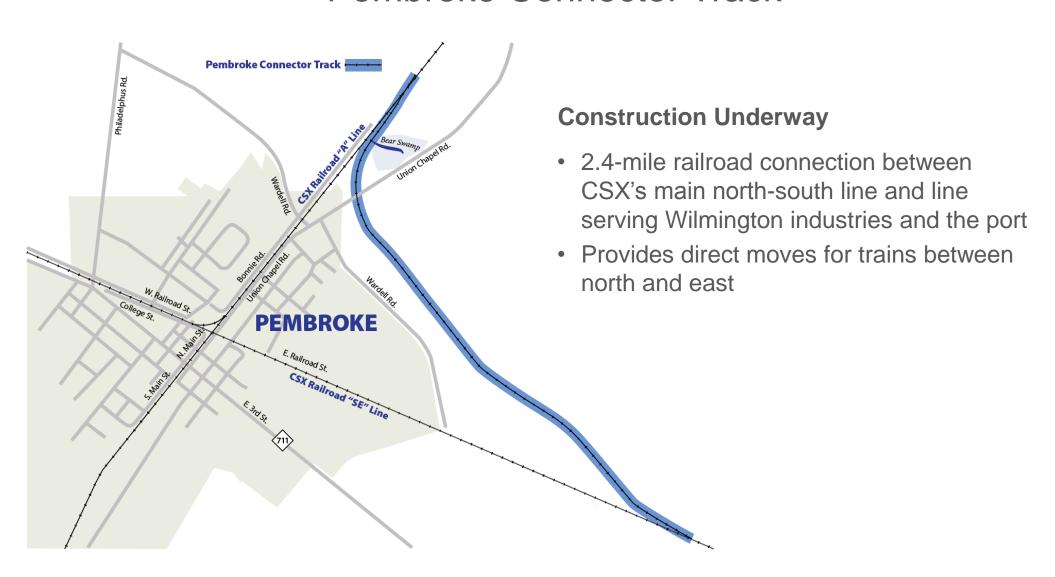
- Double-stacked containers moved daily
- Rail movement between Port CSX's Charlotte
 Intermodal Terminal Port's Charlotte Intermodal Terminal

The Service reduces:

- Truck-miles traveled
- Emissions
- Additional Service Improvements to the rail infrastructure submitted into STI P5.0 include:
 - Hoskins Road Grade Separation in Charlotte
 - Hovis Road Crossing Improvement in Charlotte
 - Wilmington Beltline Rail Speed Improvement
 - Monroe Connector



Pembroke Connector Track





Freight Rail & Rail Crossing Safety Improvement Fund (FRRCSI)

- Short Line and Industrial Access Projects
- Freight Projects improve track, rehabilitate bridges for 286K carloads
- Economic Development Projects add carloads to NC's rail network (diverting from highways)
 and develop industrial infrastructure
- Safety Projects consolidate and improve crossings, eliminate rail-highway hazards, implement new technology
- Track and transload improvements to support capacity at NC's ports



Freight Rail & Rail Crossing Safety Improvement Fund (FRRCSI)

Since the General Assembly authorized* and funded FRRCSI in 2014, the Rail Division has been able to deliver:

- \$15.968M in Track & Infrastructure Improvements
- \$18.826M in Crossing Safety & Signal Improvements
- \$8.659M in Rail Access Improvements
- \$43.453M Total FRRCSI Investment Statewide

Program Goals:

- Improve safety
- Modernize infrastructure
- Increase freight capacity
- Support economic development
- Divert freight to rail



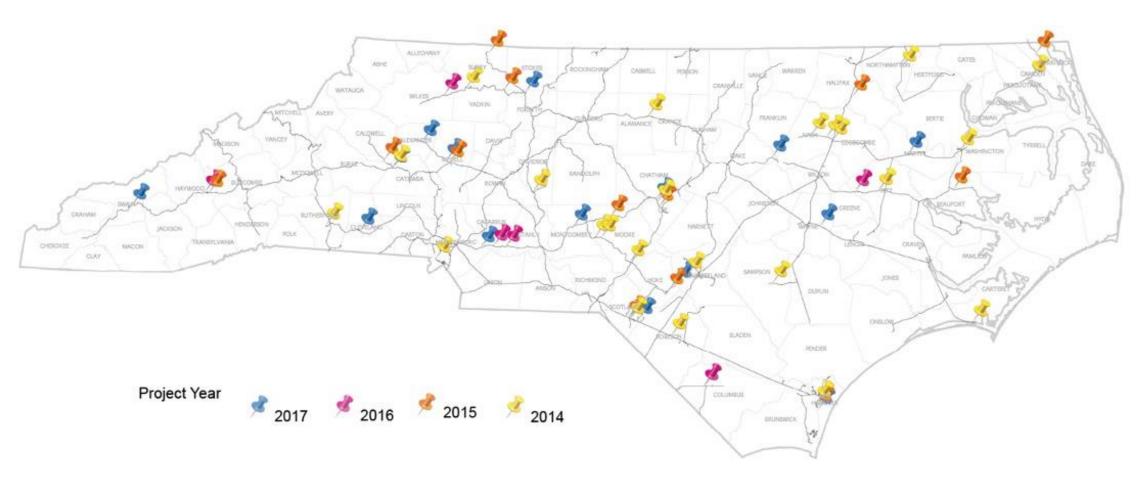
\$81.014M Investment in NC Railroads \$37.561
Private
Match

\$43.453
Private
Match

*Senate Bill 402 and utilizes dividends from the North Carolina Railroad Company, appropriated to NCDOT.

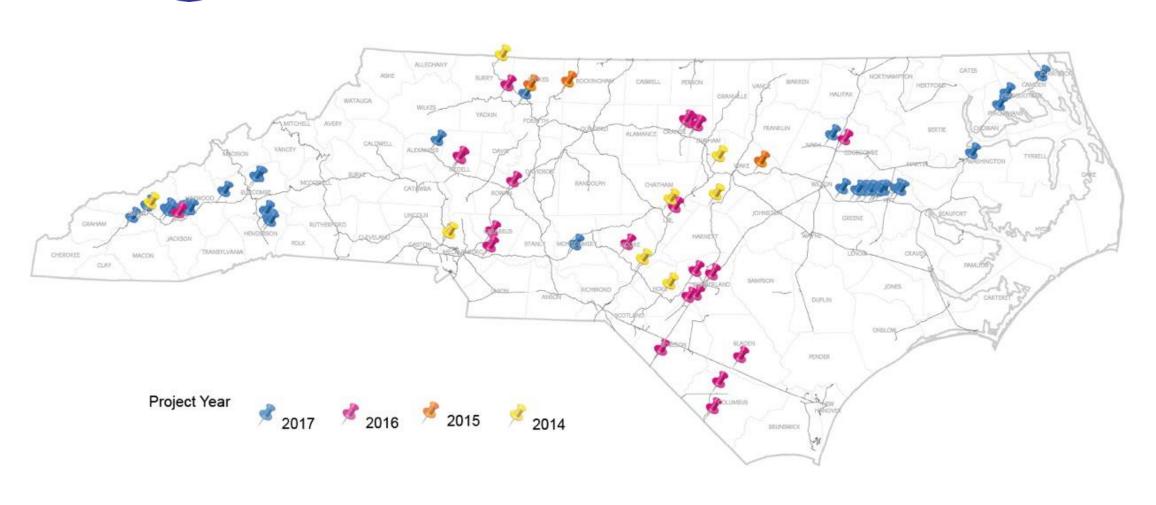


Rail Industrial Access Program & Short Line Infrastructure Assistance Program Projects





Crossing Consolidation & Assistance and Crossing Surface Projects



Looking Ahead – Next Steps and Opportunities

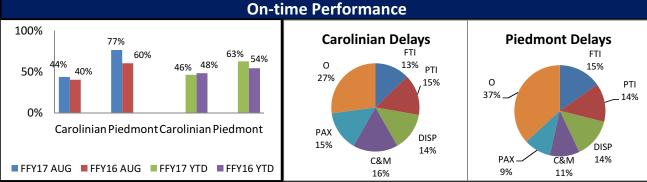
As we continue working to fulfill our mission – the safe and efficient movement of people and goods on North Carolina's railroads through freight, passenger and safety programs, supporting job creation and economic growth – the Rail Division will:

- Maximize benefits of state funding and current/upcoming federal grant resources
- Progress work on Southeast Corridor S-Line acquisition working with Virginia, FRA and railroads
- Continue to improve/grow state passenger service in the Piedmont Corridor
 - PIP complete, RUS opens February 2018, additional *Piedmont* frequency begins May 2018
 - CGS track and structure construction begins 2018, laying groundwork for relocation of Charlotte station to uptown
- Strengthen freight corridors in our state and our connections to the national freight network
 - Progress CCX construction, Port improvements, projects identified to improve Queen City Express
 - Utilize FRRCSI and other grant programs for Rail Industrial Access Program, Short Line projects, and crossing and other safety improvements
- Work with railroads, state, federal and local partners to identify rail improvements and opportunities
- Provide long-range planning for increased freight and passenger service throughout the state

ncdot.gov Rail Division Questions? 1869 1869

PIEDMONT & CAROLINIAN PERFORMANCE SNAPSHOT						
NCDOT RAIL DIVISION for the Month of AUGUST 2017						
Ridership						
	FFY17 AUG	FFY16 AUG	Δ	FFY17 YTD	FFY16 YTD	Δ
Carolinian	26,633	26,879	-1%	258,747	265,809	-3%
Piedmont	12,630	11,486	10%	135,117	139,302	-3%
Total	39,263	38,365	2%	393,864	405,111	-3%
Number	Number of Trains Average Number of Passengers per Train					
FFY17 AUG	FFY16 AUG	Service		FFY17 AUG	FFY16 AUG	Δ
62	58	Carolinian		430	463	-7%
124	116	Piedmont		102	99	3%
			Revenue			
	FFY17 AUG	FFY16 AUG	Δ	FFY17 YTD	FFY16 YTD	Δ
Carolinian	\$1,789,926	\$1,852,687	-3%	\$16,504,963	\$16,889,866	-2%
Piedmont	\$262,355	\$234,777	12%	\$2,879,421	\$2,935,823	-2%
Total	\$2,052,281	\$2,087,464	-2%	\$19,384,384	\$19,825,689	-2%
Amenities & Vending	Mo. Surcharge + Vending Income	\$18,494	Mo. Expense	\$4,008	Mo. Surplus	\$14,486

August 2017 service modifications impacted 2 Piedmont trains. On August 31, Train 73 was cancelled between Burlington and Charlotte and Train 74 was cancelled between Charlotte and Raleigh due to downed power lines across the tracks north of Greensboro, however alternate transportation was provided for both Trains. Average gasoline prices remained low in August 2017 but were \$0.18 per gallon higher than in August 2016.



*Carolinian and Piedmont delays were 8,016 and 2,789 minutes, respectively. FTI - Freight Train Interference; PTI - Passenger Train Interference; DISP - Dispatch Related; C&M - Construction, Maintenance; PAX - Any Passenger Related; O - All Other Delays (e.g. weather, mechanical). Carolinian trains arriving within 20 minutes and Piedmont trains within 10 minutes of schedule are considered on time.

Overall Customer Statisfaction						
FFY17 JULY FFY16 YEAR-END Δ						
Carolinian	61%	75%	-14%			
Piedmont	92%	90%	2%			

*The customer satisfaction index (eCSI) is calculated from rider survey data conducted on line and is for one month prior to the current report month. Overall satisfaction is defined as average scores greater than or equal to 80. Customer satisfaction goals for FFY 2017 were 75% for the Carolinian and 90% for the Piedmont. Overall July eCSI for all Amtrak services was 77%.

North Carolina City Pairs with Largest Ridership				
	Carolinian	Piedmont		
1	Raleigh - Washington	Charlotte - Raleigh		
2	Charlotte - Raleigh	Charlotte - Cary		
3	Charlotte - New York	Charlotte - Durham		
4	New York - Raleigh	Charlotte - Greensboro		
5	Charlotte - Durham	Greensboro - Raleigh		
6	Greensboro - Washington	Cary - Greensboro		
7	Charlotte - Washington	Durham - Greensboro		
8	Cary - Washington	Charlotte - HighPoint		
9	Durham - Washington	Cary - Durham		
10	New York - Wilson	Durham - Raleigh		

*Of the ten city pairs with the highest ridership, from the previous FFY month Cary - Washington had the largest increase of 31% and Charlotte - New York the largest decrease of 29% for the Carolinian; Durham - Raleigh had the largest increase of 76% for the Piedmont with none of the top ten Piedmont city pairs showing a decrease in ridership. Highlights indicate increased ridership from August 2016 for the station pairs.

Carolinian and Piedmont Total Ons-Offs at North Carolina Stations

	FFY17 AUG	FFY16 AUG	Δ		
Charlotte	12,818	12,145	6%		
Raleigh	9,715	9,087	7%		
Greensboro	8,381	7,437	13%		
Durham	6,255	5,737	9%		
Cary	5,331	4,942	8%		
Wilson	2,806	3,056	-8%		
High Point	2,165	2,222	-3%		
Burlington	1,862	1,840	1%		
Rocky Mount	1,780	2,219	-20%		
Salisbury	1,690	1,471	15%		
Kannapolis	1,487	1,450	3%		
Selma-Smithfield	787	943	-17%		

^{*}The values represent passenger ons and offs at North Carolina stations for only state-supported routes and do not include those of other Amtrak services. The values should not be construed as total ridership.

North Carolina Train Host Association FFY17 AUG FFY17 YTD Train Host Volunteer Hours 879 9,706

Go. Reconnect.





MULTI MODAL COMMITTEE PUBLIC TRANSPORTATION DIVISION REPORT SUBMITTED BY: DEBBIE COLLINS

BOARD OF TRANSPORTATION NOVEMBER 1, 2017

PROJECTS (Provide status/update for top 3-5 projects in respective mode)

- <u>STI Scoring</u> STI projects were submitted for scoring and are being reviewed. Cambridge Systematics will be
 reviewing for accuracy and consistency. The Feasibility Studies Unit will review costs for all transit Bus, Rapid
 Transit, Commuter Rail, and Light Rail projects. PTD staff will review for accuracy and reasonableness.
- <u>TIGER Grant</u> PTD submitted a TIGER grant to support building six (6) rural administrative facilities in Duplin, Hoke, Anson, Johnston, Iredell and Macon counties. These facilities will greatly improve the working conditions and operations of these organizations.

BUDGET UPDATES (Provide budget reporting pertinent to respective mode)

• The budget plan for FY19 applications due 11/3/2017 is being prepared. PTD has implemented a new process this year of predicting the useful life of vehicles to replace them earlier. It may take 1-2 years to be able to fund all of the needs.

ANNOUNCEMENTS					
(Share updates on announcements/upcoming events in respective mode)					
<u>New</u>	<u>Upcoming</u>				
	 Strategic Technical and Executive 				
 ConCPT coordination and consolidation grants submitted to us by October 20, 2017. 	Committees – November 7, 2017				

MEETINGS ATTENDED (List any key meetings attended this month)

Presentations were made at the following meetings:

- Strategic Plan Community meetings weeks of October 3rd and 16th
- Statewide Locally Coordinate Plan meetings mornings of Strategic Plan meetings
- NC Association of RPOs October 27



MULTI MODAL COMMITTEE RAIL DIVISION REPORT SUBMITTED BY: ALLAN PAUL

BOARD OF TRANSPORTATION NOVEMBER 1-2, 2017

PROJECTS (Provide status/update for top 3-5 projects in respective mode)

- CCX Intermodal Terminal
 - CSX is progressing the project design for the terminal and associated double track project with oversight from the Design & Construction Branch. Plans for the double track project are 90% complete and plans for the terminal are approximately 60% complete. CSX anticipates construction beginning in first quarter of 2018, subject to permitting.
 - NCDOT continues to coordinate with State Historic Preservation Officers (SHPO) and CSX in reaching agreement on the final mitigation measures to be included in the memorandum of agreement necessary under section 106 of the National Historic Preservation Act. Currently awaiting additional study work to be submitted to SHPO in order to determine the project's impact on archeology resources. NCDOT will ask to be a party to the MOA associated with the Section 106 Historic Resources mitigation.
- CCX Freight & Transportation Master Plan
 - Dewberry is currently working on developing data that will support potential projects along important highway corridors. The Strategic Plan should be finished soon (this month) with the Master Plan following within a month.
- Charlotte Gateway Station
 - Design of the Phase 1 Track, Structures, Signals, Canopy and Platform is underway and is being coordinated with the City of Charlotte and Norfolk Southern. The design includes an iconic cable-stayed platform canopy design. The Design & Construction Branch is coordinating with the Contracts Office on the project contract which is currently in the February 2018 central letting. The project team is monitoring a right of way relocation issue (the Greyhound property) for its possible effect on the project phasing and schedule.
- STI P5.0 Project Submittals
 - The deadline for project submittals to the Strategic Transportation Prioritization (SPOT) office for P5.0 projects was September 29th. The Rail Division anticipates receiving a minimum of 113 projects consisting of grade separations, track capacity improvements, and passenger stations/facilities throughout rail corridors across the State. Under P4.0, the project submittals totaled 83 projects of which 33 were programmed in the approved STIP totaling over \$450 million.

BUDGET UPDATES (Provide budget reporting pertinent to respective mode)

No Updates.

ANNOUNCEMENTS

(Share updates on announcements/upcoming events in respective mode)



MULTI MODAL COMMITTEE RAIL DIVISION REPORT SUBMITTED BY: ALLAN PAUL

NEW

INFRA Grants

- The Rail Division submitted INFRA applications for the following projects. Rail Improvements from Charlotte to Wilmington, Weldon Double Track and Second Roanoke River Bridge, and Southeast Corridor Grade Crossing Improvements and Grade Separations.
- With NCDOT Rail getting one of the NCDOT INFRA slots, the Weldon Double Track and Charlotte to Wilmington Improvements will be combined into one application from NCDOT.

TIGER Grants

- NCDOT Rail Division submitted TIGER grant applications for the following projects - a subset of the grade separation and crossing improvements along the Southeast Corridor, the Weldon Double Track and Second Bridge Project (\$67M) and a Passenger Station in Weldon.
- Southeast Corridor Coordination
 - The next Compact meeting will have to be held after the NC members are all re-appointed.
 - Currently, Representative Brawley and Representative Dollar have been reappointed; a Senate Bill is anticipated to be voted on in October that will include the Senate appointments to the Compact (currently anticipated to be Senators Tom McInnis and Jim Davis).

UPCOMING

- Southeast Regional Rail Plan
 - The next stakeholders' meeting has been scheduled for November 13th -14th in the Board Room
 - The Rail Division has proposed a tour of the Raleigh Union Station and is awaiting confirmation from the FRA team.



MULTI MODAL COMMITTEE RAIL DIVISION REPORT SUBMITTED BY: ALLAN PAUL

MEETINGS ATTENDED (L	List any	key meetings	attended th	is month)
----------------------	----------	--------------	-------------	-----------

Presentations were made at the following meetings:

• No updates.

CLOSING THOUGHTS

• No updates.



NCDOT Rail Division The Rail Report





🥑 @NC_By_Train 🚺 facebook.com/NCByTrain ncbytrain.org 919-707-4700 November 2017

Tanzanian Mayor Rides the Piedmont

Over the years, many interesting passengers have ridden our trains. Most are North Carolinians or from neighboring states, but occasionally we have passengers from halfway around the globe.

That was the case on Sept. 5 when the mayor of Arusha, Tanzania, the Honorable Kalisti Bukay, rode *Piedmont* Train 73 from Durham to Greensboro. He was accompanied by one of our regular passengers, Bennett College Professor Gwenn Bookman. The two were enroute to Greensboro to speak to Professor Bookman's class after visiting with Mayor Bill Bell in Durham.

While on board. Professor Bookman took some time and introduced Mayor Bukay to Amtrak staff and train hosts.

"It was a pleasure to have met the mayor as the experience was one of significance," said Conductor O.T. Salley.

Arusha is located in northern Tanzania, and has a population of nearly half a million people. It is near the Serengeti National Park and Mount Kilimanjaro.



Mayor Kalisti Bukay and Conductor O.T. Salley

November Railroad Trivia Question

Ouestion: What were the names of the first and second railroad companies to serve Charlotte and Mecklenburg **County?** (See answer on page 6.)

Short Line Infrastructure Program Applications Received

On Sept. 29, the application period for state fiscal year 2018 closed for the Short Line Infrastructure Program, which is funded through the Freight Rail & Rail Crossing Safety Improvement Program. The Rail Division received a total of 12 applications seeking approximately \$6.1 million in matching funds. The submitted applications include a variety of projects to improve bridge structures, replace rail, construct transload facilities, harden the railroad, and facilitate freight diversion. The approved projects will be announced later in November.

Strategic Transportation Investments P5.0 **Project Submission Window Closes**

On Sept. 29, the project submission window closed for the Strategic Transportation Investments for Prioritization 5.0. MPOs, RPOs, and the Highway Division Offices submitted 123 rail projects, totaling approximately \$2.0 billion.

The Rail Division has begun collecting the data necessary to score these projects, which is due to the Strategic Prioritization Office (SPOT) on November 9. Once received, the SPOT office will review and transmit this data to the MPOs, RPOs, and Highway Division Offices in late November, and these groups will have about five weeks to review the scoring data and provide comments back to the SPOT Office. Projects submitted in the Rail category include a number of grade separations that eliminate at-grade crossing conflicts, passenger station facilities and construction of additional track capacity.

Two Crossings Closed in the Town of Fremont

The NCDOT Rail Division recently closed the atgrade rail-highway crossings at North

Street and South Street in Fremont in Wayne County as part of the crossing closure program.

These two humped crossings resulted in low-bed trailers getting stuck on one of the crossings on average every six weeks.

As is common practice, towns may receive financial incentives for closing problematic or unsafe crossings. Funds received from railroads do not have use restrictions, however funding from NCDOT, which must follow federal guidelines, must be used for traffic safety purposes. In this case, the Town chose to use both CSX and NCDOT funds towards the purchase of a new, much-needed police cruiser, which satisfied the NCDOT safety requirement.





Meherrin River bridge Meherr

Northeastern North Carolina Rail Improvement TIGER Project Update

The Northeastern North Carolina Rail Improvement project was awarded to the N.C. Department of Transportation in federal fiscal year 2014 from the Federal Railroad Administration for improvements to the North Carolina & Virginia Railroad in North Carolina in the amount of \$5.8 million. NCDOT is contributing \$2.6 million towards the project, while NCVA is responsible for the remaining costs of the \$11.631 million project. The cooperative agreement was signed on August 10, 2016. The scope of the project includes:

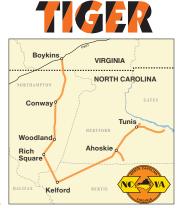
- Replacement of approximately 17,700 ties, including surfacing and ballast;
- Replacement of 17 miles of 100-pound jointed-rail with 115-pound rail, or heavier, continuous welded-rail;
- Replacement and/or repair of 11 turnouts;
- Improvement of eight at-grade highway-railroad crossings; and
- Improvements to the Meherrin River Bridge.

In addition to the replacement of 17 miles of rail, FRA recently approved NCDOT to add an 3.2 miles of rail replacement due to cost savings in the materials procurement process.

Construction began in July 2017 on the Meherrin River Bridge and that portion of the project was completed in August. Construction of the line of road work began in July 2017. As of September 29, 87,920 feet of rail has been installed, 13,600 cross ties have been replaced, four of seven turnouts have been completed, two at-grade

highway-railroad crossings have been improved, 4,000 tons of ballast has been dumped and over five miles of surfacing has been finished. Improvements to the line will allow for greater efficiency for the line's largest customer, Nucor Steel in Cofield.

In addition to Nucor Steel, NCVA also provides service to Berry Plastics, Commercial Ready Mix, Eddie Kane Steel, and Resinall, among others. Short line railroads like the NCVA are valuable to freight logistics and economic development efforts throughout the state.









Track work

Mebane Traffic Separation Study



were presented at the September 11, 2017 City Council meeting. The study evaluated eight at-grade rail-highway crossings, including the need for additional pedestrian improvements. Previously there had been a number of accidents, specifically in the downtown area. Recommendations included various crossing and pedestrian improvements, as well as a new grade separation at Buckhorn Road (SR 1114). Funding is being sought to implement the near and midterm improvements.

Mooresville Traffic Separation Study

A Traffic Separation
Study is
currently
underway
for the Town of Mooresville
in Iredell County, including 30 at-grade
crossings. The Pail Division recently held the final stakeholder's

crossings. The Rail Division recently held the final stakeholder's meeting on this project and is now scheduling the presentation to stakeholders. Once the Council endorses it, funding for the improvements will be sought. These improvements currently include two new at-grade crossings, the closure of eight existing at-grade crossings (including five public and three private crossings), crossing signal upgrades at 11 crossings, pedestrian improvements at five locations and a grade separation at Mazeppa Road (SR 2395).

NCDOT and Blue Ridge Southern Railroad Make Safety Improvements at Crossings

NCDOT Division 14, the Rail Division, and the Blue Ridge Southern Railroad worked together to improve crossing surfaces on railroad crossings in Henderson and Haywood counties. The first crossing improved was Berkeley Road, SR 1511 in Henderson County. This crossing was an asphalt surface with narrow shoulders. Trucks making a right turn at the crossing were running off the crossing surface and over the track. The new surface is a concrete tub with a wider crossing surface that allows trucks making the right turn to stay on the crossing surface. The highway shoulder on the right side was also widened. The second crossing improved was Blackwell Drive, NC 215 in Haywood County. This crossing consisted of rubber panels that were wearing out and in need of replacement. Also the asphalt around the crossing was deteriorating resulting in a bumpy ride. The new crossing surface is a concrete tub providing a long lasting, smooth surface for this crossing.





Blackwell Drive before improvements



Berkeley Road before improvements



Berkeley Road after improvements



Blackwell Drive after improvements

Freight Rail and Rail Crossing Safety Improvement Funds Improve Great Smoky Mountain Railroad Track and Bridges

In August, members of the NCDOT Rail Planning Unit met with Roadmaster Tom Falicon of the Great Smoky Mountain Railroad to review completed and pending state funded infrastructure improvement projects along with discussing future maintenance needs. Located in Bryson City, GSMR offers scenic and themed passenger excursions within the heart of the Great Smoky Mountains. The railroad operates on 53 miles of track, two tunnels, 25 bridges and one of the few remaining turntables in the state. This popular attraction served nearly 200,000 passengers last year and ridership continues to grow annually.

Between 2015 and 2016, NCDOT provided more than \$395,000 in matching Freight Rail and Rail Crossing Safety Improvements (FRRCSI) funds to restore inactive track, rehabilitate bridges and replace worn cross ties. Through the Short Line Infrastructure Assistance Program (SIAP), matching FRRCSI funds of \$478,839 have been committed in 2017 to continue maintenance, upgrades and restoration of the GSMR rail infrastructure. These ongoing efforts improve the safety and efficiency of rail operations while supporting economic development in the state and the longevity of this beloved passenger experience.



Bridge rehabilitation







GSMR Locomotive 1702



GSMR Turntable (not funded through FRRCSI)

Ridership & Revenue on NC By Train Service - *August 2017 vs. 2016

ina a Sa	RIDERSHIP			REVENUE		
11.11. 2.2	2017	2016	% +/-	2017	2016	% +/-
Piedmont	12,630	11,486	+10%	\$262,355	\$234,777	+12%
Carolinian	26,633	26,879	-1%	\$1,789,926	\$1,852,687	-3%

Hours Volunteered by N.C. Train
Hosts in August, supporting NC By
Train onboard and at events

August 2017 service modifications impacted two Piedmont trains. On Aug. 31, Train 73 was cancelled between Burlington and Charlotte and Train 74 was cancelled between Charlotte and Raleigh due to downed power lines across tracks north of Greensboro, however alternate transportation was provided for both trains. Average gasoline prices remained low in Aug. 2017, but were 18¢ per gallon higher than in Aug. 2016.

Celebrate the Holidays by Riding NC By Train with Santa Claus Families can celebrate the holidays by the Santa Train!

Families can celebrate the holidays by getting on board NC By Train's popular Santa Train with routes between Charlotte and Raleigh on Saturday, Dec. 2. For one day only, come make some memories on this fun-filled trip featuring Mrs. Claus,

carolers, refreshments, and Santa Claus himself!

Tickets are limited and sell out quickly, so book early to reserve your seats! Passengers can board the Santa Train at any of the stops listed below.

To participate in Santa Train, tickets must be purchased as round trip:

From Raleigh: (station code RGH), Cary (CYN), Durham (DNC) or Burlington (BNC), book your round trip ticket on Train #75 to Greensboro (GRO), returning on Train #74

From Charlotte: (CLT), Kannapolis (KAN), Salisbury (SAL), book your round trip ticket on Train #74 to High Point (HPT), returning on Train #75

Tickets can be purchased online by visiting NCByTrain.org or calling 800-298-7246.

Score a Touchdown by Riding NC By Train to Panther Games

Passengers headed to the 1 p.m. Sunday games on the dates listed below can take *Piedmont*Train 73 from any of the eight stations along the corridor to Charlotte and return on *Piedmont* Train 76 at 5:15 p.m. The Charlotte Area Transit System is picking up passengers at the Charlotte station and dropping them off a few blocks from Bank of America Stadium. Passengers can request a transit pass from the conductor to travel from the Charlotte train station to the transportation center. The pass is valid for one ride and one transfer.

Nov. 5, Dec. 10, Dec. 17, Dec. 24
Tickets can be purchased online at
NCByTrain.org.

Out and About with NC By Train



Above: Amtrak and NC By Train sponsored the Youth Stage at World of Bluegrass, Sept. 30 - Oct. 1. Alison Boswell (right) from the Rail Division Customer Service Team, along with N.C. Train Host Association President Robert 'Bob' Warner, were on hand to spread the word about NC By Train service.



NC By Train table in Exhibit Hall



Chatham County Line sings "The Carolinian"





Customer Service Team Member Timothy McHugh (right) shares info about NC By Train and upcoming events accessible by train, such as the Wide Open Bluegrass Festival, the State Fair stop, the Lexington BBQ Festival and Santa Train with fans at the Charlotte Knights Game.

Raleigh Union Station Construction Photos



Raleigh skyline from inside station looking east



U.S. Rep. David Price (far right) touring Raleigh Union Station



Chief Deputy Secretary David Howard and members of the House Select Committee on Transportation tour Raleigh Union Station



Rep. John Torbett, (far right) Chairman of the House Select Committee on Transportation, addresses the RUS tour group



Mezzanine level, future office rental space



Passenger Concourse

November Railroad Trivia Answer: The first was the Charlotte and South Carolina Railroad which built a 110-mile line from Charlotte to Columbia in 1852. The first C&SC passenger train left Charlotte for Columbia on March 25, 1852. The second was the North Carolina Railroad whose first passenger train arrived in Charlotte from Greensboro (94 miles) on January 30, 1856. Today, both railroads are operated by Norfolk Southern.



ROAD/BRIDGE/FERRY NAMING COMMITTEE AGENDA

BOARD OF TRANSPORTATION OCTOBER 4, 2017

TIME: 11:00 AM

LOCATION: Room 160

Торіс	PRESENTER	Тіме
Call to Order	Mike Fox, Chair	11:00 AM
Roll Call		
Declaration of Quorum		
Non-Conflict Statement		
Approval of September 2017 Road/Bridge/Ferry Naming Committee Meeting Minutes		
Championship Sign Discussion	Kevin Lacy	11:05 AM
Logo Panel Discussion	Kevin Lacy	11:15 AM
Adjourn	All	11:30 AM