



North Carolina Projects Update

Presented to

North Carolina Association of Metropolitan Planning Organizations

2013 Annual Conference

Winston-Salem, NC

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May 17, 2013



NCDOT Rail Division

Since 1977, the Rail Division has focused on 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.





Rail Safety Improvements

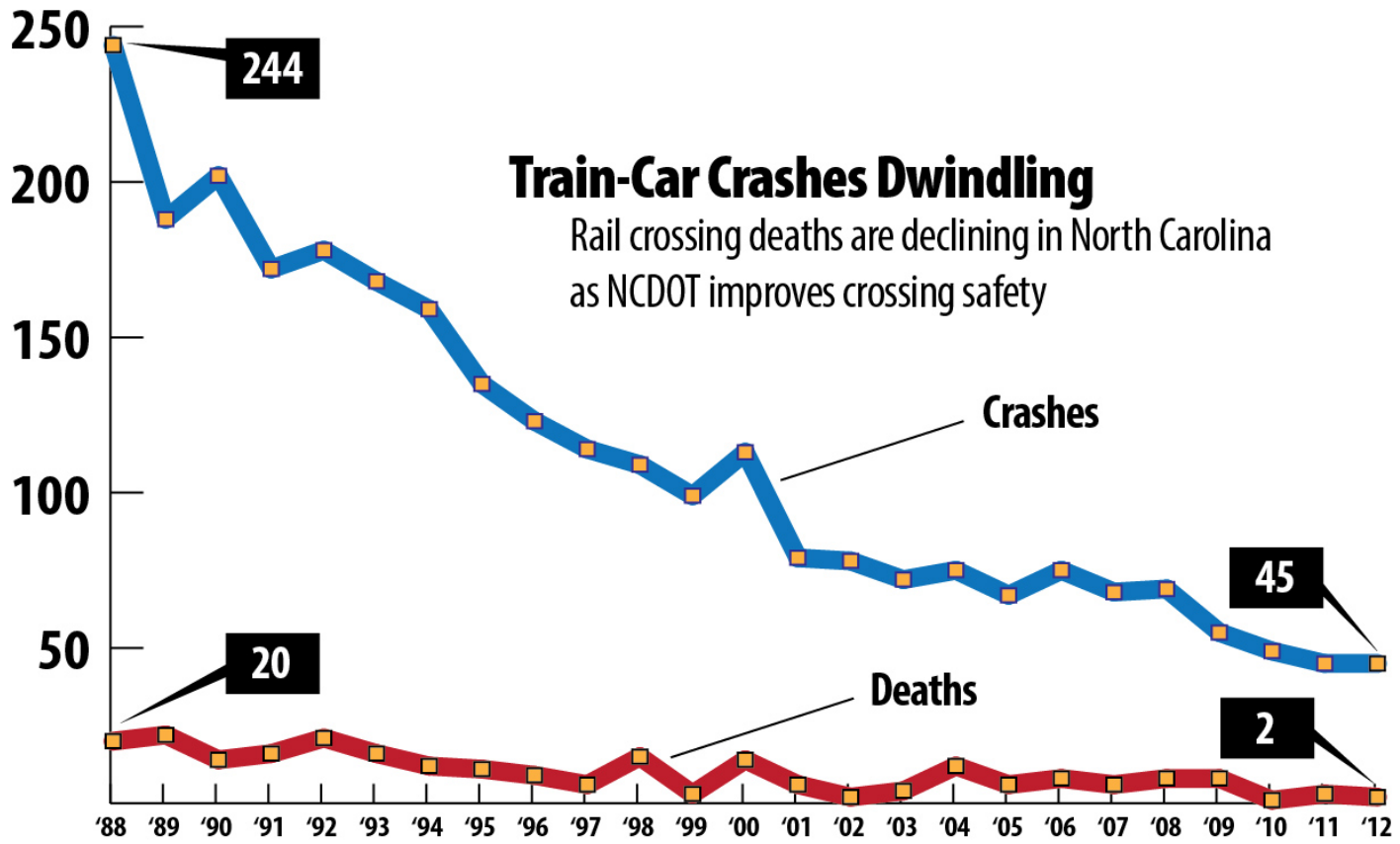
NCDOT Rail Division is responsible the management and delivery of rail safety programs:

- Crossing Signalization Projects – 1,090 locations since January 2002
- 189 rail-highway crossings closed since 1992
- **Piedmont Improvement Program, CRISP, PRIIA will:**
 - Create 15 new grade separations
 - Replace 25 public and 26 private crossings & build 12 miles of new roads





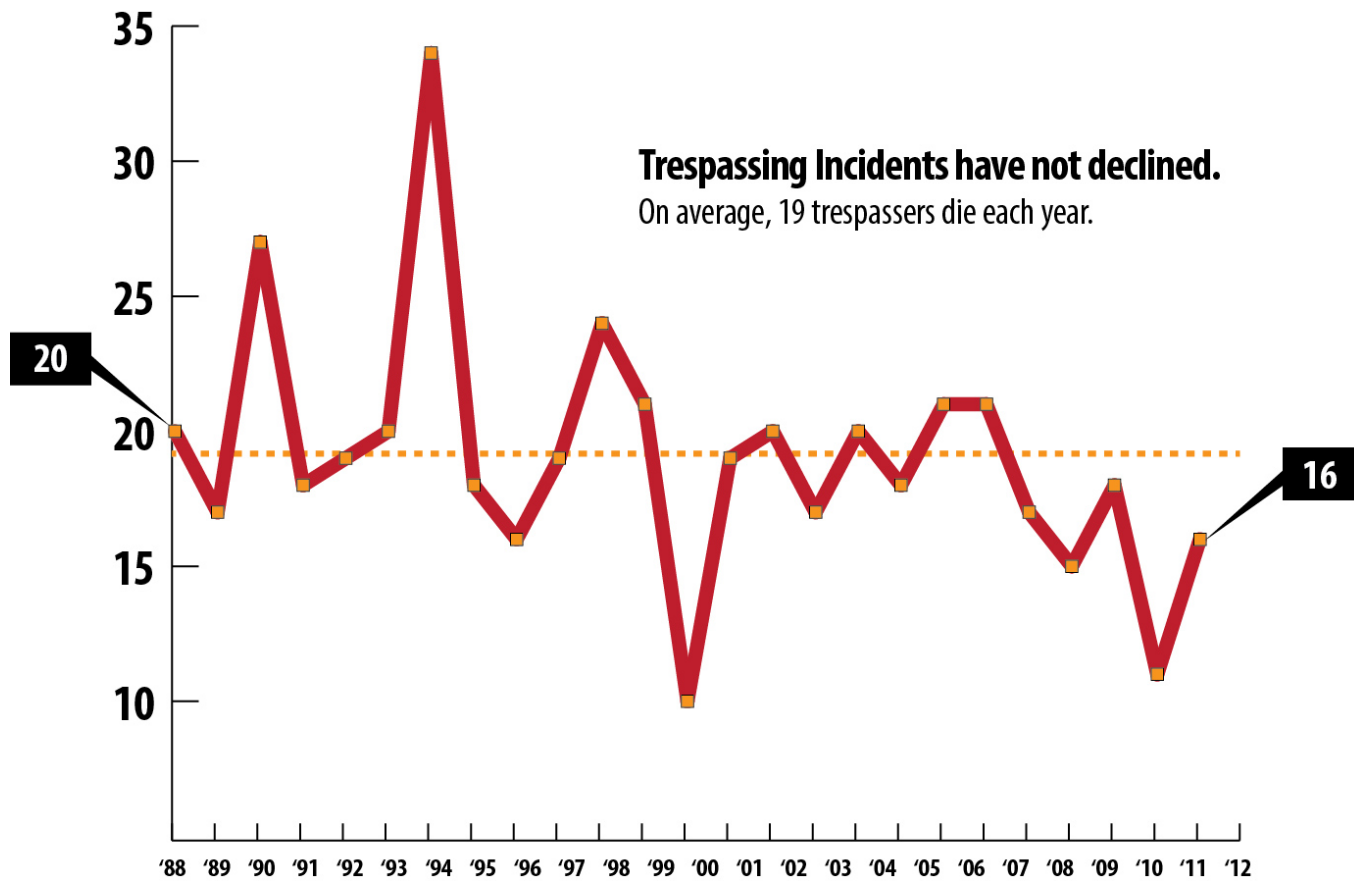
25 Years of Progress – Crossing Crashes Decreased



Source: FRA



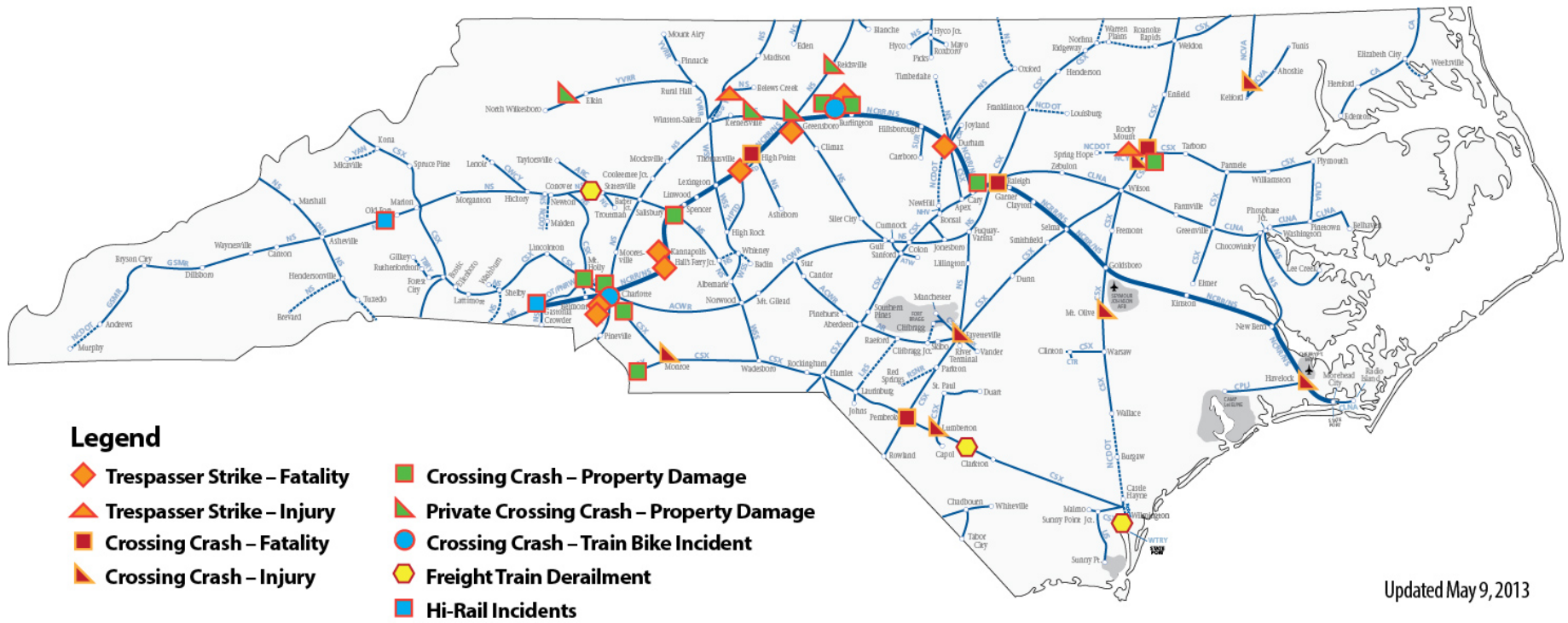
Railroad Trespassing



Source: FRA



Railroad Crashes/Incidents 2013



Updated May 9, 2013



Railroad Safety Challenges

- In 2013, 38 incidents in North Carolina to date – 8 were trespasser fatalities
 - Crossing incidents have decreased, but trespass incidents are still a problem
 - Ability to enforce as well as educate
 - Reaching what seems to be the “unreachable” – suicides, alcoholism, homeless
- Locomotive video documents incidents with NCDOT and Amtrak trains





At-Grade Crossing Safety Improvements

- 26 locations – scheduled for construction of new or upgraded traffic control warning devices
- 38 locations – in design for new or upgraded devices
- 12 locations – scheduled for design in 2014
- Traffic Separation Studies are underway or have recently been completed in conjunction with state, local municipalities and railroads in:
 - Durham
 - Wilmington
 - Hillsborough
 - West Charlotte
 - Goldsboro



NCDOT **Be Rail Safe**

- 2009 – NCDOT insurance carriers suggested additional public outreach
- Targeted information and outreach to support NCDOT projects and operations
- 1,646 law enforcement and emergency responders trained in railroad emergency and passenger equipment safety procedures from January 2011 to December 2012
- Targeted presentations to 3,224 school bus drivers, commercial drivers, adults, children, law enforcement in 2011-2012
- **Partnerships, Outreach, Research and Enforcement**





State Rail Plan – Work underway

Objective:

- Support Governor's 25 Year Plan, and NCDOT's 3.0 Prioritizations, 2040 Plan and State Freight Plan
- Qualify NC Rail Projects for federal funding per PRIIA and other
- Consistency w/ Statewide, Regional, and National Freight and Passenger Rail Initiatives and Programs
- Develop a State Rail Plan that:
 - Provides the basis for economic growth through the investment in freight corridors
 - Prioritizes projects and programs for funding through the evaluation of data and economic competitiveness
 - Enables rail projects to compete with other modes of transportation for funding priority at all levels



Strategic Mobility Formula

New way to fund and prioritize transportation projects to ensure they provide maximum benefit to our state awaits vote in the state legislature

Features:

- All transportation modes compete for funding
- Decisions driven by data and local input
- Revenues used as efficiently as possible to ensure state, regional and local priorities are met
 - 40% of revenue – projects of statewide significance – 100% data driven
 - 40% of revenue – projects of regional significance – 70% data driven/30% local input
 - 20% revenue – projects of local significance – 50% data/50% local rankings



Freight Rail in North Carolina

22 Freight Railroads operate on 3,245 miles in North Carolina

- These railroads:
 - originated 10.1 million tons
 - terminated 53.1 million tons
 - carried an additional 31.7 million tons of goods in NC in 2010
- Equivalent to diverting 5.3 million truck trips off the interstate highway system
- Major commodities included coal, farm products, chemicals, stone, sand, gravel, and intermodal (rail to truck) movements
- On average, railroads are four times more fuel efficient than trucks





NCDOT Passenger Rail Services

Three daily round trips between Charlotte & Raleigh

- **Carolinian* – service Charlotte to New York City since 1990 (Amtrak-owned equipment)
- *Piedmont* – service Raleigh to Charlotte since 1995 (NCDOT-owned equipment)
- Mid-day *Piedmont* service added in 2010 – **54% ridership increase with addition of 3rd frequency during the first year of operation**

****Carolinian* – second best (farebox recovery) state-supported service in country**





Piedmont Improvement Program



NCDOT has been awarded \$546.5 million in FRA grants to fund a series of rail projects between Charlotte and Raleigh and in Eastern NC – **to be completed 9/30/17.**

ARRA Program objectives for PIP:

- Railroad capacity and operations improvements
- Railroad modernization & sustainability
- Significant safety enhancements

NCDOT works very closely with all communities affected by these projects and collaborates on the best solutions for all involved.





PIP Improvements Include:

- Stations and Facilities
- Locomotives and Passenger Equipment
- Track and Bridges, Crossing Safety Projects
- Charlotte Rail Improvement & Safety Program





Station & Facilities Program



- Internet accessible Station Security Systems installed at eight stations
- Backup Generators bid opens May 22
- Kannapolis Station Canopy construction began February 2013
- Charlotte Maintenance Facility
 - Preliminary Engineering completed, Draft Environmental Assessment being reviewed by FRA
 - Property acquisition
 - Facility design to begin 2014 & construction targeted for 2015 as funding becomes available
 - Tryon Yard Improvements





Equipment Program



- Three F59PH and two F59PHI locomotives, a lounge car and two coach cars – all refurbished – are now in daily *Piedmont* service
- Another lounge car will be added to the fleet in June
- Five additional cars will be refurbished during the next 18 months





Track & Structures Program



- Build 2 new passing sidings on the NCRR between Greensboro and Raleigh
- Complete double tracking of NCRR between Charlotte and Greensboro – “Widening the Railroad”
- Track crossover improvements for efficiency
- Build 14 highway overpasses or underpasses of the railroad to separate auto and train traffic – safety & mobility
- Overpasses and underpasses replace up to 23 public at-grade crossings
- Given limited program budget and need to live within it, improvements may be cut from the program.

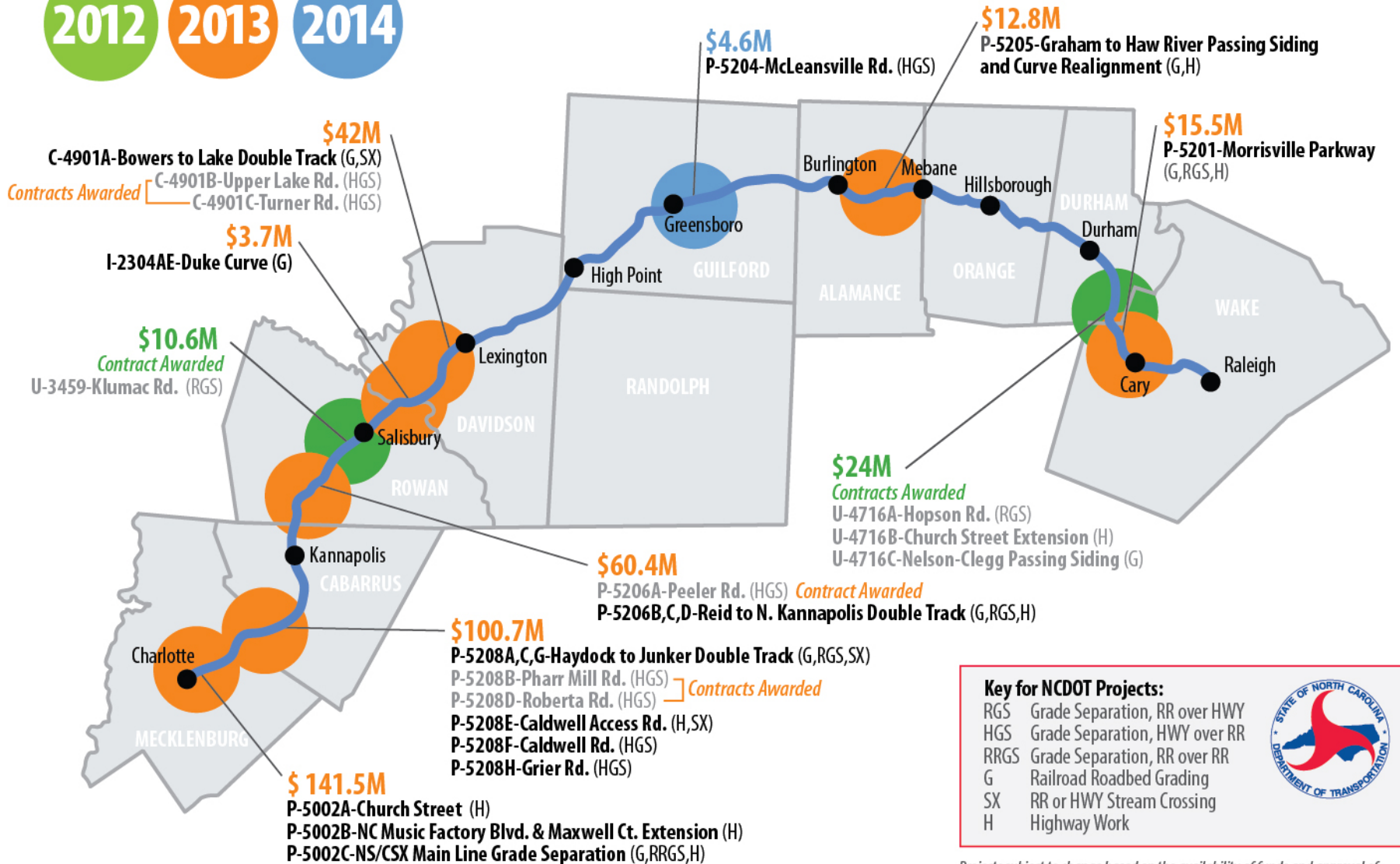


Project Lets

2012 2013 2014

Piedmont Improvement Program

Current Estimated Construction Costs



Key for NCDOT Projects:

RGS	Grade Separation, RR over HWY
HGS	Grade Separation, HWY over RR
RRGS	Grade Separation, RR over RR
G	Railroad Roadbed Grading
SX	RR or HWY Stream Crossing
H	Highway Work

Projects subject to change based on the availability of funds and approval of essential environmental documents.

Private Crossing Safety Initiative (PCSI) Projects totaling \$1.3M will be constructed in Alamance, Cabarrus, Guilford, Orange, Rowan & Wake Counties.

Note: Dollar amounts for 2013 & 2014 are overall project totals and include both NCDOT and NS/CSXT projects. The dollar values shown are the original grant budgets and funding.



Track & Structures Program in the Triangle



Highway/Rail Grade Separation

- Morrisville Parkway (*Wake County*)
 - Let date – October 2013, Construction begins 2014

Passing Siding & Highway/Rail Grade Separation

- Nelson-Clegg Passing Siding
- Hopson Road Grade Separation, Church St. Extension and (*Wake & Durham counties*)
 - Work underway





Track & Structures Program in the Piedmont Triad



Passing Siding and Curve Realignment

- Graham to Haw River (*Alamance County*)
 - Let date – July 2013
 - Construction begins fall 2013

Highway/Rail Grade Separation

- McLeansville Road (*Guilford County*)
 - Let date – September 2014
 - Construction begins late fall 2014





Track & Structures Program in the Piedmont Triad



Curve Realignment Project

- Duke Curve (*Davidson and Rowan Counties*)
 - Contract advertised for letting

between Salisbury and Kannapolis

Highway/Rail Grade Separations

- Klumac Road (*Rowan County*)
 - Work underway

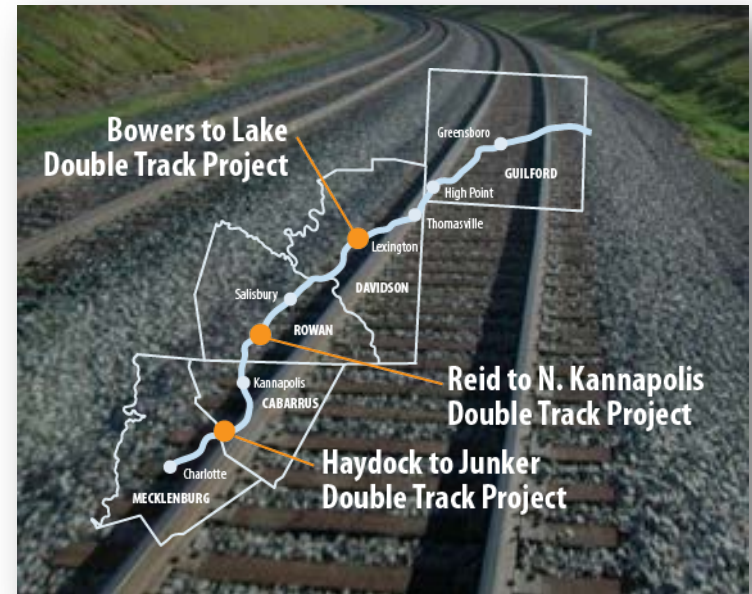


Track & Structures Program

Complete double tracking of NCRR Main Line between Greensboro and Charlotte



- Three single track sections remain in Davidson, Rowan and Cabarrus/Mecklenburg counties
 - Projects will be let this summer
 - Work begins in the fall
- “Widening the Railroad” increases capacity, traffic flow and reliability for passenger and freight service – ALL TRAINS WILL USE ALL TRACKS





Grade Separations in conjunction with Double-Track Projects



Highway/Rail Grade Separations

- Upper Lake and Turner Roads (*Davidson County*)
 - Project let
 - Construction begins summer 2013
- Peeler Road (*Rowan County*)
 - Project let
 - Construction begins summer 2013

Rail/Highway Grade Separation

- Kimball Road (*Rowan County*)
 - Let date – August 2013
 - Construction begins fall 2013





Grade Separations in conjunction with Double-Track Projects



Highway/Rail Grade Separations

- Pharr Mill, Roberta and Caldwell Roads (*Harrisburg*) & Grier Road (*Charlotte*)
 - Let dates – April & May 2013
 - Construction begins summer 2013

Rail/Highway Grade Separation

- For future Mallard Creek Church Road Extension Project (*Charlotte*)
 - Let date – July 2013
 - Construction begins fall 2013



Track & Structures Program

Charlotte Railroad Improvement & Safety Program



Highway/Rail Grade Separation

- Sugar Creek Road Grade Separation

\$22M Passenger Rail Investment and Improvement Act (PRIIA) funds

- Constructs highway bridge over NCRR corridor
- Let date November 2014
- Construction begins Spring 2015





Track & Structures Program

Charlotte Railroad Improvement & Safety Program



NS/CSXT Main Line Grade Separation:

- Reduces conflicts/improves efficiency between freight and passenger trains at NC's busiest at-grade railroad intersection
- Places CSXT tracks in trench below NS, CATS North Corridor
- Relocates CSXT Tryon Yard

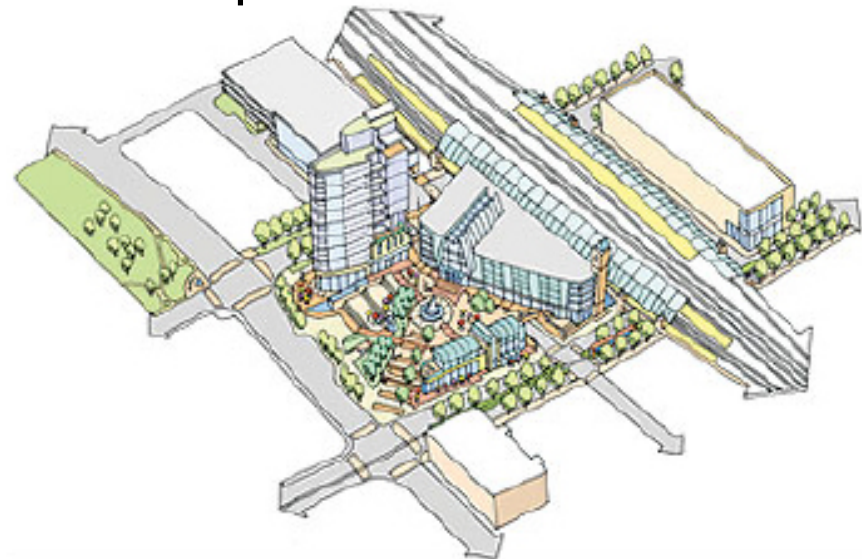
	Current	Anticipated 2037
NS	34	56
CSXT	14	25
Amtrak	2	20
Total	50	101



Charlotte Gateway Station

City of Charlotte, Mecklenburg County & NCDOT began a PPP process via competitive selection of Master Development Firm summer 2012

- NCDOT acquired 21 acres between 2003 and 2009
- Hines was selected as Master Developer in October 2012
- NCDOT & Hines currently negotiating next steps





Raleigh Union Station

- Partnership
 - USDOT, City of Raleigh, NCDOT and TTA
- Additional Stakeholders
 - Amtrak, CSXT, NCR, NS
- City of Raleigh was awarded \$21M for design & construction July 2012
- \$6M City of Raleigh Grant Matching Funds
- NCDOT committed \$9M match Sept 2012 (FY13 through FY17)
- \$15M “Un-Programmed” FRA funds contingent on availability





Statewide Rail Improvements

In Greenville:

- NCDOT partnered with CSXT to construct a new switching yard north of the downtown to alleviate major traffic congestion at current location
- Project is near completion, facility opens end of June 2013

In Fayetteville:

- Three-part project to upgrade CSXT/A&R, make improvements in CSX yard downtown and replace a railroad bridge, and build .25 mile Fort Bragg Connector to reduce congestion in Fayetteville
- First two parts complete, connector construction begins September 2013



Statewide Rail Improvements

In Pembroke:

- Construction of connector track will facilitate train moves from North-South to East-West, alleviate congestion in downtown, and improves military access south to Wilmington Port/Sunny Point
- Design currently underway, ROW purchase in 2014, construction begins 2015

Wallace to Castle Hayne:

- Early planning underway to replace 27 miles of track which have been removed between Wallace and Castle Hayne to improve access to Port of Wilmington

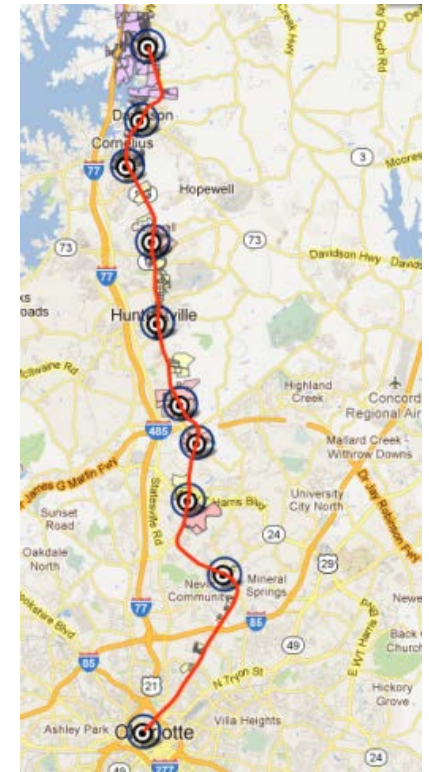
In Wilmington:

- Early planning underway to improve access to and capacity Port of Wilmington



Red Line Regional Rail

- Rail line is owned by Norfolk Southern
- 9 funding partners: 7 jurisdictions (50%), CATS (25%) and NCDOT (25%)
- 10 stations from Charlotte to Mooresville
- \$452 million estimated capital cost based on 2011 plan
- Innovative financing and governance options have been considered
- Further progress is pending capacity modeling, determination of infrastructure needs and definitive agreements between all stakeholders





Thank You



Photo credit to Matt Guerrant.

PiedmontRail.biz bytrain.org ncdot.gov