



# N.C. Department of Transportation

## Rail Improvements in the Charlotte/Mecklenburg Area

### Mecklenburg County Board of Commissioners

April 17, 2012



## About the NCDOT Rail Division

Since its inception, the Rail Division has focused on the safe and efficient movement of people and goods to enhance the economy, health and well-being of North Carolina.





## About the NCDOT Rail Division

Great progress has been made over the past 20 years as a result of innovative ideas and planning, and systematic and strategic use of federal, state, local and private funds.





## Track and Signal Improvements have lead to:

- Faster travel times/  
better on-time performance  
for passenger trains
- Safety improvements where  
trains meet vehicles  
and trains meet trains
- Greater capacity on the  
railroads for passenger  
and freight trains





## Ridership has increased on the *Piedmont* and *Carolinian*

- Ridership is up 54% in the Piedmont Corridor since addition of mid-day service between Charlotte and Raleigh
- Revenue is up an impressive 74%





## Stations and Equipment have been improved to meet the needs passengers

- Historic stations have been rehabilitated, new stations built, or buildings adapted for use as passenger stations
- Locomotives and passenger cars have been purchased, refurbished and modernized





## Our Current Focus: Piedmont Projects



In January 2010, NCDOT was awarded \$545 million in Recovery Act dollars to fund a series of rail projects between Charlotte and Raleigh – **to be completed September 30, 2017.**

### Our Objectives:

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

### Our Partners:

Federal Railroad Administration, North Carolina Railroad Company, Norfolk Southern Railway, CSXT, local towns and communities





## Track & Structures Program Highlights between Raleigh and Charlotte



- 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 13 highway overpasses or underpasses of the railroad to separate auto and train traffic – safety and mobility
- Overpasses and underpasses replace up to 28 public at-grade crossings
- Freight and industry access retained or improved – “All trains use all tracks.”





## Track & Structures Program Highlights in the Charlotte Area



- Double track 12 mile section of Main Line between Charlotte and Concord
- Heavy traffic on this portion of the NCRR
- Track work and signal improvements
- Result: increased capacity, traffic flow and reliability for both passenger and freight service





# Track & Structures Program Highlights in the Charlotte Area



## Highway/Rail Grade Separations in Charlotte:

- Grier Road
- Mallard Creek Ch. Rd.

*(eventually replaces 3 at-grade crossings)*



## Highway/Rail Grade Separations in Harrisburg:

- Pharr Mill Road
- Roberta Road
- Caldwell Road

*(replaces 5 public and four private at-grade crossings)*





## Track & Structures Program Highlights in the Charlotte Area

### 36<sup>th</sup> Street Grade Separation:

- Grade separation for CATS Lynx Blue Line Extension
- NCDOT will contribute \$16.2 of \$36 million to relocate freight service
- Constructs railroad bridge for NCRR over 36<sup>th</sup> Street
- Replaces at-grade crossing at 36<sup>th</sup> Street





# Station and Facilities Program Highlights



- Upgrade 4 stations
- Make station ADA and security improvements
- Expanded existing maintenance facility in Raleigh
- Begin first phase of work for new NCDOT Locomotive & Railcar maintenance facility in Charlotte





## Equipment Program Highlights



Additional equipment needed to maintain current service and meet future service needs, including additional round trips between Charlotte and Raleigh.

- Rebuild 6 Locomotives
- Purchase 4 additional Passenger Cars
- Refurbish 10 Passenger Cars





# Other Projects of Interest in the Charlotte Area





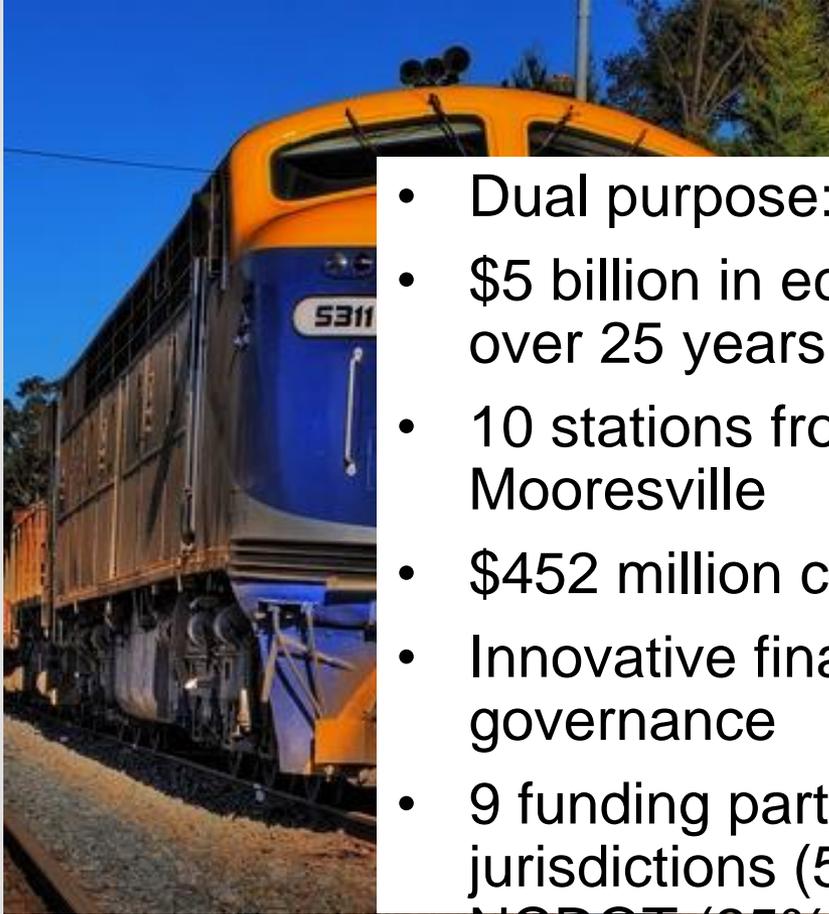
## Charlotte Gateway Station

- **Request for Expressions of Interest (REFI) for Charlotte Gateway Station Transit Oriented Development** issued March 29.
- Identifying potential development partners – key to success in design and development of a world-class multi-modal transit complex
- Gateway Station will become one-stop connection to all forms of transportation, as well as home to housing, commerce, shopping and entertainment

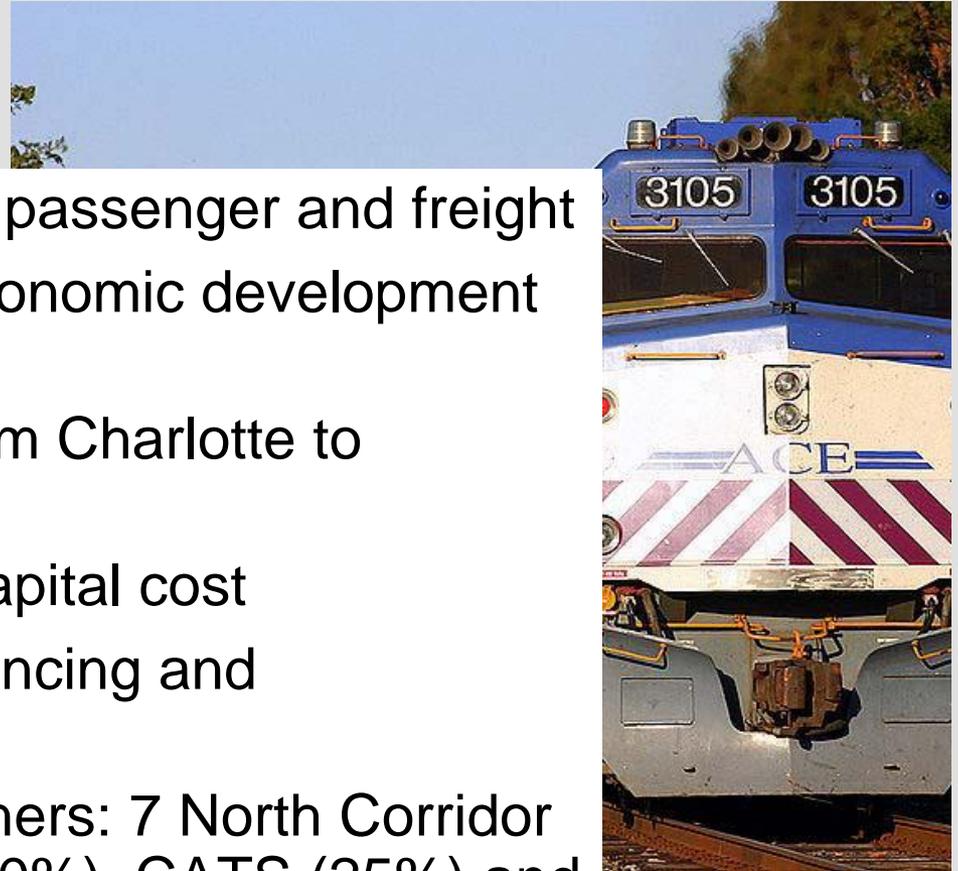




# Proposed North Corridor Red Line



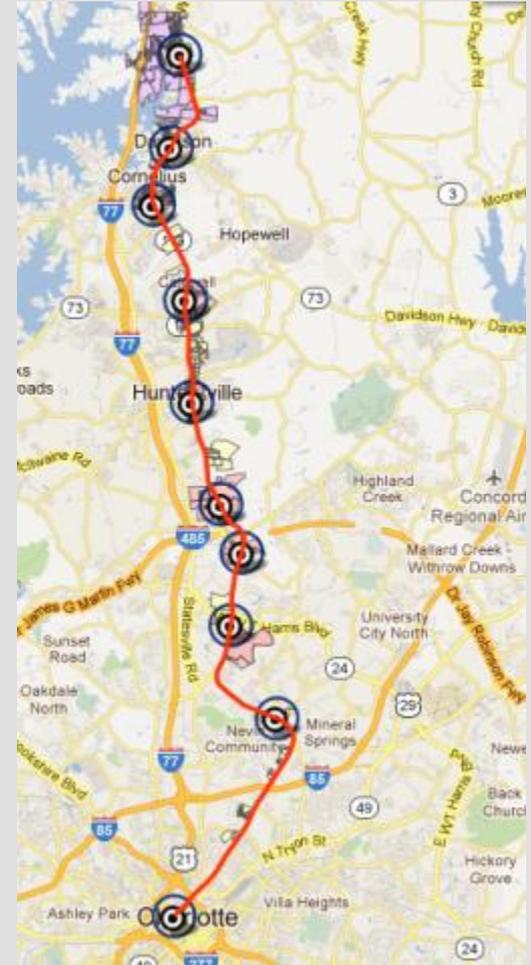
- Dual purpose: passenger and freight
- \$5 billion in economic development over 25 years
- 10 stations from Charlotte to Mooresville
- \$452 million capital cost
- Innovative financing and governance
- 9 funding partners: 7 North Corridor jurisdictions (50%), CATS (25%) and NCDOT (25%)





# Process Update & Next Steps

- December 2011: Draft Business / Finance Plan released
- January-March 2012: Review Period
- March 2012: NCDOT Consultants Tested Feedback
- April-October 2012: Bridge Period
  - NCDOT and CATS work with N/S on infrastructure and operations study
  - Recommence finance plan adoption after cost is verified





## CSX Railroad Intermodal Facility Improvement

- NCDOT administered federal grant for \$4.5 million towards project cost
- Capacity of the facility will increase by 50%
- Will be completed June 2012





## Norfolk Southern Intermodal Freight Facility

- NCDOT will administer \$15.7 million federal and state funds to assist in construction of Intermodal Freight Facility at Charlotte-Douglas International Airport
- Facility combines rail, ship, truck and air
- Construction begins – April 2012
- Target completion – late 2013





## Piedmont and Northern Railroad Corridor is now open for business

- 12-mile state-owned railroad between Gastonia and Mount Holly
- \$5.1 million project – track upgrades, bridge repairs and signal, gate improvements
- Patriot Rail – operates line, provides rail service to customers and access to both NS and CSXT Main Lines.





## Charlotte Railroad Improvement & Safety Program



Not to Scale

Revised December 16, 2017





**Charlotte Railroad Improvement & Safety Program**



## **Sugar Creek Road Grade Separation**

\$22M (FRA) funds

- Constructs roadway bridge over NCRR corridor
- Replaces at-grade crossings at Sugar Creek Road and Craighead Road





**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 highway/railroad intersection
- Grade separates Main Line tracks of Norfolk Southern, CSXT and NS O-Line/future Red Line Corridor
- Replaces multiple at-grade highway/railroad crossings with bridges over the railroad
- Enhances safety, reduces noise and increases railroad operating efficiency – improves the environment and local quality of life





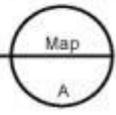
Charlotte Railroad Improvement & Safety Program (CRISP)  
 CSX/NS Mainline Grade Separation Project  
 Environmental Assessment (EA) Document

Data courtesy of Charlotte-Mecklenburg Geospatial Information Services



**Project Study Area**

Mecklenburg County, North Carolina  
 February 2012





**Charlotte Railroad Improvement & Safety Program**



# NS/CSXT Main Line Grade Separation

**Number of Trains Crossing Diamonds**

	Current	Anticipated 2037
NS	34	56
CSXT	14	25
Amtrak	2	20
<b>Total</b>	<b>50</b>	<b>101</b>

- Places CSXT tracks in trench below NS, CATS North Corridor
- Relocates CSXT Tryon Yard
- CSXT, NS and ADM Mill (all remain operational during construction)

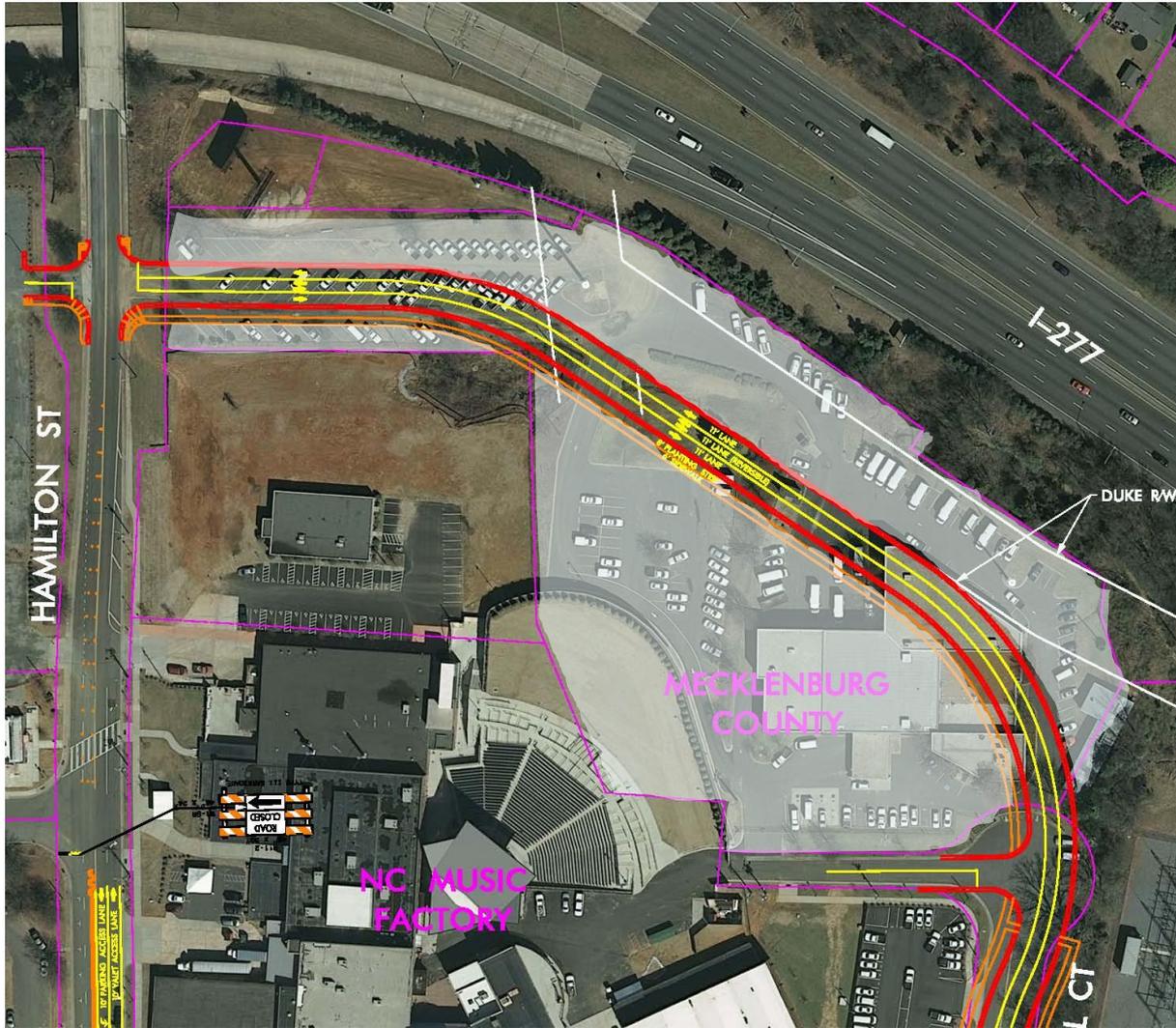




# NS/CSXT Main Line Grade Separation









## Challenges and Opportunities

- Many projects will be under construction simultaneously in the Charlotte area over the next several years.
- NCDOT, railroads, municipalities and contractors are working together to be sure these projects stay on track and are finished on time.
- Charlotte area rail project improvements will have a positive impact on the economic well being of this region and its citizens.





## Questions?



[www.ncdot.gov](http://www.ncdot.gov)

[www.bytrain.org](http://www.bytrain.org)

