

NCDOT Rail Division

The Rail Report



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August 2018

CSX Intermodal Facility Coming to Edgecombe County



A new intermodal transportation facility will be built in Edgecombe County to help industry get products to customers and spur growth in the region. NCDOT has reached an agreement with CSX Corporation regarding the building and operation of the facility.

"This facility will make Eastern North Carolina even more attractive to businesses looking to grow by offering a logistical solution to industry shipping challenges," said NCDOT Secretary Jim Trogon. "We are pleased to help bring this intermodal facility to Eastern North Carolina."

The facility, known as the Carolina Connector (CCX), will be built on the CSX mainline and CSX will run it. NCDOT will invest up to \$118.1 million for site development and roadway construction. The department conducted an economic impact evaluation in early June and determined the facility will have an indirect job impact of up to 1,300 jobs.

Once the contract is executed, site development work will begin with an anticipated completion date of 2020.

Originally, CSX intended to build what is called a "hub and spoke" intermodal facility in Edgecombe County. In November 2017, CSX put those plans on hold as the company reassessed its long-term business model. Since then, North Carolina officials have remained in contact with CSX to ensure the North Carolina site remained in consideration.

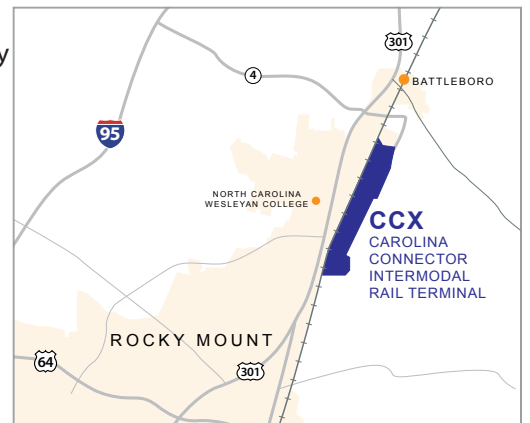
The newly envisioned site will be a traditional intermodal site. The 330-acre facility will allow trucks to bring cargo containers to a rail yard where they will be transferred to trains for transport. This facility will serve many industries with efficient access to rail. "Getting products to the customer is paramount to any business's

success," said Carolinas Gateway Partnership CEO and President Norris Tolson.

"We at the Carolina Gateway Partnership are pleased that the CCX intermodal site will provide another vital link in the logistics

solutions offered to our customer base in the Twin Counties and all of Eastern North Carolina. Edgecombe and Nash counties will now truly be a gateway to markets throughout the eastern part of the U.S."

The project was scored and evaluated per North Carolina's data-driven process that allows NCDOT to invest available funds more efficiently and effectively to enhance the state's infrastructure, while supporting economic growth, job creation and a higher quality of life.



August Railroad Trivia Question:

See answer on page 6

What North Carolina railroad was constructed by the U.S. Department of Defense in 1954 to connect one of the state's most important military bases to the North Carolina Railroad corridor and another important U.S. military installation?

Jason Orthner Named Rail Division Director



Jason has worked in railroad project and program management for over 23 years and his interest in railroad engineering and operations began at a young age. He started his career as a co-op engineering student for a major Class 1 railroad in 1994. In 2000, following four years at a private engineering firm, Jason joined the NCDOT as a Senior Project Engineer in the Rail Division and subsequently held the role of Engineering Manager. Since 2013 he has served as the Rail Division Design & Construction Branch Manager.

He has been a leader in many statewide projects and initiatives including the North Carolina Railroad Improvement Program, the statewide highway-rail grade crossing warning device program, and the Piedmont Improvement Program, the state's largest multi-year railroad infrastructure program.

Jason holds a Bachelor's Degree in Civil Engineering from North Carolina State University, is a registered Professional Engineer, and is an active member of the American Railway Engineering and Maintenance of Way Association. He lives in Raleigh with his wife, Karen, and their four sons.

Sandra Stepney Receives Road Gang Award



Sandra Stepney is presented the Road Gang Award by Chief Deputy Secretary David Howard.

Sandra Stepney was honored at a going-away lunch on June 29 and presented the Road Gang award by Chief Deputy Secretary David Howard for her 26-year career at the NCDOT.

Sandra joined NCDOT in 1984 in the Roadway Design Unit as an engineer. She rose through the ranks in Roadway Design to a supervisory position, leading many critical roadway projects. She is both in title and all respects a Professional Engineer.

In February, Sandra joined the NCDOT Rail Division as the Manager of Engineering Coordination where she led the development of Traffic Separation Studies, improved safety through grade crossing closures in collaboration with municipalities and other agencies, and was the lead design engineer on many grade separation projects.

Sandra was promoted to the Manager of the Planning & Development Branch in July of 2014. There she was on the forefront and a leader of many critical Rail Division initiatives, including the design development of many PIP projects, the FRRCSI program, the Rail Division's ever expanding STI program, and the CCX project which is now moving forward following her and her team's great efforts.

The Rail Division family and NCDOT thank her for over 26 years of dedication and service to the mission of NCDOT.

Ridership & Revenue on NC By Train Service – April 2018 vs. 2017

	RIDERSHIP			REVENUE		
	2018	2017	% +/-	2018	2017	% +/-
<i>Piedmont</i>	12,654	12,233	3%	\$287,075	\$261,040	10%
<i>Carolinian</i>	21,060	25,525	-17%	\$1,310,771	\$1,586,931	-17%

950



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

April 2018 service modifications impacted four *Piedmont* trains and two *Carolinian* trains. On April 4, Trains 74 and 75 were cancelled due to track damage from a tractor trailer striking a railroad bridge in Durham. On April 15, Train 76 operated between Charlotte and Greensboro only due to trees and powerlines downed across the tracks by storms; alternate transportation was provided for passengers. On April 18,

Train 74 operated between Charlotte and High Point only due to traction motor failure in the locomotive; alternate transportation was provided for passengers. On April 22, Trains 79 and 80 operated between Charlotte and Rocky Mount only due to CSX signal work.

Average gasoline prices remained low in April 2018 but were \$0.32 per gallon higher than in April 2017. The higher price of gasoline makes the use of rail service even more attractive.

NEVER TRY TO OUTRUN A TRAIN AT A RAILROAD CROSSING.

To illustrate this point, BeRailSafe partnered with North Carolina Operation Lifesaver to stage and record a simulation showing a moving 'target' vehicle trying to beat a train at a railroad crossing in Star, NC (Montgomery County.) The car, fitted with properly and improperly restrained child and adult crash dummies, was struck by a locomotive while trying to 'beat a train' at the highway-grade crossing.



The moment of impact

with a locomotive to pull the target vehicle into the path of the train, resulting in real world crash data for use in highway safety analysis.

Coordinating this event required cooperation from numerous people and departments, both public and private. The Town of Star was a gracious host, as well as the Star Police Department, Star Fire Department, Montgomery County Emergency Management, Montgomery County Community College, Montgomery Municipal Airport, Montgomery County Sheriff's Office, NC Highway Patrol, the Town of Biscoe and several fire, rescue and EMS departments.

Numerous NCDOT divisions came together with their expertise including Division 8, the Equipment Depot, Roadside Environmental, The Division of Aviation and Research & Development to coordinate highway traffic control, pedestrian control, establish safety barriers and crash data analysis. Five hundred people attended this event while Cranemasters provided safety and rigging support for the crash crew before, during and afterwards.

Continued on next page



Margaret Cannell, Executive Director of Operation Lifesaver and Roger Smock, Rail Safety Consultant with NCDOT, talk to spectators and educate participants about the importance of crossing safety.

"All the injuries and deaths we see at railroad crossings are preventable if motorists would respect the railroad crossing," said Roger Smock who coordinates NCDOT's BeRailSafe program and helped organize the May 30 simulation. "It's our hope, that by showing the impact that occurs when a vehicle attempts to race a locomotive to a crossing, drivers will think twice when approaching railroad tracks. Trains cannot stop quickly and this is the reason they have the right-of-way over all highway traffic, including emergency vehicles."

This was a first-of-its-kind event with a moving target vehicle struck by a moving locomotive. Staged train crashes are not new to the highway safety community. All previous crashes utilized a stationary vehicle on the tracks. The BeRailSafe crash set a new standard for crossing crash safety and analysis by incorporating a moving target vehicle. The crash crew engineered a unique pulley system



Close up of the aftermath of the train-car collision

The star of the event was the Aberdeen Carolina and Western Railway. They provided numerous expert personnel from several railroad disciplines, plus the locomotive and track time to make this highway safety message possible. The Aberdeen Carolina and Western Railway's president, Jennifer Harrell, sets a standard of excellence in safety, community spirit and service all other railroads should strive to achieve. NCDOT BeRailSafe and NC Operation Lifesaver are very thankful for the opportunity to partner with Aberdeen Carolina and Western Railway in the name of railroad and highway safety.

The staged crash was well attended by numerous media outlets extending the safety message to motorists throughout North Carolina in print, television and radio. The media coverage continued during International Level Crossing Awareness Day (ILCAD), an annual rail safety event held on June 7 worldwide in more than 40 countries. ILCAD featured the NCDOT BeRailSafe

staged crash video and press release on their website in the days leading up to ILCAD 2018.



Videos of the crash can be viewed by clicking on the links below:

NCDOT YouTube:

<https://youtu.be/pJqePQufx1E>

NCDOT Drone link: <https://vimeo.com/272650324>

NCDOT Ground link: <https://vimeo.com/272644314>

NCDOT, the Great Smoky Mountains Railroad and Carolina Coastal Railroad Make Safety Improvements

The NCDOT Rail Division partnered with Division 14 and the Great Smoky Mountains Railroad for a crossing project in Cherokee County, and with Division 2 and the Carolina Coastal Railroad for a project in Greene County.

The Cherokee County project was on SR 1390, Robbinsville Road in Andrews, NC. This two track crossing had timber and asphalt in the crossing surface. The timbers were very deteriorated, causing traffic to be slow going over the crossing and giving motorists a very rough ride. The crossing was rebuilt with rail seal and asphalt giving a much smoother ride and not causing traffic to reduce speed.



The second crossing was on SR 1318, Lewis Store Road near Walstonburg, NC. This single track crossing was asphalt with no flangeway material, becoming uneven and rough. The crossing surface was replaced with rail seal and asphalt providing a better ride for the residents of this area.



Robbinsville Road before improvements



Lewis Store Road before improvements



Robbinsville Road after improvements



Lewis Store Road after improvements

NCDOT and the Alexander Railroad Company Partner to Upgrade the ACR Network



The ACR Rail Yard expansion included the addition of 3,175 feet of storage track.

The Alexander Railroad Company (ARC) is a short line railroad that operates between Statesville and Taylorsville in North Carolina's Western Piedmont. The rail line serves businesses in western Iredell and eastern Alexander counties. Founded in 1945, the rail line was purchased from a predecessor of Norfolk Southern. It connects to the Norfolk Southern line in Statesville, transferring freight rail shipments with a daily-used interchange. The ARC operates 18 miles of track while moving over 4,000 carloads (or ~320,000 RR tons) of freight annually.

In June of this year, Rail Planning staff met with ARC President and General Manager, Mr. Benjamin Zachary, to review completed, ongoing, and planned improvements. The NCDOT has partnered with the ARC on projects that have provided crosstie replacement, track resurfacing and rail yard capacity improvements. Through the NCDOT Freight Rail & Rail Crossing Safety Improvements program, SFY 2015, SFY 2017 and SFY 2018 projects will provide approximately \$2.26 million in upgrades and improvements to the ARC network. Per state statute, NCDOT and ARC split these costs via a 50/50 match.

An overhaul of the Statesville Yard began in 2017. Recently completed, project improvements to the yard installed 1,000 feet of new track, upgraded of four switches and 3,175 TF* of storage track to 286,000, and added 3,000 TF of new storage. These changes immediately increased storage capability of the Yard by 57 percent. Ongoing improvements

will upgrade 4,500 TF of rail and nine switches to 286k. With back-to-back years of improvements, these projects will thoroughly upgrade and expand the ARC Statesville Yard by next year.

In the future, the ARC hopes to expand its interchange capabilities with Norfolk Southern through the addition of another passing track. Currently, ARC interchanges over 4,000 cars annually with Norfolk Southern on an eleven-car track. This section of track is too short and creates a bottleneck. Future improvements to this area are subject to design considerations and NS participation.

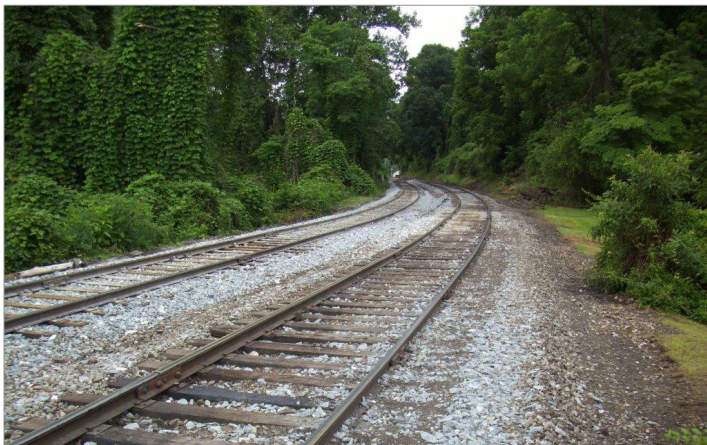
These completed and ongoing improvements are anticipated to have a direct impact on revenue and carloads in the near term. Additionally, they have increased storage capacity for customers and will support anticipated increases in rail traffic. NCDOT is pleased to be a partner in transportation projects that enhance the safety, reliability and efficiency of rail operations while supporting economic development across North Carolina.

*TF = Track Foot



Switch replacements

Great Smoky Mountain Railroad 2017 SIAP Project



Robinson Siding Project

The Great Smoky Mountains Railroad (GSMR) is a unique short line railroad within the North Carolina rail network. Located in the heart of the Great Smoky Mountains in Bryson City, the railroad offers scenic and themed passenger excursions. GSMR operates 53 miles of track, two tunnels, 25 bridges, one of the few remaining turntables in the state and several rare and nostalgic steam engines. This beloved attraction serves over 200,000 persons annually and continues to grow in popularity.

The NCDOT has partnered with GSMR on projects that rehabilitate bridges, replace worn rail and crossties, build sidings and return inactive track to service. Through the NCDOT Freight Rail & Rail Crossing Safety Improvements program, SFY 2017 and SFY 2018 projects will provide approximately \$2.2 million in upgrades and improvements to the GSMR network. Per state statute, NCDOT and GSMR will split these costs via a 50/50 match.

In June 2018, GSMR completed a 500-foot extension of the Robinson Siding. This improvement accommodates longer train sets without blocking crossings or turnouts and provides additional storage for unused rail cars. The project also facilitates daily operational efficiency of the GSMR network. NCDOT is pleased to be a partner with the Great Smoky Mountains Railroad on these projects that enhance the safety, reliability, and efficiency of rail operations, while supporting economic development across North Carolina.



Robinson Siding Extension

Quick Facts about the new Raleigh Union Station



Raleigh Union Station Opened July 10, 2018.

Station Address:

510 West Martin St., Raleigh, NC 27601

Parking:

All parking at Raleigh Union Station is paid. The Dillon Parking Deck is located across the street, while limited short-term and disability parking is available in front of the station.

The address to use to navigate to the parking deck for GPS is 223 S. West St. When entering the deck, take a ticket from the machine and then have it ready when exiting. There is no attendant on duty.

Parking costs \$2 per hour or \$18 maximum per day. (Pay by credit card only when exiting the parking deck)

Short-Term and Disability Parking

Limited short-term and disability parking is available at the station. Enter from West Street and drive into the traffic circle. Parking spots are on the left. There is a two-hour limit and parking costs \$1.00 per hour. (Pay by credit card or coins at the meter).

Passenger Drop-Offs

Drop off passengers in front of Raleigh Union Station. Enter from West Street and drive into the traffic circle.

Learn more at NCByTrain.org or call 800-BY-TRAIN.

August Railroad Trivia Answer:

The Camp Lejeune Railroad (CPLJ). It is a 30-mile long rail corridor owned by the Department of Defense (DOD). It begins in the midst of the huge US Marine Corps Camp Lejeune base at Jacksonville and connects to the NCRR at Havelock (MP EC 76). The Marine Corps Air Station at Cherry Point also connects to the NCRR at Havelock. The CPLJ Railroad is operated by Norfolk Southern under an agreement with the DOD.