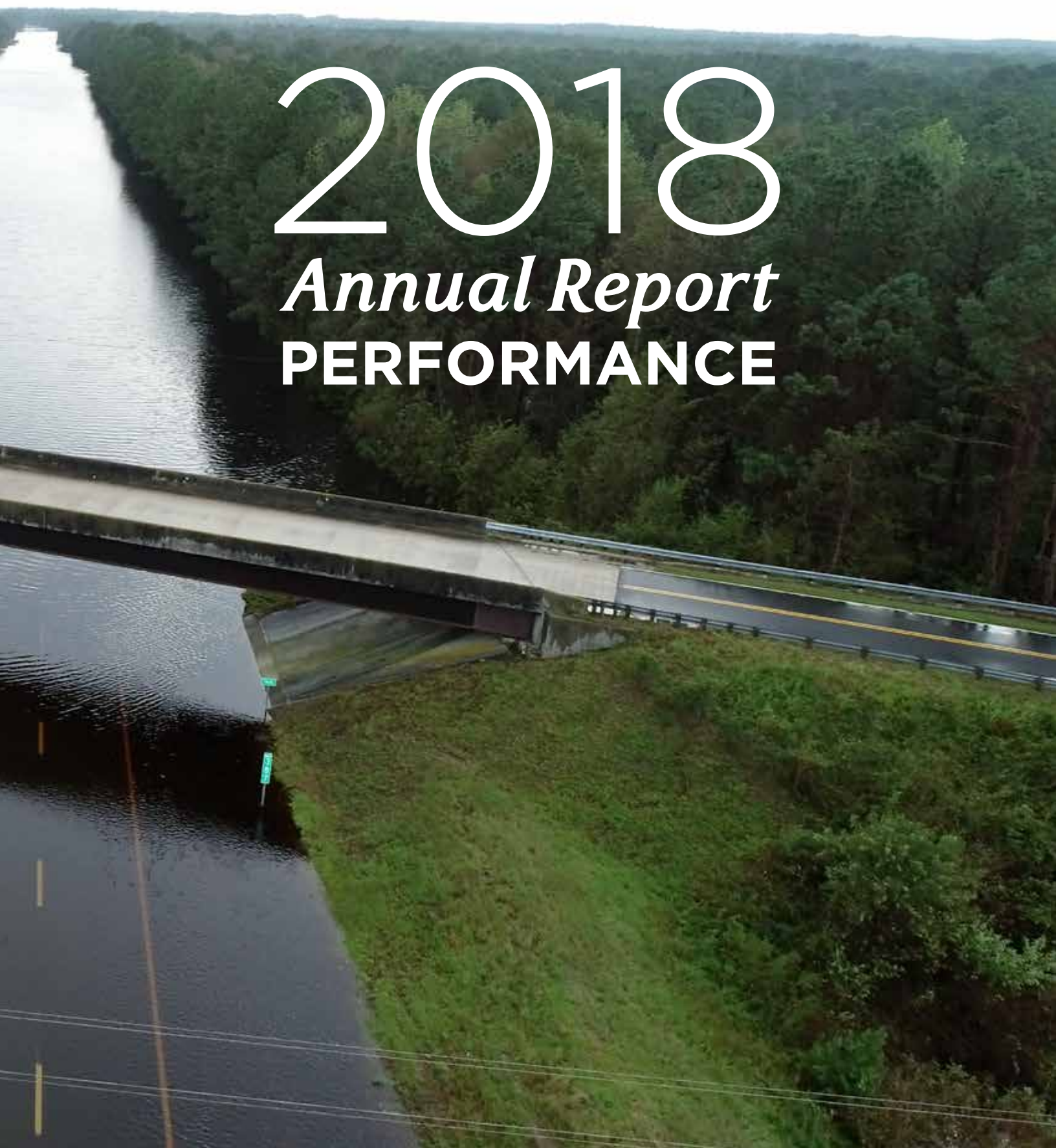


NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

2018
Annual Report
PERFORMANCE





From the Secretary

Dear North Carolinians:

This past year has been one of significant progress for the North Carolina Department of Transportation.

We made fundamental changes in how we work in order to build projects faster, allowing communities to realize benefits sooner. With support of people across the state, a new funding tool, called Build NC, was approved. This new tool will provide NCDOT the funding stability needed to maintain this increased level of project delivery in the next decade.



Hurricanes Florence and Michael resulted in unprecedented flooding and catastrophic damage in North Carolina. Employees across NCDOT and other agencies worked together to prepare and respond to dynamic conditions—all with the shared goal of keeping citizens safe and restoring access as quickly as possible.

This report outlines the Department's performance in meeting specific goals and targets for fiscal year 2017–2018 as well as our goals and measures for 2018–2019. It also highlights the Department's progress in six focus areas to better serve North Carolinians.

Thank you for your partnership and support. As I like to say, “success has many parents,” and our successes in 2018 demonstrate how great things can be accomplished when we share a common goal.

I look forward to working with you as we build on this momentum in 2019.

Sincerely,

A handwritten signature in black ink, which appears to read "James H. Trogon III". The signature is fluid and cursive.

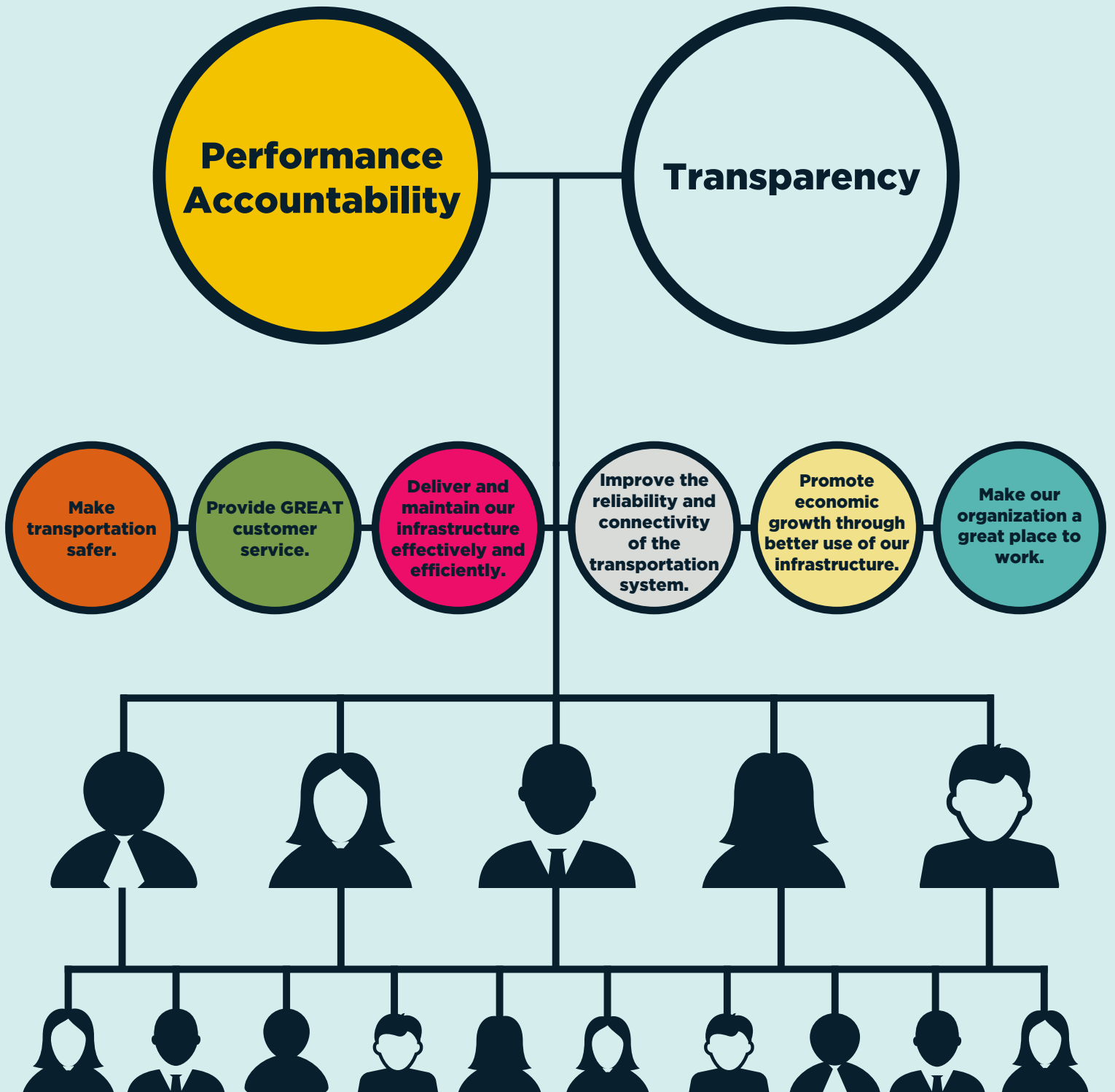
James H. Trogon III
Secretary of Transportation

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Supporting material, including background information, definitions and rationale on the performance scorecard is available at ncdot.gov, search "Performance Scorecard." Information in this report is based on State Fiscal Year (SFY) 2018, which covers the time period of July 1, 2017 to June 30, 2018, unless otherwise noted.

On the cover: I-40 in Pender County after Hurricane Florence



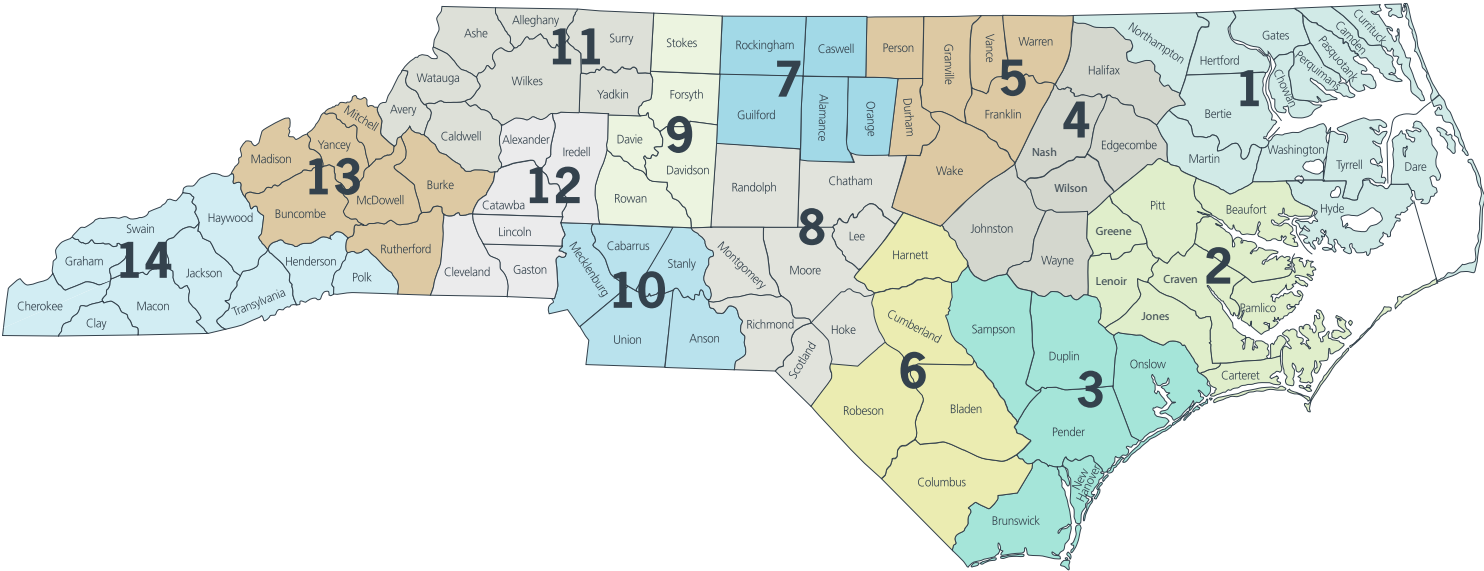
About NCDOT

The N.C. Department of Transportation (NCDOT) is responsible for all modes of transportation in North Carolina. This includes highways, rail, aviation, ferries, public transit, and bicycle and pedestrian transportation. The Department also oversees the state's Division of Motor Vehicles and the Governor's Highway Safety Program, which promotes safety awareness to reduce highway crashes and fatalities. Additionally, NCDOT helps expand economic growth opportunities through oversight of the N.C. State Ports, N.C. Global TransPark and N.C. Turnpike Authority.

NCDOT is a performance-based organization with a strategic, data-driven, decision-making process that is transparent and accountable. This approach ensures that politics do not determine transportation selection, and it aligns the Department's operations with its overall mission and goals.

The Department's operations are led by the Secretary of Transportation. A 19-member Board of Transportation, the Department's governing body, is responsible for overseeing the transportation policymaking process and monitoring performance of the agency.

14 Transportation Divisions



one of the largest
state-maintained highway
systems in the nation with about
80,000 miles of road
more than 13,500
bridges



Inspectors check about
9,000 of these bridges and
culverts each year.

more than
15,000 miles
of primary highways
(Interstate, US and
NC routes)

nearly
65,000 miles
of secondary roads

More than 58 million
passengers fly to and
from North Carolina and
over **1.5 billion pounds**
of cargo pass through the
state's airports.



72

publicly owned airports and nearly
300 privately owned airports,
heliports and other landing areas;
more than 8,000 registered aircraft
and 14,000 licensed pilots

nearly
3,300
miles of mainline
railroad track and about
6,200 total at-grade railroad
crossings in North Carolina



98 transit
systems
serve
residents in all
100 counties
provided more than
70 million passenger trips

more than 5,000
miles of regional and statewide bicycle
and pedestrian routes planned

2nd
largest state-operated
ferry system and the
largest
on the East Coast



21
ferries serve
7
routes

carried over 1.7 million passengers



NC By Train's
Piedmont and
Carolinian provide
4 daily roundtrips
to Charlotte, Greensboro,
Raleigh and nine other
North Carolina cities with
nearly **425,000 passengers**

9 **mobile units**
take NCDMV license
services to remote
areas of the state

NCDMV issued nearly



2.7 million

driver licenses, permits and
identification cards; processed more than
3.2 million vehicle titles
and issued more than
9.5 million license
plates and registration stickers



About **4,900 volunteer**
groups adopted about
9,800 miles of
state-maintained roadsides,
saving taxpayers millions
of dollars in cleanup costs.



NCDOT *State Farm* Safety Patrol
made nearly 76,000 stops
and expedited incident
clearance, removed
debris, assisted motorists
and managed traffic



NCDMV's License & Theft Unit
recovered 1,297
stolen vehicles
valued at
\$11.9 million

The **NC 511**
phone system
handled nearly
660,000 calls
for traveler
information
and Amber and
Silver Alerts.

The **NC 511 phone system**
provides live
operators during
daytime hours to
assist travelers with inquiries
and provide traffic updates.
Available 24 hours a day
via **DriveNC.gov.**



NCDMV has **113 driver license**
offices and **125 privately**
owned license plate agencies
and registration offices that
serve the state's **7.1 million licensed**
drivers and owners of the **9.4 million**
vehicles registered in the state.

More than 900 traffic cameras
allow NCDOT to monitor traffic
conditions in real time
to quickly respond to
incidents and alert other
motorists through more
than **300 Dynamic Message Signs**



Our Divisions

AVIATION

The Division of Aviation is responsible for state aviation system planning and development, which involves administering funding and technical assistance to communities for building and improving airports as well as overseeing the regulation of unmanned aircraft systems in the state. The Division also operates an active safety and education program and operates and maintains the department's aircraft for photogrammetry and passenger services.

BICYCLE AND PEDESTRIAN

The Division of Bicycle and Pedestrian Transportation supports all aspects of bicycling and walking in North Carolina through engineering, planning, education and training, with the goal of integrating bicycle and pedestrian safety, mobility and accessibility into the state's overall transportation program.

FERRY

The Ferry Division provides safe, cost-effective and dependable service for travelers. The Division operates seven routes across the Currituck Sound, Pamlico Sound, Cape Fear River, Neuse River, Pamlico River and Hatteras Inlet. The Division also is capable of activating an emergency route between the Dare County mainland and Hatteras Island at Rodanthe within two to three hours in the event of a long-term or emergency closure of N.C. 12. The ferry operations are supported by a full-service shipyard, dredge, crane barge, tugboats and other support vessels.

GLOBAL TRANSPARK

The N.C. Global TransPark is a 2,500-acre multimodal, industrial and business park strategically situated in eastern North Carolina. Its on-site Composite Center is one of the most advanced workforce development training facilities in the state. With its integrated infrastructure, close proximity to Interstates 40 and 95 and to the state's two deep water ports, the GTP is an ideal location for a variety of business types, especially companies involved in aerospace and logistics.

GOVERNOR'S HIGHWAY SAFETY PROGRAM

The Governor's Highway Safety Program is dedicated to reducing the number of traffic crashes and deaths in North Carolina by funding efforts to reduce crashes and promote safety awareness. GHSP also helps fund North Carolina's Vision Zero initiative, which is working to meet the goal of zero deaths on the state's roadways.

HIGHWAYS

The Division of Highways is responsible for all aspects of the approximately 80,000-mile state-maintained highway system, including the safe and efficient movement of traffic. It includes 14 regional offices, referred to as division offices, across the state that are comprised of multiple counties within a region (see map Page 6). Each division oversees project planning, design, construction and all maintenance activities, such as mowing, pothole repair and resurfacing. Statewide units provide support and oversight for these functions.

MOTOR VEHICLES

The Division of Motor Vehicles delivers quality customer support through professional driver and motor vehicle services, while promoting highway safety and protecting secure information.

PUBLIC TRANSPORTATION

The Public Transportation Division fosters the development of intercity, urban and community public transportation for all North Carolinians. PTD administers federal and state transportation grant programs, provides leadership and training opportunities, as well as planning and technical assistance to local transit services. Operated by local agencies, North Carolina's public transportation systems provide transit options in all 100 counties, serving as a safe, cost-effective and environmentally friendly alternative for residents who cannot, or choose not to, drive.

RAIL

North Carolina has more than 3,300 miles of railroad tracks that benefit both freight and passenger trains by providing an efficient and environmentally friendly transportation option. The Rail Division works with communities throughout the state to make rail-highway crossings safer by installing traffic-control equipment, closing and consolidating high-crash crossings on highways and streets, and building new bridges.

The state-owned *Piedmont* passenger train provides service at stops between Raleigh and Charlotte four times a day. The state-supported Amtrak *Carolinian* provides service between Charlotte and Raleigh, and continues up the East Coast to New York City.

STATE PORTS

North Carolina's ports in Wilmington and Morehead City, plus inland terminals in Charlotte and Greensboro, link the state's consumers, businesses and industry to world markets, and serve as magnets to attract new business and industry to the State of North Carolina. Owned and operated by the State Ports Authority, North Carolina's port system combines modern facilities and abundant capacity with the commitment to excel in service to their customers, without taxpayer subsidy. Port activities contribute statewide to more than 87,700 jobs and \$678 million each year in state and local tax revenues.

TURNPIKE AUTHORITY

The N.C. Turnpike Authority supports the traditional non-toll transportation system in the state by accelerating the delivery of roadway projects using alternative financing options and facilitating the development, delivery and operation of an integrated, innovative system of projects. It was created in 2002 by the N.C. General Assembly in response to concerns about rapid growth, heavy congestion and dwindling resources.

Our Mission

Connecting people, products, and places safely and efficiently with customer focus, accountability, and environmental sensitivity to enhance the economy and vitality of North Carolina

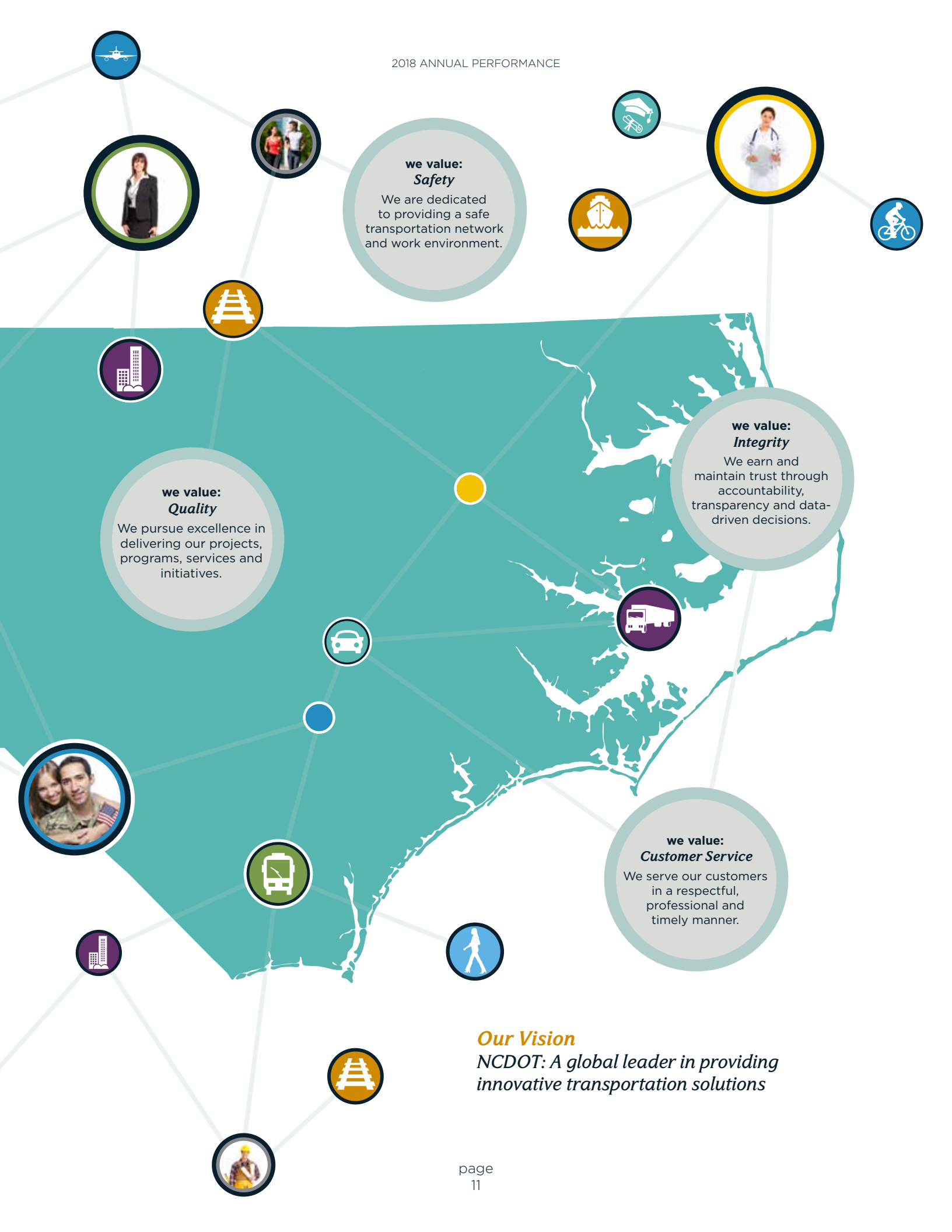
we value:
Innovation
We promote the development and use of new and better solutions.



we value:
Teamwork
We work together using our diverse strengths and skills, collaborating to solve problems and serve our communities.

we value:
Diversity
We respect one another while drawing strength from our diverse opinions, ideas and experiences.





Our Vision
NCDOT: A global leader in providing innovative transportation solutions

Measuring Our Performance & Accountability

To be transparent and accountable, the Department measures and publicly reports on its performance. The agency has identified 26 executive measures that align with its six goals. Performance accountability starts at the top of the organization and cascades down to all employees. All functions within the agency must work together efficiently and effectively to ensure that our programs, projects and services are delivered on schedule and within budget. The Performance Scorecard shows the results in each area as compared to numerical performance targets. This information is continually updated on the online [Performance Scorecard](#), which can be found at [ncdot.gov](#) by searching “performance scorecard.”

2017–18 Performance Scorecard



Measure has been met



Measure has not been met

Performance Measure	How We Measure It	Target	Previous Result	Current Result	Target Met
GOAL 1: Make transportation safer					
Crash Rate	Total statewide crashes per 100 million vehicle miles traveled	Less than 220	256	261	X
Serious Injury Rate	Total statewide serious injuries per 100 million vehicle miles traveled	Less than 105	1.05	1.07	X
Fatality Rate	Total statewide fatalities per 100 million vehicle miles traveled	Less than 1.15	1.21	1.23	X
Safety Belt Usage	Percentage of surveyed North Carolina drivers using a safety belt	More than 92%	91.4%	91.3%	X
GOAL 2: Provide GREAT customer service					
Customer Satisfaction	Percentage of surveyed customers satisfied with transportation services in North Carolina	More than 85%	84%	86%	✓
DMV Customer Wait Time	Average customer wait times at DMV facilities (in minutes) once the customer checks in	Less than 30	18	26	✓
Visitor Center & Rest Area Condition	Average rest area condition scores	More than 92	95.0	94.7	✓

2017–18 Performance Scorecard



Measure has been met



Measure has not been met

Performance Measure	How We Measure It	Target	Previous Result	Current Result	Target Met
GOAL 3: Deliver and maintain our infrastructure efficiently and effectively					
Project Development (STIP)	Percentage of STIP projects let on schedule	More than 90%	81%	80%	X
Project Development (Non-STIP)	Percentage of non-STIP projects let on schedule	More than 90%	99%	97%	✓
Construction Projects—On Schedule	Percentage of construction projects completed on schedule	More than 90%	90%	92%	✓
Construction Projects—On Budget	Total budget overrun for completed construction projects	Less than 5%	3.4%	-0.3%	✓
Bridge Health	Percentage of bridges rated in good condition	More than 80%	73%	76%	X
Pavement Health	Percentage of pavement miles rated in good condition	More than 80%	64%	64%	X
Roadside Features Condition	Average interstate highway feature condition score (excluding pavement and bridges). An assessment of roadside maintenance elements such as signs, signals, pavement markings, vegetation, drainage systems, shoulders, etc.	More than 84	91.3	90.8	✓
Environmental Compliance	Average statewide environmental compliance score on construction and maintenance projects	More than 7.5	8.6	8.5	✓
Internal Administrative Costs	Percentage of the overall budget for administrative costs	Less than 7.6	5.5%	5.7%	✓
GOAL 4: Improve the reliability and connectivity of the transportation system					
Interstate Reliability	Interstate travel time index	Less than 1.02	1.00	1.01	✓
Ferry Service Reliability	Percentage of planned ferry runs completed as scheduled	More than 95%	97%	96%	✓
Rail Service Reliability	Percentage of planned passenger trains arriving on schedule (<i>Carolinian</i> and <i>Piedmont</i> only)	More than 75%	51%	62%	X
Non-Reoccurring Congestion	Percentage of crashes cleared within 90 minutes	More than 85%	78%	79%	X
GOAL 5: Promote economic growth through better use of our infrastructure					
Program Delivery	Total cash balance (as of October 1, 2018)	Less than \$1 billion	\$2.27 billion	\$920 million	✓
Business Utilization	Percentage of the total program budget paid to minority- and women-owned businesses	More than 12%	13.3%	13.6%	✓
External Expenditures	Percentage of NCDOT's total budget expended on external goods, materials and services	More than 70%	75%	79%	✓
GOAL 6: Make our organization a great place to work					
Employee Retention	Percentage of employees retained after three years of employment	More than 90%	96%	96%	✓
Employee Safety	Weighted index score for employee injury rates, equipment accident rates and workers compensation claim rates	Less than 6.16	3.94	3.60	✓
Employee Engagement	Employee engagement survey score	More than 5.25	5.29	5.32	✓

Organizational Highlights

The Department has concentrated on focus areas that align with NCDOT's goals and performance measures.

IMPROVING PROJECT DELIVERY

How quickly we deliver projects impacts how well we meet our goals as a department and carry out our mission to serve the public. A high level of delivery is critical in making sure North Carolina citizens have safe roadways to access health care, education and jobs.

NCDOT's cash balance peaked in March 2017 at \$2.3 billion, meaning that we were not delivering projects in a timely manner and communities were waiting too long for highway improvements. The Department implemented new strategies that allow us to construct projects more quickly. This means that communities will realize the benefits of transportation improvements sooner. A clear sign that this effort is working is the reduced cash balance which, as of December 1, 2018, was under \$500 million.

To maintain this higher level of delivery for the people we serve, NCDOT worked with the General Assembly to create a new financing tool, called Build NC.

The General Assembly approved the Build NC Bond Act of 2018 and Governor Roy Cooper signed it into law, allowing important highway improvements to keep moving forward. This new tool will allow up to \$300 million in bonds to be sold each year if the Department maintains its current strong rate of delivery. NCDOT anticipates the first Build NC bond sale at the end of the first quarter of 2019. Build NC bonds will be paid back from the state Highway Trust Fund.

As transportation improvements are completed across the state, they will increase safety and mobility, reduce congestion and support economic competitiveness, aligning with NCDOT's mission.

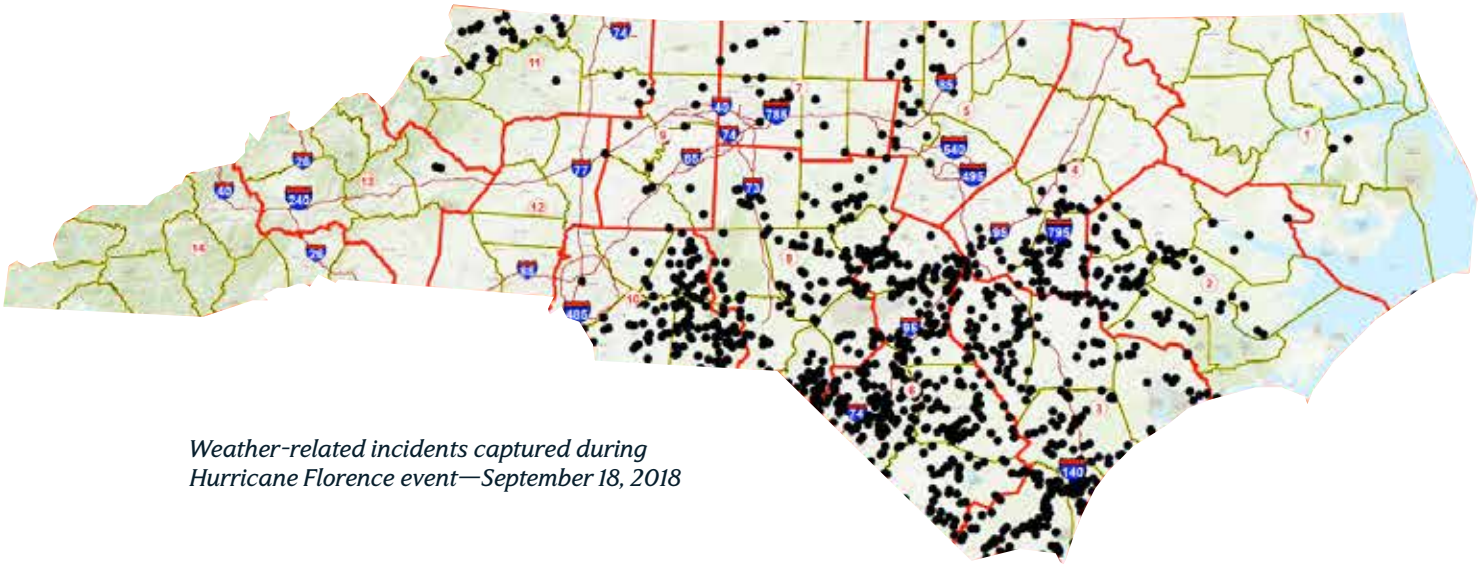


Emergency Response and Recovery

The importance of transportation infrastructure in our every day lives is never more evident than when it's not accessible. Hurricanes Florence and Michael delivered back to back blows to North Carolina in September and October 2018, leaving behind catastrophic damage. The storms highlighted the need for rapid response and more resilient infrastructure. Hurricane Florence dropped an estimated 8 trillion gallons of rain on North Carolina. This is almost 779,000 gallons per person for each of the state's 10.27 million residents. At the height of the storm, the state had more than 1,500 road closures, including long sections of Interstates 95 and 40. A section of U.S. 421 at the New Hanover-Pender County line was the most severely damaged. Less than one month later, a temporary bridge was completed, restoring travel on this critical route into Wilmington. Two permanent, two-lane bridges will be constructed on U.S. 421 starting in early 2019. Hurricane Michael caused 650 road closures.

Employees from across NCDOT pulled together to prepare for all possible impacts of the storm and then responded quickly and adeptly to the rapidly changing conditions after the storm.

As of December 6, 2018, 12 road closures remained due to Hurricane Florence, and six road closures remained due to Hurricane Michael.



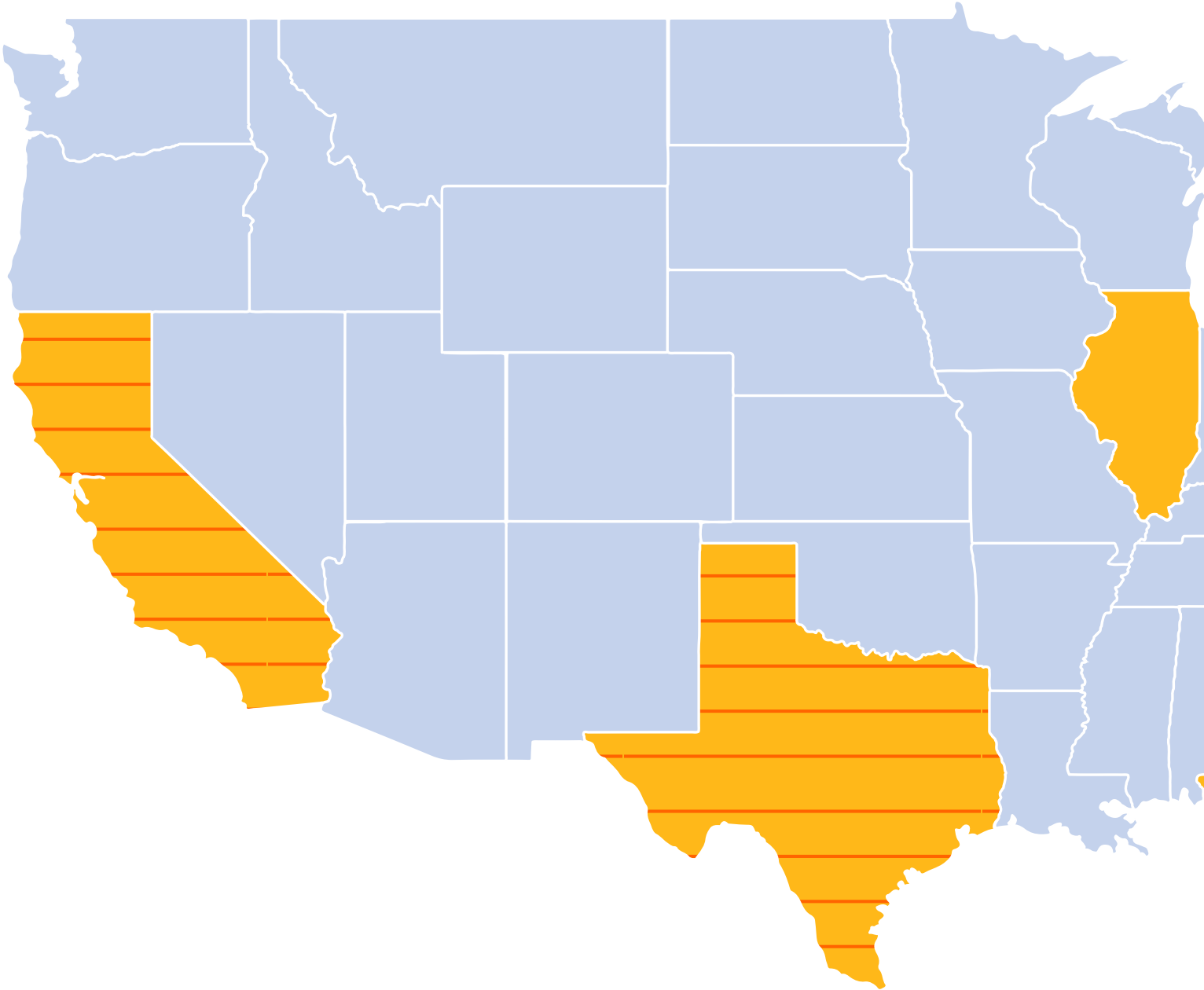
Weather-related incidents captured during Hurricane Florence event—September 18, 2018



U.S. 421 in New Hanover and Pender counties



NC VISION ZERO

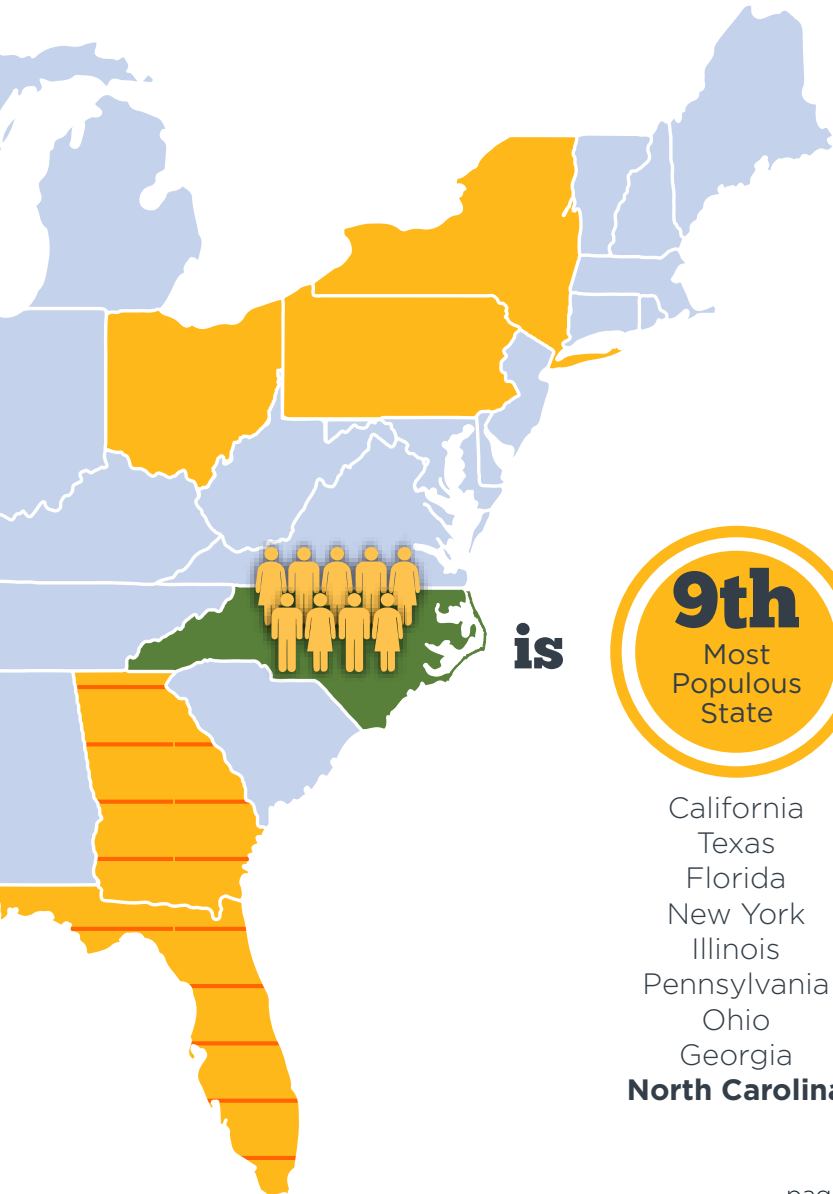




REDUCING FATAL CRASHES

North Carolina is ninth in population, but fifth in highway fatalities. As a Vision Zero state, we view even one highway death as too many. While NCDOT is making safety improvements through engineering and new technology, such as wrong-way driver detection, changing driver behavior is critical to making significant progress toward eliminating traffic deaths. Recognizing that we must do more to establish new partnerships and find innovative ways to tackle this problem, NCDOT worked with community leaders in Robeson County to establish a Vision Zero Task Force. Robeson County was identified as the pilot for this effort because it had the highest death rate per registered vehicle in North Carolina between 2014 and 2016.

The task force is the first county-wide effort in North Carolina to galvanize around the problem of roadway deaths. The goal of this community-driven effort is to steer people who live and work and go to school in Robeson County into safer driving habits. NCDOT hopes to identify successful solutions to take to other areas of the state.



is



with



- California
- Texas
- Florida
- New York
- Illinois
- Pennsylvania
- Ohio
- Georgia
- North Carolina**

- Texas
- California
- Florida
- Georgia
- North Carolina**

IMPROVING MOBILITY AND REDUCING CONGESTION

As North Carolina's population grows and changes, so does the demand on our transportation system. It is more critical than ever that we improve our highway system, and also ensure people have efficient and convenient travel options to get to their destinations safely.

Interstate 95 and U.S. 70/Future I-42 are important connections for the movement of commerce and military transportation. They also serve as key evacuation routes for eastern North Carolina and nearby states in cases of hurricanes and other natural disasters. In June 2018, North Carolina was awarded \$147 million in federal funds to improve both highways in eastern North Carolina.

The Infrastructure For Rebuilding America (INFRA) grant, awarded by the U.S. Department of Transportation, will help North Carolina make needed roadway improvements along Interstate 95, upgrade U.S. 70 to Interstate 42 between Interstate 40 and the Port of Morehead City, and install 300 miles of fiber optic cable along both highways to expand access to broadband and telecommunication access.

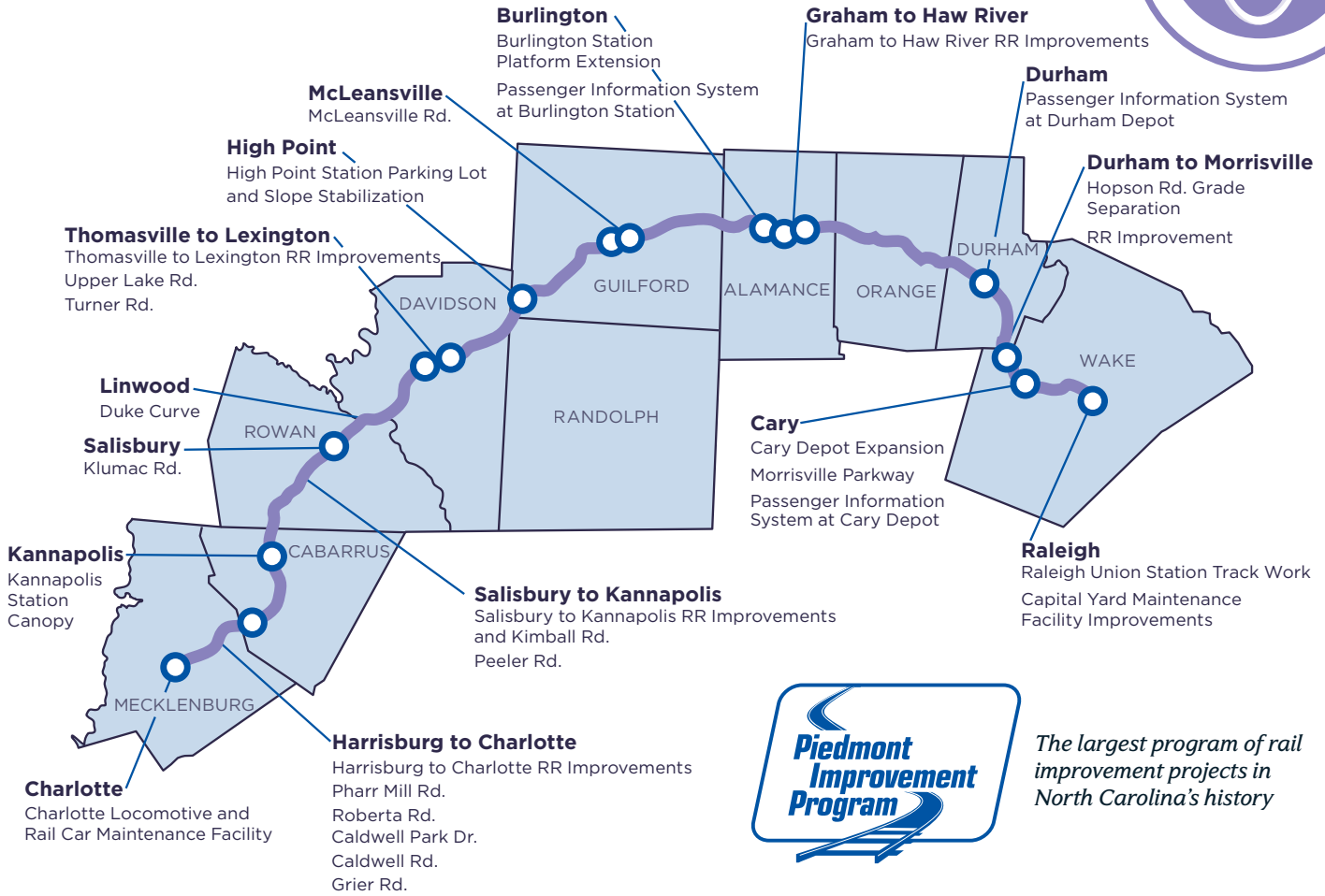
The grant will help North Carolina:

- Widen up to 25 miles of I-95 and upgrade interchanges;
- Convert U.S. 70 to interstate standards, enhancing freight movement throughout the state;
- Install miles of fiber cable network to bring broadband and telecommunication service to many communities in eastern North Carolina;
- Create interstate links between four military bases: Fort Bragg, Seymour Johnson, Camp Lejeune and Cherry Point;
- Improve connections between the Port of Morehead City and Global TransPark; and
- Improve travel safety and reliability in the two corridors.

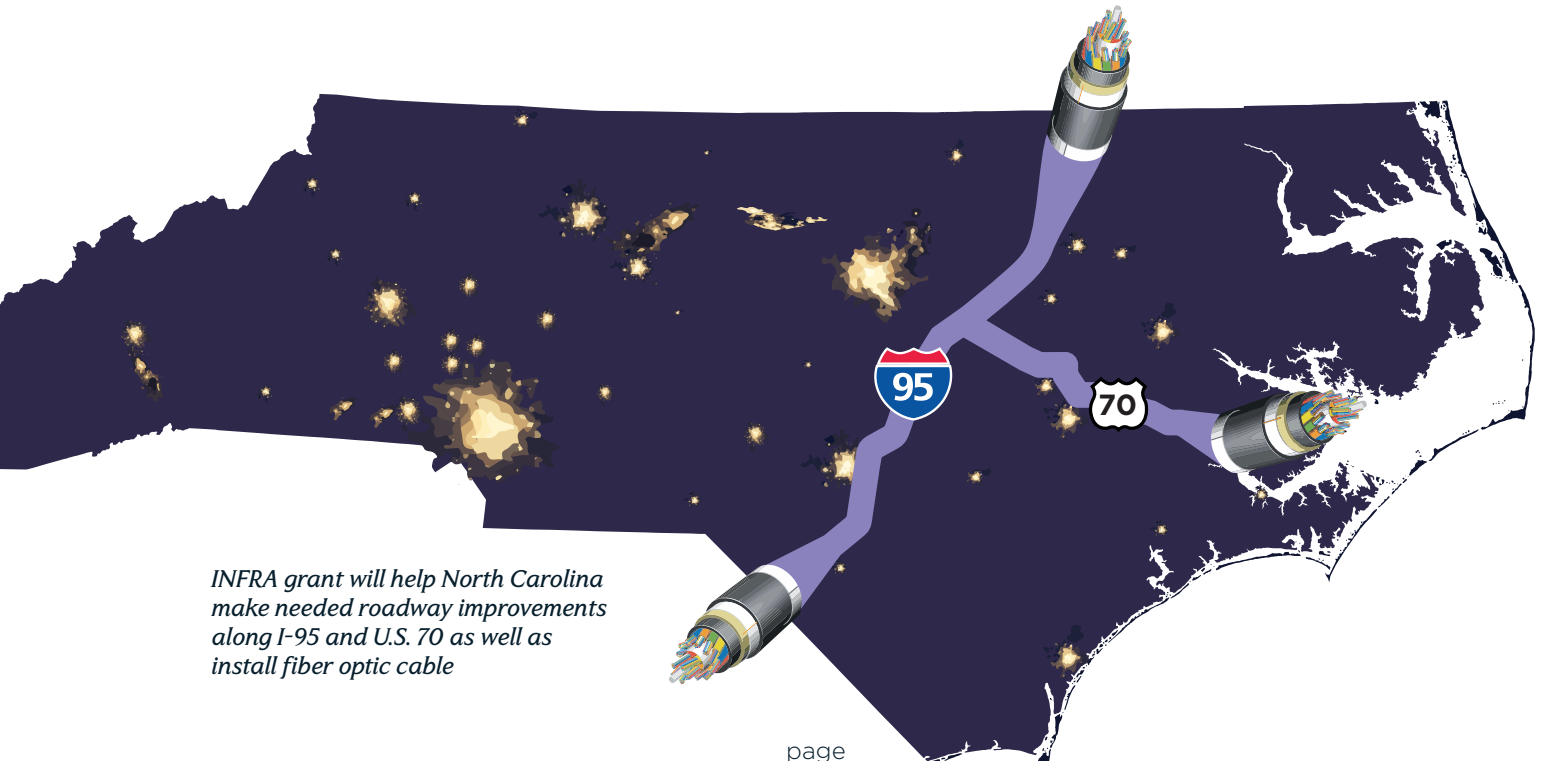
NC By Train is also improving its passenger rail service. With the completion of the largest program of rail improvement projects in state history, NC By Train launched a fourth daily round trip between Raleigh and Charlotte, making passenger rail even more convenient for travelers seeking transportation options.

NCDOT additionally, is using technology to provide real-time travel information through [DriveNC.gov](https://www.driveNC.gov) to help drivers avoid delays. Improvements to the system this year, as well as a new partnership with Waze—the free, real-time, crowdsourced traffic and navigation app powered by drivers—will make it easier for travelers to avoid congestion and help the Department enhance traffic management.

Another way the Department is helping to keep traffic flowing is through the NCDOT State Farm® Safety Patrol, which was expanded to include coverage of Interstate 95 for the first time. The primary purpose of the patrols is to clear stalled vehicles that are slowing down traffic or pose a hazard on the highways. The safety patrol trucks have lighted arrow boards, warning lights and supplies to quickly aid stranded drivers.



The largest program of rail improvement projects in North Carolina's history



INFRA grant will help North Carolina make needed roadway improvements along I-95 and U.S. 70 as well as install fiber optic cable

IMPROVING THE CONDITIONS OF OUR ROADWAYS

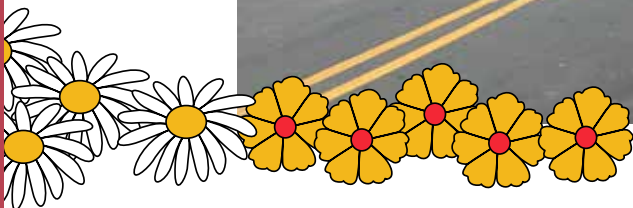
NCDOT has placed a renewed focus on the condition of our highways, and making sure they are being maintained in good condition. This includes resurfacing, improving lane markings and signage as well as reducing the number of deficient bridges.

Through the newly established Roadside Environmental Fund, NCDOT has expanded efforts to improve roadside aesthetics, primarily through litter removal, mowing and brush/tree removal. Private contractors now perform consolidated roadside functions, mowing and litter cycles occur more frequently, and vegetation trimming around guardrails and signs has increased. Routes are inspected ahead of major holidays for contractor performance, ensuring the work meets NCDOT standards. In 2018, 87 percent of roadside management operations were finished by holiday deadlines. These efforts enhance roadside safety, improve the travel and tourism experience and continue growing our business industry.

The Department has reduced the percentage of deficient bridges in the state by about five percent over the past several years and places an emphasis on continually reducing that number. In December 2018, NCDOT was awarded a \$23 million U.S. Department of Transportation BUILD grant that will be used to help complete a project to replace 77 bridges across the state in communities with significant agriculture and agribusiness interests. Many of the bridges scheduled for replacement are weight-restricted which limits use by large trucks which often serve the agriculture industry, as well as buses that take students to school.

The new bridges will be constructed to include weather and/or flood monitors to help provide better data and warnings about potential hazards. In addition, each bridge replaced will also include conduit to allow for future expansion of broadband fiber, decreasing the cost to provide broadband service to rural and underserved areas.

Contracts to perform the bridge replacements will be awarded during the next two years and most projects will take less than a year to complete.



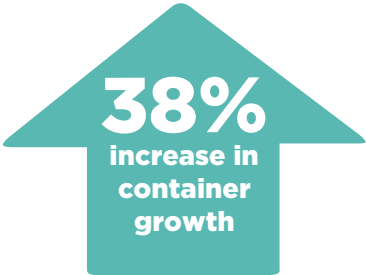


Roadside Inspection Sites



87%

of roadside
management operations
finished by holiday
deadlines



Port of Wilmington



Port of Morehead City

Year-Over-Year Growth at the Ports



ENHANCING ECONOMIC COMPETITIVENESS

Transportation infrastructure is a key driver of jobs and economic growth. Providing efficient and convenient travel options is not only critical for mobility, but also the economy. A multi-faceted, interconnected transportation network gets people to jobs and helps industries move goods at lower costs, both key for economic competitiveness.

North Carolina Ports has committed more than \$200 million in infrastructure improvement projects, including the order of three new neo-Panamax cranes (two of which arrived at the Port of Wilmington in March), berth renovations and container yard and turning basin expansion. North Carolina Ports has also purchased a new rail-mounted gantry crane for the Port of Morehead City that is expected to arrive in Summer 2019. The investments are paying off as North Carolina Ports welcomed its first ever 10,000 TEU vessel to the Port of Wilmington, the largest vessel capacity-wise to call the Port. Wilmington also moved a record number of containers through the Port during SFY 2018. Container growth was up 38 percent year-over-year and year-over-year general cargo growth increased 18 percent. The Port of Morehead City also experienced growth in SFY 2018 with a 20 percent year-over-year increase in general cargo.

On the freight front, NCDOT and CSX reached an agreement to build a new intermodal facility near Rocky Mount. The terminal will provide the industry a logistical solution to help get products to customers and spur growth in the region. Known as the Carolina Connector, the terminal will be built on the CSX mainline, and the company will operate it. Trucks will bring cargo containers to a rail yard where they will be transferred to trains for transport to customers. Work on the site is estimated to complete by late 2020. The CCX facility also will be available for Triangle Tyre to ship finished products domestically and internationally. The tire maker plans to invest about \$580 million and employ 800 people at a nearby facility under construction.



PREPARING FOR FUTURE TECHNOLOGIES

New and disruptive technologies are changing how we plan for and maintain our transportation infrastructure. Autonomous and connected vehicles, ride-sharing service providers (such as Uber and Lyft), electric scooters, unmanned aircraft systems (UAS)—or drones—are a few examples of such technologies. NCDOT is working with industry leaders to not only prepare for, but also embrace these technologies.

The Rail Division completed installation of technology called Positive Train Control on state-owned locomotives. The technology and equipment will work with other railroad equipment installed along the tracks to reduce collisions between trains and automatically enforce speed limits.

After the U.S. Department of Transportation designated the Triangle Expressway in Wake and Durham counties as an autonomous vehicle proving site, the N.C. Turnpike Authority partnered with Volvo Trucks North America and FedEx to demonstrate Volvo's connected truck technology—also known as platooning—on the Triangle Expressway. The demonstration marked the first, public, on-highway showcase of platooning technology between a major truck manufacturer and a transportation company in the United States. Three Volvo VNL tractors pulled two 28-foot loaded trailers and remained in constant communication through cooperative adaptive cruise control, a wireless connected vehicle technology.

This ongoing research collaboration allows real-world testing to help the companies and NCDOT keep drivers safe with emerging technologies on the roads.

The USDOT also selected NCDOT as one of only 10 participants in the Federal Aviation Administration's Unmanned Aircraft Systems Integration Pilot Program, an initiative that will shape the future of drones in America. The primary focus of NCDOT's proposal is working with global drone delivery companies, such as Zipline, Matternet and Flytrex, that currently operate overseas to set up a network of medical distribution centers that can use drones to make medical deliveries. Blood and other supplies currently travel by courier to hospitals and testing facilities. With drones, medical providers would get the test results and supplies they need much faster. NCDOT has also partnered with existing UAS software companies like AirMap and Raleigh-based PrecisionHawk to develop unmanned traffic management systems that track drones as they fly. The first round of test flights demonstrating these technologies in use were conducted August 2018.

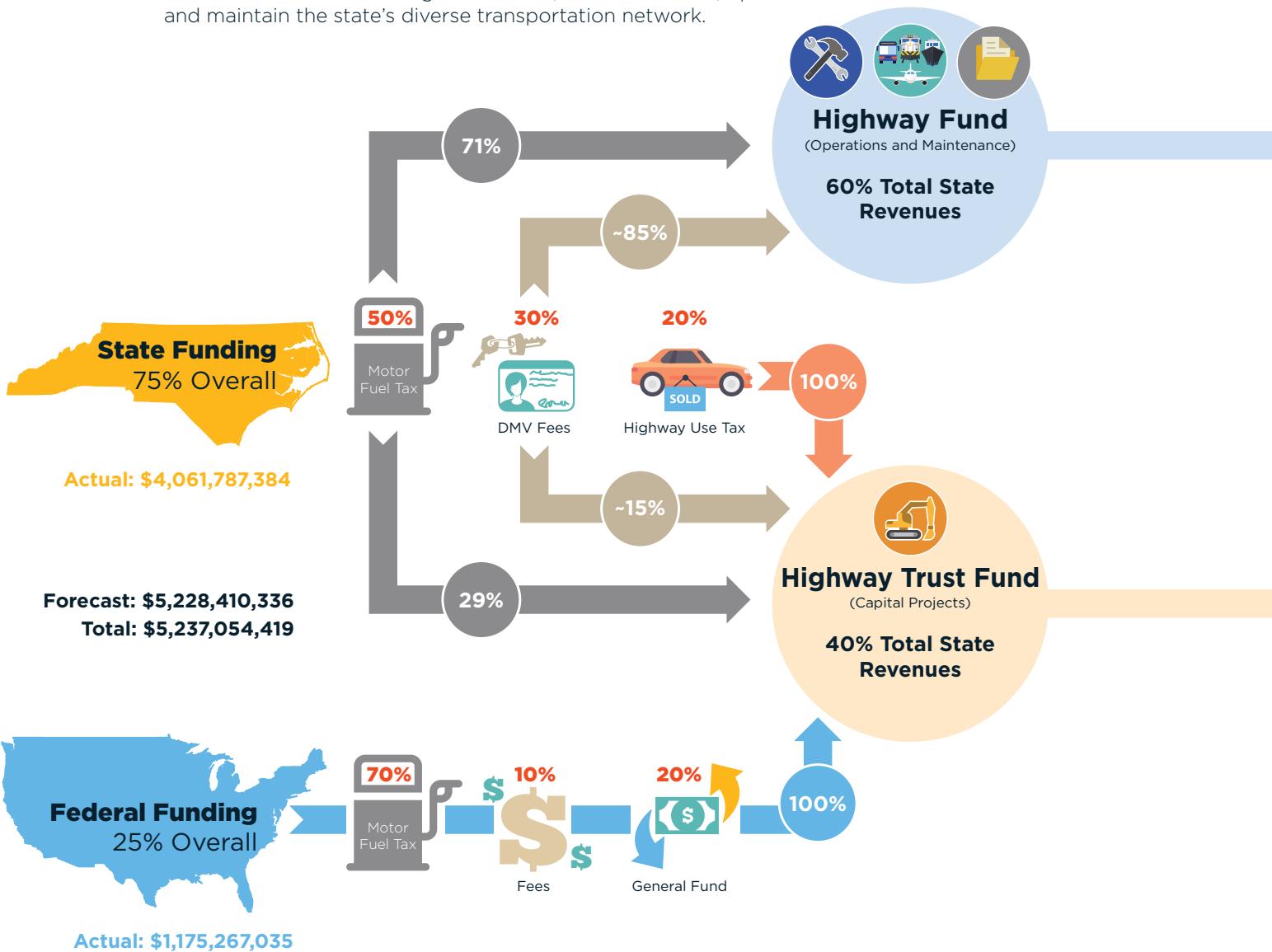
Drones proved to be an invaluable resource for the state in hurricane emergency response. While NCDOT previously used drones to survey storm damage, engineers used them for the first time during Hurricane Florence to identify safe travel routes to move emergency personnel and supplies, as well as to monitor traffic.





Funding Sources and Allocation

NCDOT has an annual budget of about \$5 billion to build, operate and maintain the state's diverse transportation network.



A portion of the revenues from the State Motor Fuel Tax and NCDMV fees goes to the Highway Fund and the Highway Trust Fund (Strategic Transportation Investments).

NCDOT directs 100 percent of both the State Highway Use Tax and federal transportation appropriations to Strategic Transportation Investments.

Expenses

Maintenance Actual: \$1,742,968,425



29%

Primarily supports projects that help take care of the state's existing transportation system. This includes resurfacing highways, replacing bridges and paving unpaved secondary roads. Funds are distributed across North Carolina based on need.

Modes Actual: \$352,807,871



6%

The Highway Fund also supports the Powell Bill Program, which provides state aid to municipalities for pedestrian, bicycle and road improvements.

Administrative and Other Actual: \$807,034,473

(State-Aid to municipalities, debt service, transfers to other state agencies)

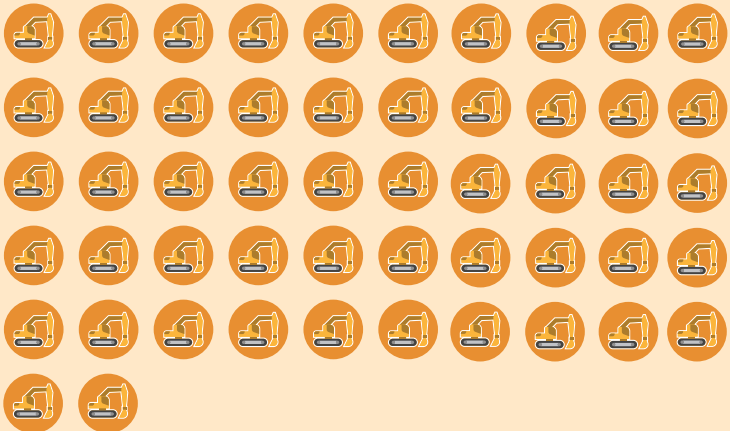


13%

Forecast: \$5,967,123,029

Total: \$6,012,616,079

Construction Actual: \$3,109,805,310



52%

Primarily funds new construction and expansion projects across all modes of transportation. Funding is allocated on local, regional and statewide levels based on data and input from local planning organizations and NCDOT divisions. Federal funding accounts for about 45 percent of NCDOT's available funding for these types of projects.

2018-19 Performance Goals and Measures

Performance Measure	How We Measure It	Target
GOAL 1: Make transportation safer		
Crash Rate	Total statewide crashes per 100 million vehicle miles traveled	Less than 220
Serious Injury Rate	Total statewide serious injuries per 100 million vehicle miles traveled	Less than 105
Fatality Rate	Total statewide fatalities per 100 million vehicle miles traveled	Less than 1.15
Safety Belt Usage	Percentage of surveyed North Carolina drivers using a safety belt	More than 92%
GOAL 2: Provide GREAT customer service		
Customer Satisfaction	Percentage of surveyed customers satisfied with transportation services in North Carolina	More than 85%
Customer Wait Time	Average customer wait times at DMV facilities once the customer checks in (in minutes)	Less than 30
Visitor Center & Rest Area Condition	Average rest area condition scores	More than 92
GOAL 3: Deliver and maintain our infrastructure efficiently and effectively		
Project Development (STIP)	Percentage of planned STIP projects let on schedule	More than 90%
Project Development (non-STIP)	Percentage of planned non-STIP projects let on schedule	More than 90%
Construction Projects—On Schedule	Percentage of construction projects completed on schedule	More than 90%
Construction Projects—On Budget	Total budget overrun for completed construction projects	Less than 5%
Bridge Health	Percentage of bridges rated in good condition	More than 80%
Structurally Deficient Bridges	Percentage of bridges that are rated as structurally deficient	Less than 10%
Pavement Health	Percentage of pavement miles rated in good condition	More than 80%
Roadside Features Condition	Average highway feature condition score (excluding pavement and bridges). An assessment of roadside maintenance elements such as signs, signals, pavement markings, vegetation, drainage systems, shoulders, etc.	More than 84
Environmental Compliance	Average statewide environmental compliance score on construction and maintenance projects	More than 7.5
Internal Administrative Costs	Percentage of the overall budget for administrative costs	Less than 7.6
GOAL 4: Improve the reliability and connectivity of the transportation system		
Interstate Reliability	Interstate travel time index	Less than 1.02
Ferry Service Reliability	Percentage of planned ferry runs completed as scheduled	More than 95%
Rail Service Reliability	Percentage of planned passenger trains arriving on schedule (<i>Carolinian</i> and <i>Piedmont</i> only)	More than 75%
Non-Reoccurring Congestion	Percentage of reported motor vehicle crashes cleared within 90 minutes	More than 85%
GOAL 5: Promote economic growth through better use of our infrastructure		
Program Delivery	Total cash balance (July 1, 2019)	Less than \$750,000,000
MBE/WBE Utilization	Percentage of the total program budget paid to minority- and women-owned businesses	More than 12%
External Expenditures	Percentage of NCDOT's total budget expended on external goods, materials and services	More than 70%
GOAL 6: Make our organization a great place to work		
Employee Retention	Percentage of employees retained after three years of employment	More than 90%
Employee Safety	Weighted index score for employee injury rates, equipment accident rates and workers compensation claim rates	Less than 6.16
Employee Engagement	Employee engagement survey score	More than 5.25

Appendix

In addition to the Performance Scorecard on pages 12–13, NCDOT maintains and tracks hundreds of various key performance measures and level of service indicators that influence the Department’s ability to move people and products and provide an improved level of service to our citizens.

The detailed results of these key measures are monitored by management on an on-going basis and reported periodically throughout the year as well as annually in the following pages of this report.

The following tables and charts provide a more detailed view of several key performance statistics maintained regularly by Department analysts and experts. Additional information and more up-to-date results are available on the [Performance Scorecard](#) at ncdot.gov by searching “performance scorecard.”

Bicycle and Pedestrian Performance Profile:
BICYCLE AND PEDESTRIAN FATALITIES

Division	SFY 2013		SFY 2014		SFY 2015		SFY 2016		SFY 2017		SFY 2018			5YrAvg		
	Bicycle	Ped.	Bicycle	Ped.	Bicycle	Ped.	Bicycle	Ped.	Bicycle	Ped.	Bicycle	Ped.	Combined	Bicycle	Ped.	Combined
1	3	11	1	5	2	6	4	7	1	6	2	3	5	2.2	7.0	9.2
2	2	10	1	8	0	5	0	18	1	8	0	12	12	0.8	9.8	10.6
3	6	18	2	15	2	20	1	22	6	14	2	20	22	3.4	17.8	21.2
4	0	21	2	15	1	16	0	15	1	18	1	11	12	0.8	17.0	17.8
5	3	21	1	19	2	27	3	28	2	24	2	28	30	2.2	23.8	26.0
6	5	26	0	20	3	15	5	22	6	15	2	26	28	3.8	19.6	23.4
7	2	18	7	14	2	14	1	19	2	14	0	20	20	2.8	15.8	18.6
8	2	9	0	12	3	9	1	15	1	6	1	10	11	1.4	10.2	11.6
9	0	15	0	6	0	9	1	14	0	16	0	12	12	0.2	12.0	12.2
10	1	28	0	23	0	11	2	31	4	28	2	45	47	1.4	24.2	25.6
11	0	3	0	3	0	5	1	3	1	0	1	3	4	0.4	2.8	3.2
12	0	15	2	11	1	19	2	11	1	18	2	15	17	1.2	14.8	16.0
13	0	5	0	13	0	9	1	12	0	14	1	8	9	0.2	10.6	10.8
14	0	5	1	7	0	7	2	4	0	6	1	5	6	0.6	5.8	6.4
Statewide	24	205	17	171	16	172	24	221	26	187	17	218	235	21.4	191.2	212.6

- Trend is down (FY 2018 compared to 5-year preceding average)
- Trend is statistically even
- Trend is up (FY 2018 compared to 5-year preceding average)

Note: The 5-year average is the preceding 5 years of data (SFY 2013-17)

Ferry Performance Profile:
FERRY RIDERSHIP STATISTICS

Ferry Route	SFY 2013		SFY 2014		SFY 2015		SFY 2016		SFY 2017		SFY 2018	
	Vehicles	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles	Passengers
Southport to Fort Fisher	183,223	485,424	188,848	503,458	195,062	508,852	204,799	535,204	208,893	555,160	197,572	523,116
Cherry Branch to Minnesott	214,114	381,591	210,719	376,295	201,528	362,033	196,210	362,067	196,831	349,953	198,902	355,512
Cedar Island to Ocracoke	28,054	66,426	26,786	62,284	24,873	58,503	23,753	56,419	23,047	54,054	21,750	49,489
Ocracoke to Cedar Island	26,753	64,911	26,608	60,927	25,247	59,615	23,584	56,195	23,153	54,613	21,042	48,321
Pamlico River	66,125	90,103	63,159	82,549	58,196	80,616	50,632	71,173	49,524	71,019	45,609	65,202
Swan Quarter to Ocracoke	17,245	37,835	14,429	32,500	15,772	35,500	16,572	36,660	16,448	36,118	16,752	36,151
Ocracoke to Swan Quarter	17,058	36,434	14,662	33,228	16,142	35,102	16,831	36,077	16,531	34,917	16,160	34,689
Hatteras Inlet	260,248	697,149	275,789	718,253	259,637	668,131	249,858	640,920	240,984	603,282	232,427	569,580
Currituck	21,805	63,227	19,772	57,835	17,841	53,128	19,016	49,414	18,198	45,159	15,405	38,359
Annual Summary	834,625	1,923,100	840,772	1,927,329	814,298	1,861,480	801,255	1,844,129	793,609	1,804,275	765,619	1,720,419

- % change was positive (compared to 5-year average)
- % change was 0 to -7.99% (compared to 5-year average)
- % change was greater than or equal to -8% (compared to 5-year average)

Notes:

- SFY 2015 ferry service statistics affected by Hurricane Arthur in July 2014.
- SFY 2016 ferry service statistics affected by Hurricane Joaquin in October 2015.
- SFY 2017 ferry service statistics affected by Hurricane Matthew in October 2016.

Passenger Rail Performance Profile:
PIEDMONT AND CAROLINIAN RIDERSHIP STATISTICS

Quarter	SFY 2013	SFY 2014	SFY 2015	SFY 2016	SFY 2017	SFY 2018	5YrAvg
First	121,851	126,606	123,706	118,424	112,893	113,128	120,696
Second	129,618	118,983	127,460	119,279	114,013	118,248	121,871
Third	116,939	104,770	103,090	87,695	91,732	89,635	100,845
Fourth	125,773	125,555	111,486	95,803	108,184	103,633	113,360
Annual Total	494,181	475,914	465,742	421,201	426,822	424,644	456,772

Notes:

- The 5-year average is the preceding 5 years of data (SFY 2013–2017).
- Ridership data is provided for *Piedmont* and *Carolinian* train services only.
- SFY 2013 and 2014 ridership statistics have been adjusted to current passenger count methodology.

Highway Performance Profile:

HIGHWAY SAFETY RATES

Division	VMT (per 100 MVMT)		Total Crashes		Crash Rates (per 100 MVMT)		Total Fatalities		Fatality Rates (per 100 MVMT)		Total Injuries		Injury Rates (per 100 MVMT)	
	5YrAvg	SFY 18*	5YrAvg	SFY 18	5YrAvg	SFY 18	5YrAvg	SFY 18	5YrAvg	SFY 18	5YrAvg	SFY 18	5YrAvg	SFY 18
1	32.48	34.29	6,010	6,123	185.04	178.58	46	44	1.43	1.28	2,414	2,438	74.31	71.10
2	48.91	51.19	13,090	14,617	267.62	285.54	68	73	1.40	1.43	5,825	6,384	119.09	124.71
3	74.30	78.52	18,328	20,055	246.68	255.41	105	116	1.42	1.48	7,399	7,837	99.58	99.81
4	70.94	75.22	15,959	16,917	224.95	224.89	112	119	1.58	1.58	7,367	7,152	103.84	95.08
5	166.06	179.15	48,080	53,828	289.54	300.47	139	140	0.84	0.78	17,402	19,048	104.80	106.33
6	73.65	79.12	18,528	19,768	251.55	249.86	148	162	2.01	2.05	8,759	9,171	118.92	115.92
7	103.47	110.91	23,498	26,355	227.11	237.62	104	119	1.00	1.07	11,917	12,700	115.17	114.50
8	52.76	56.41	12,053	13,152	228.44	233.14	100	115	1.90	2.04	5,430	5,521	102.91	97.87
9	85.48	91.52	18,348	24,603	214.65	268.83	104	94	1.21	1.03	7,832	9,176	91.62	100.26
10	172.60	190.04	47,575	57,477	275.64	302.45	139	182	0.81	0.96	23,594	25,986	136.70	136.74
11	40.90	42.76	8,184	8,882	200.11	207.70	56	42	1.37	0.98	3,469	3,584	84.82	83.81
12	83.81	89.06	20,131	23,498	240.20	263.86	109	110	1.30	1.24	9,117	8,991	108.78	100.96
13	57.39	61.22	12,499	14,587	217.79	238.26	67	82	1.16	1.34	5,067	5,244	88.29	85.65
14	42.97	46.20	7,365	8,367	171.39	181.09	56	58	1.31	1.26	3,009	3,120	70.04	67.53
Statewide	1,105.72	1,185.61	269,648	308,229	243.87	259.98	1,354	1,456	1.22	1.23	118,600	126,352	107.26	106.57

- Trend is down (FY 2018 compared to preceding 5-year average)
- Trend is statistically even (+/- 2.5%)
- Trend is up (FY 2018 compared to preceding 5-year average)

Notes:

- The 5-year average is the preceding 5 years of data (SFY 2013-17).
- *FY 2018 vehicle miles traveled (VMT) is calculated by using the most current published VMT data from the Transportation Planning Division that is available at the time the statistics are compiled.

Highway Performance Profile:
BRIDGE HEALTH INDEX (% GOOD)

Division	Interstate	Primary	Secondary	Total
1	100.0	81.3	70.3	75.8
2	N/A	89.6	70.4	79.3
3	100.0	84.8	68.5	77.3
4	96.1	84.9	68.0	78.1
5	94.9	84.8	77.3	82.5
6	86.4	84.1	74.8	79.3
7	92.2	73.0	71.1	75.1
8	93.8	86.2	73.6	79.0
9	97.4	68.8	81.6	78.2
10	94.0	81.2	78.9	82.3
11	94.3	82.3	60.5	64.8
12	71.0	85.9	73.3	76.8
13	89.9	79.0	69.5	73.0
14	76.3	84.1	66.3	69.9
Statewide	91.4	82.4	70.3	75.7

Notes:

- Bridge Condition is defined as the percentage of bridges rated in good condition as of June 30, 2018.
- Division 2 does not maintain any Interstate mileage.

Highway Performance Profile:
STRUCTURALLY DEFICIENT BRIDGES (% STRUCTURALLY DEFICIENT)

Division	Interstate	Primary	Secondary	Total
1	0.0	7.7	9.7	8.7
2	N/A	6.5	13.9	10.5
3	0.0	4.5	17.1	11.2
4	3.9	5.3	11.1	7.8
5	0.0	4.8	11.9	7.8
6	0.0	4.3	12.8	8.7
7	2.6	15.7	15.5	13.7
8	0.0	1.8	9.7	6.5
9	2.6	19.1	15.1	15.4
10	2.4	8.3	8.0	7.2
11	0.0	13.6	24.0	21.8
12	8.5	6.9	13.5	11.3
13	5.4	9.9	16.0	14.1
14	13.2	7.8	15.4	13.9
Statewide	3.1	7.9	14.8	11.9

Notes:

- This measure tracks the percentage of state-maintained bridges that are considered structurally deficient as of June 30, 2018, which indicates it is in relatively poor condition or has insufficient load-carrying capacity. The fact that a bridge is “structurally deficient” does not imply that it is likely to collapse or that it is unsafe.
- Division 2 does not maintain any Interstate mileage.

Highway Performance Profile:
PAVEMENT CONDITION RATINGS (% GOOD)

Division	Interstate	Primary	Secondary	Total
1	63.38	71.65	60.20	63.84
2	N/A	67.18	57.83	60.46
3	94.31	66.61	55.07	59.15
4	92.43	63.68	58.89	61.55
5	98.81	76.25	54.34	60.82
6	91.78	74.28	74.80	75.19
7	97.38	79.26	56.26	62.91
8	97.64	64.59	58.84	60.90
9	100.00	76.55	59.31	64.00
10	84.69	63.93	64.70	66.04
11	86.39	73.79	58.90	62.31
12	97.92	70.06	68.08	69.45
13	100.00	83.35	61.89	68.21
14	100.00	72.82	55.63	61.23
Statewide	94.83	71.13	60.44	64.02

Notes:

- Pavement Condition is defined as the percentage of pavement miles rated in good condition.
- Pavement Condition Scores were published in December 2017.
- Division 2 does not maintain any Interstate mileage.

Highway Performance Profile:
ROADSIDE FEATURES CONDITION

Division	Interstate	Primary	Secondary
1	80.2	85.6	85.7
2	88.9	91.8	86.9
3	90.7	88.7	86.0
4	83.2	85.0	88.2
5	91.9	91.2	91.4
6	90.4	89.3	88.3
7	91.5	91.7	92.2
8	94.1	89.9	93.0
9	94.6	94.3	93.3
10	92.1	84.1	86.7
11	94.9	93.1	90.7
12	92.0	91.7	88.6
13	98.1	94.2	91.0
14	90.1	88.6	85.8
Statewide	90.8	89.3	88.7

Notes:

- The Roadside Features Condition is defined as a weighted value score from 1-100 with 100 being the best that represents the physical condition of all highway features and elements, excluding pavement and bridges. The roadside feature scores for roads are determined, for the most part, by evaluating samples of 0.2 mile segments of roads for various elements such as Shoulders and Ditches (i.e. Low Shoulder, High Shoulder, Lateral Ditches); Drainage (i.e. Blocked or Damaged Pipes and Gutters); Roadside (i.e. Mowing, Brush and Tree Control, Litter and Debris, Slope and Guardrail); Traffic Control Devices (i.e. Traffic Signs, Pavement Markings, Traffic Signals) and Environmental (i.e. Turf Condition, Miscellaneous Vegetation Management).
- Because of the granularity of data, total scores are not calculated for Roadside Features. Data is unaudited.



The Monroe Expressway, an all-electronic toll road, opened to traffic on Nov. 27, 2018. The 18-mile, four-lane toll road extends from U.S. 74 near I-485 in eastern Mecklenburg County, southeast to U.S. 74 at Marshville in Union County.



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