NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

2026 BUILD GRANT

NC TRUCK PARKING ACTION PLAN

MERIT CRITERIA

Secure
Accessible
Functional
Efficient

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Merit Criteria

The North Carolina Truck Parking Action Plan (Action Plan) will lay the groundwork for future construction projects that increase truck parking capacity at strategic, data-driven locations and improve real-time awareness of truck parking availability for truck drivers.

Projects identified through SAFE – the North Carolina Truck Parking Action Plan will:

- Enhance **Security** for truck drivers and cargo,
- Improve **Accessibility** to safe and convenient parking locations,
- Provide **Functional** truck parking with amenities for trucker security and comfort, and
- Enable **Efficient** operations for trucks by providing information on truck parking availability.

Projects identified by the Action Plan will be screened and ranked based on feasibility and potential benefits in alignment with BUILD merit criteria. The highest-ranked projects will include conceptual design, costs, and environmental screening, positioning the projects to immediately compete for future federal competitive grant programs, including BUILD, or state funding. Other projects and strategies identified through the Action Plan will be strategically advanced as funding opportunities and private partnerships are established. Solutions identified through the Action Plan meet all eight BUILD merit criteria (see **Figure 1**).

Figure 1. NC Truck Parking Action Plan – Merit Criteria Summary

Safety
New truck parking capacity and technologies can reduce unauthorized parking and crashes involving parked trucks on the interstate system (427 crashes leading to 16 fatalities since 2016) and crashes involving trucks operating on local roads near truck parking facilities, freight activity centers, and intermodal facilities. Available and safe parking locations ensure that truck drivers have convenient options to meet hours of service requirements, creating opportunities for adequate rest periods in secure surroundings for long-haul trips. Unauthorized parking creates safety and security risks for truck drivers and adjacent communities, leading to conflicts between trucks and other roadway users on roads not designed for trucks.
Environmental Sustainability
New truck parking capacity and technologies can reduce low-speed circulation of trucks looking for parking, reduce idling in unauthorized parking locations, reduce stormwater impacts from parking on degraded shoulders, and reduce emission and noise impacts in communities where unauthorized parking occurs. New truck parking capacity can also help facilitate emergency management and equipment staging operations along key evacuation corridors such as I-40 and I-95.

Quality of Life

New truck parking spaces and technologies can reduce time looking for truck parking, decreasing lost revenue-earning miles and lost pay for drivers. This outcome leads to less driver frustration and stress, helping to position this essential workforce to grow and meet increasing demand. Unauthorized parking presents a safety and security risk for drivers and cargo and has community impacts, particularly when trucks are parked in or near residential areas.

Mobility and Community Connectivity

New truck parking capacity and technologies can reduce truck volumes on lower-capacity roadways near freight corridors, leading to fewer crashes and congestion, and more predictable staging times for trucks near intermodal facilities and ports. This improved efficiency will enable truckers to optimize schedules, helping to reduce congestion costs, which in 2024 were estimated at $3.3 billion for the North Carolina trucking industry.

Economic Competitiveness and Opportunity

New truck parking capacity and technologies can address truck parking staging needs near freight-intensive areas, leading to reduced logistics costs, improved pick-up and drop-off reliability, and support for freight-intensive industry expansion. The corridors proposed for evaluation and project development within this Action Plan are within 5 miles of over 18,000 freight-intensive businesses supporting 427,020 jobs in North Carolina. Improved parking options will help these businesses manage shipping costs and maintain and expand their market reach and workforce.

State of Good Repair

New truck parking capacity and technologies can reduce damage to state property caused by unauthorized parking on ramps and roadway shoulders, decreasing NCDOT maintenance costs. Ongoing NCDOT interstate projects are expanding ramps and shoulder widths and depths to accommodate truck parking and minimize short-term maintenance. These interim solutions are occurring in the absence of planned new public truck parking capacity.

Partnership and Collaboration

New truck parking capacity and technologies are facilitated through partnerships with the private sector (which currently manages 87% of the truck parking spaces in North Carolina) to identify and prioritize industry and community benefits of privately financed rest areas. The Action Plan will explore partnership models that better integrate public and private parking supply, consistent with BUILD's emphasis on collaborative investment, and will consider existing requirements for P3s in North Carolina to identify new partnership opportunities.

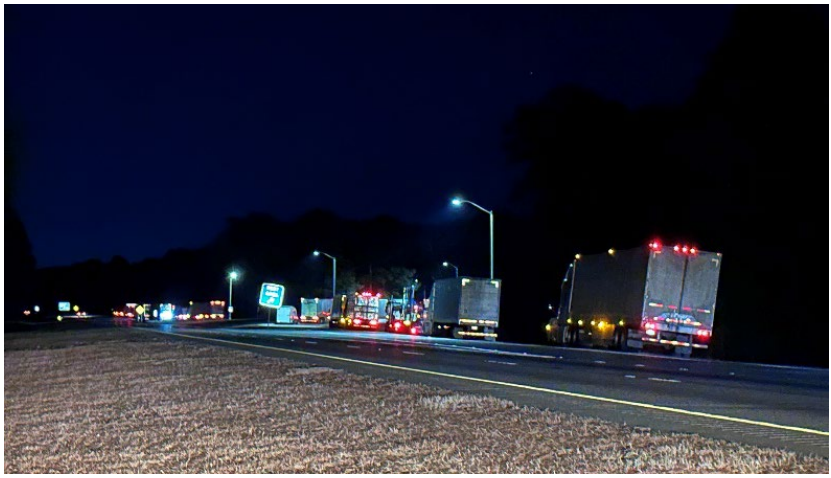
Innovation

New truck parking capacity and technologies offer the potential to optimize truck parking utilization, provide information to drivers, and position the state to accommodate emerging freight technologies better. As part of the Action Plan, NCDOT will create a concept of operations for truck parking availability systems (TPAS).

Safety

Truck parking capacity and technology projects identified through the Action Plan will address unsafe and illegal parking behaviors that contribute to crashes, congestion, and roadside hazards.

Between 2017 and 2022, 22 new truck parking facilities (public and private) were added statewide, increasing overall capacity by nearly 1,800 spaces. However, NCDOT's 2023 Truck Parking Plan found that approximately 94% of truck parking facilities are at full capacity on most nights, underscoring the persistence of parking shortages.[1] When legal parking spaces are unavailable, operators frequently resort to parking on interstate ramps, shoulders, or in poorly lit locations (such as underutilized parking lots or industrial areas). The 2023 Truck Parking Plan also reported that truck drivers parked on road shoulders or ramps during approximately 10% of stops in North Carolina, largely due to insufficient authorized parking.



Overflow nighttime parking on exit ramps at the I-95 rest area in Robeson County.

The truck parking shortage in the United States is in part tied to Hours-of-Service (HOS) requirements. A 2026 report by GEOTAB found that the median journey before a ramp-parking event spans 520 miles and lasts approximately 9 hours and 40 minutes, placing drivers near the 11-hour maximum allowable drive time.[2] When drivers approach or reach their HOS limits without securing a parking space, they have to choose between parking illegally or continuing to drive illegally, both of which pose safety risks. Consistent with these nationwide findings, NCDOT records show recurrent nighttime overflow on interstate ramps and shoulders, particularly along high-volume segments of I-95, I-85, and I-40.

These behaviors have measurable impacts on safety. The conditions described above elevate the likelihood of sideswipe and rear-end crashes, as well as theft and personal security incidents for truck drivers. The lack of safe, convenient, and easy-to-find parking also forces drivers to spend extended periods searching for available spaces. In areas where parking supply is inadequate, trucks spill onto local streets near industrial districts, ports, rail terminals, and interstate interchanges, particularly in freight-dense urban areas such as Charlotte and Greensboro, creating conflicts at unsignalized access points, driveways, and pedestrian curbside areas.

NCDOT crash and safety data from 2015 to 2025 show ongoing challenges with severe truck crashes on North Carolina's interstate corridors, reflecting a risk environment worsened by unauthorized parking on ramps and shoulders (see **Figure 2**). During this period, the Action Plan corridors (see **Project Description file**) experienced 28,877 truck-involved crashes, including 427 crashes involving parked trucks. Parked-truck crashes resulted in 17 serious injuries and 16 fatalities, demonstrating the disproportionately severe outcomes associated with collisions involving stationary heavy-duty vehicles. In addition, 55 truck-involved crashes occurred on ramps, locations where drivers are more likely to stop when compliant, safe truck parking is unavailable, and where limited sight distance and high-speed merging traffic elevate the risk of severe crashes. These data document a clear crash risk driven by insufficient parking capacity, which forces drivers to stop on shoulders, ramps, or other unauthorized locations.

Figure 2. Truck Crashes (2015 – 2025) by Type and Severity on Key Freight Corridors

Corridor	Total Truck Crashes	Parked Truck Crashes	Parked Truck Crashes - Serious Injury[2]	Parked Truck Crashes - Fatality	Ramp Crashes
I-26	1,723	23	1	-	1
I-40	8,551	112	6	5	29
I-77	5,178	76	3	2	6
I-85	9,379	143	4	6	14
I-95	4,046	73	3	3	5
Total	**28,877**	**427**	**17**	**16**	**55**

Source: NCDOT Mobility & Safety Unit, Statewide Truck Crashes (2015 – 2025)

[1] *Includes trucks parked out of travel lanes only.*

[2] *A type injury (suspected serious injury) as reported on NC DMV crash reports.*

Contributing factors include limited sight distance, nighttime visibility issues, hazardous re-entry maneuvers, and erratic driving by fatigued operators searching for parking. For example, in December 2021, a motorist was killed while exiting I-77 north of Charlotte in Iredell County after striking a tractor-trailer stopped on a ramp shoulder, highlighting the consequences of heavy vehicles stopping outside designated facilities.

ACTION PLAN OUTCOMES

The Action Plan will develop projects that expand access to safe, legal, and reliably available truck parking, positioning NCDOT to support reductions in severe and fatal truck-involved crashes on the National Highway Freight Network. When adequate truck parking capacity is

provided, and information is readily accessible to drivers on real-time parking availability, crashes are reduced in three possible ways:

- Less circulation of trucks on local roads looking for legal or unauthorized parking reduces conflicts with passenger vehicles on streets that may not be designed for trucks.
- Reduced unauthorized parking on ramp shoulders and other roadside locations reduces the risk of collisions involving parked trucks due to visibility constraints.
- Reliably available truck parking reduces driver stress and helps ensure drivers meet hours of service requirements, resulting in less fatigued truck drivers.

The projects and strategies will respond to documented crash patterns, reduce the likelihood of unauthorized parking, improve operational safety at interchanges, and support Hours-of-Service compliance.

Environmental Sustainability

Truck parking capacity and technology projects identified through the Action Plan will reduce roadside environmental impacts and will be integrated with corridor resilience and emergency management needs.

Limited truck parking availability forces drivers to circulate in search of space and idle for extended periods, increasing fuel consumption, emissions, and localized air pollution. The U.S. Environmental Protection Agency (EPA) estimates that reducing unnecessary idling can save more than 900 gallons of fuel per truck annually and significantly reduce nitrogen oxides (NO_x) and particulate matter emissions.[3] Reducing idling and circulation through improved truck parking availability will improve freight system efficiency and environmental performance.

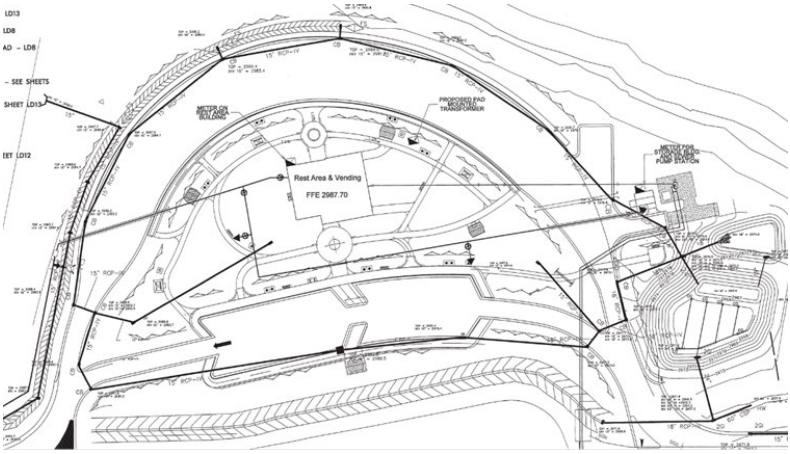
Unauthorized parking on shoulders, ramps, and unregulated areas contributes to stormwater runoff and degradation of roadside environments. Unlike authorized truck parking facilities, which can be planned and maintained with defined drainage patterns and stormwater controls, unauthorized roadside areas typically lack treatment features that manage runoff at the source. EPA notes that stormwater runoff can transport pollutants from vehicles, including heavy metals from tire, brake, and engine wear, which can impair receiving waters if not controlled.[4]

Trucks parked at a rest area with shoulder and pavement deterioration along I-95.

When trucks routinely occupy roadside locations, disturbance of vegetated shoulders and adjacent soils can increase susceptibility to erosion, adding sediment and associated contaminants to drainage systems and nearby waterways. Projects identified through the Action Plan will be screened in alignment with state frameworks:

- NCDOT's Highway Stormwater Program[5] and North Carolina Department of Environmental Quality (NCDEQ) Stormwater Design Manual require nature-based controls such as permeable pavement, bioretention, and vegetated swales.[6]
- NCDOT Resilience Improvement Plan (RIP) defines multimodal, risk-based resilience criteria for transportation assets, including freight corridors.[7]

The Action Plan will assess the feasibility of green-infrastructure practices and evaluate the resilience value of candidate truck parking sites, including their ability to support system redundancy, evacuation staging, and emergency mobilization along hurricane evacuation critical corridors such as I-95 and I-40.



NCDOT typical bio-retention and hazardous spill basin designs were applied during the construction of the US 23/ US 74 Rest Area in Haywood County.

ACTION PLAN OUTCOMES

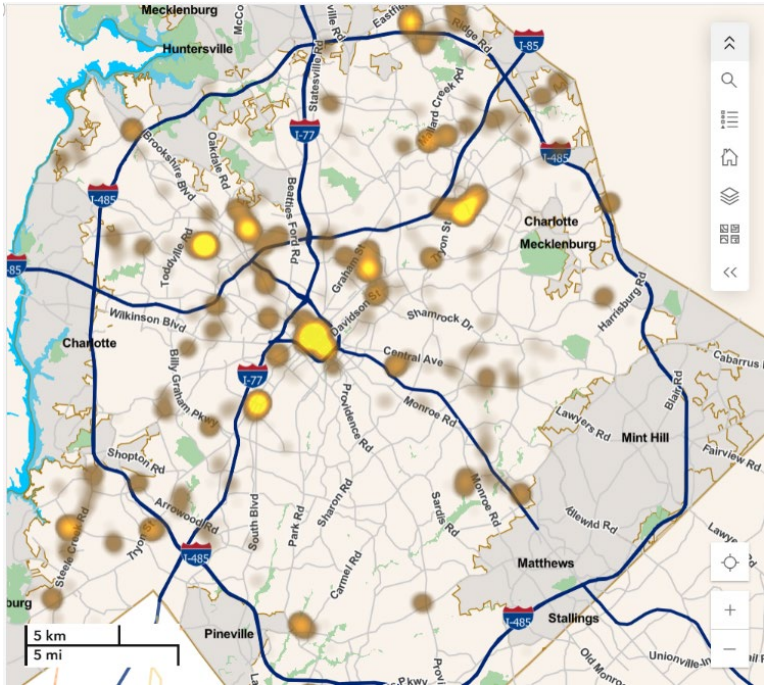
The Action Plan will identify and advance projects to expand truck parking capacity and improve awareness of truck parking availability. The outcomes of these projects will reduce avoidable idling and low-speed circulation, leading to fuel consumption savings and emission reductions, and mitigate unauthorized parking and the associated roadside and stormwater impacts from freight operations.

Quality of Life

Truck parking capacity and technology projects identified through the Action Plan will reduce driver stress, wasted time and fuel, and overnight safety risks, while minimizing unauthorized truck parking within nearby neighborhoods.

Reliable access to safe truck parking is a quality-of-life issue for truck drivers and the communities they serve. According to the North Carolina Trucking Association, the trucking industry supports approximately 277,000 jobs statewide, roughly one in every fifteen jobs in North Carolina, including more than 65,000 heavy and tractor-trailer drivers earning an average annual wage of $51,877, with total trucking-industry wages exceeding $14.4 billion in 2022.[8] The health, safety, and productivity of this workforce are tied to the availability of safe, reliable truck parking. Improving public truck parking capacity and real-time parking information supports driver well-being, reduces stress and wasted time, improves safety and security, particularly for overnight rest, and lessens neighborhood impacts.

Truck-parking shortages erode truck drivers' earning potential and create burdens for local communities. According to the American Transportation Research Institute, drivers forfeit an average of 56 minutes of available drive time per day to find parking, which equals $7,105 in lost yearly wages.[9] These shortages may also lead to financial penalties. When drivers cannot find legal spaces, they face tickets for parking violations or Hours-of-Service overage fines. Expanding public truck-parking capacity can help reduce out-of-pocket costs for drivers and create a more predictable operating environment. According to FMCSA data, there were 1,049 safety violations statewide in 2025, including 189 (18%) violations associated with hours-of-service reporting (higher than the national share (11%) of these violations in 2025).[10]



In 2023, the City of Charlotte tightened ordinances involving commercial vehicles, including restrictions in residential zones and downtown, in combination with intensified enforcement of unauthorized parking. To support drivers and the public, the City developed an interactive parking locator tool and a violations heat map. In 2025, there were 2,006 commercial vehicle parking violations in Charlotte.

A lack of safe truck parking endangers drivers. For women, one of the fastest-growing segments of the industry, the risks are even greater: 43% report having to stop in places where they do not feel safe, and nearly 70% of drivers overall have been forced into unsafe or illegal parking due to lack of available spaces.[11] National research also shows nearly one-third of female truckers experience harassment, often at poorly lit or unsecured rest areas.[12] These dangers underscore why truck parking is a critical issue for the workforce, reflected in the origins of "Jason's Law," established after a driver was murdered at an unofficial site.

The impacts of unauthorized truck parking extend to adjacent communities. When trucks park on shoulders, ramps, or local streets near interchanges and industrial areas, residents experience increased noise, idling, emissions, early-morning departures, litter, and reduced visibility at access points. These localized effects diminish neighborhood quality of life and reflect broader freight system inefficiencies, where unmet demand is displaced into communities not designed to accommodate truck activity.

There is also a notable potential impact of truck activity and parking needs within disadvantaged communities. Based on 2020 Census designations of areas of persistent poverty (APP) and historically disadvantaged communities (HDC), approximately 329 centerline miles of the 947 centerline miles (35%) of the Action Plan corridors are within APP/HDC census tracts.

ACTION PLAN OUTCOMES

The Action Plan is intended to reduce these avoidable quality-of-life impacts by improving how truck parking demand is managed and accommodated. By expanding public parking capacity, improving awareness of available spaces through truck parking availability systems and wayfinding, and identifying strategies to redirect trucks away from unsafe or incompatible locations, the Action Plan supports a safer, less stressful, and more predictable operating environment for drivers. At the same time, it helps alleviate noise, vehicle conflicts, and environmental effects that burden communities near freight corridors.

Mobility and Community Connectivity

Truck parking capacity and technology projects identified through the Action Plan will align truck parking with locations where trucks most often interface with intermodal, manufacturing, and distribution facilities.

North Carolina's freight network relies on interstate highway corridors to move goods between manufacturing centers, logistics hubs, ports, rail terminals, and population centers. Along these freight-critical routes, truck parking shortages reduce reliability for time-sensitive freight movements and increase conflicts with local traffic when trucks are forced to circulate or wait in unintended locations. These conditions are most pronounced along high-volume corridors and transfer hubs, which form the focus areas for the Action Plan's corridor-based analysis.

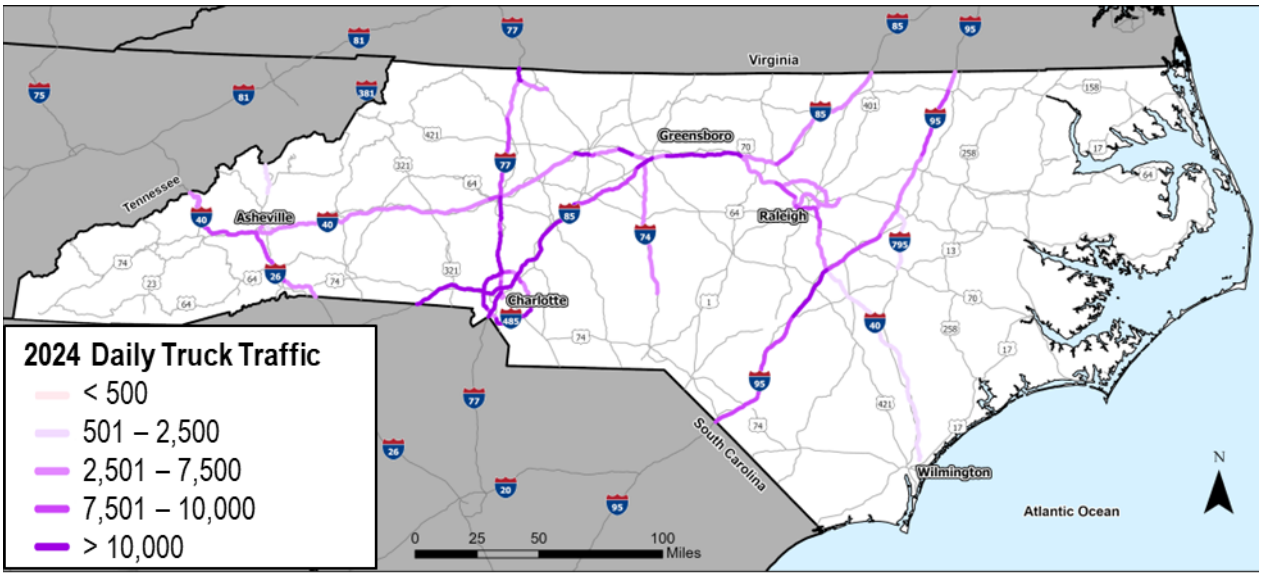
According to ATRIs 2026 Top 100 Truck Bottlenecks Report, three bottlenecks in the Charlotte region are within the top 50, including I-77 north near Lake Norman (#31), I-77 at I-485 South (#43), and I-85 at I-485 West (#44).[13] All three of these bottlenecks have moved up the list since 2023, with I-77 north increasing 22 spots, I-77 at I-485 increasing 15 spots, and I-85 at I-485 west

increasing 24 spots. To address these conditions, the Action Plan will prioritize truck parking strategies near freight activity centers and transfer points, including (for example):

- Charlotte logistics region: The Charlotte Inland Port and distribution and staging activity along I-85 and I-77 that supports one of the nation's fastest-growing logistics markets.
- Piedmont Triad distribution cluster: Rail-served warehouse and manufacturing facilities in Greensboro and High Point supporting regional and national supply chains.
- Research Triangle region: Pharmaceutical, research, and high-value distribution nodes served primarily by I-40 and surrounding connectors.
- I-95 industrial corridor: Manufacturing, agricultural, military, and intermodal freight activity in eastern North Carolina, including connections to inland terminals.
- Port of Wilmington and inland connectors: More than 600,000 container-related truck trips annually, interfacing with I-40, U.S. 74, and regional distribution facilities.
- Inland intermodal terminals: Facilities such as the CSX Carolina Connector and rail-served logistics hubs where predictable truck access improves multimodal transfers

Segments of I-26 and I-40 in western North Carolina, I-85 and I-77 in the Charlotte region, I-40/I-85 in the Piedmont-Triad region, and I-95 from I-40 to South Carolina see more than 10,000 trucks daily and since 2022 have seen average daily volume growth near 10% (see **Figure 3**).

Figure 3. Average Annual Daily Truck Traffic (2024)



Truck parking also plays an important role in last-mile freight access and community mobility, particularly in regions where freight activity and population growth are occurring side by side. Trucks staging near employment centers, interchanges, and freight facilities can interfere with commuter travel, transit operations, and neighborhood access. Community input gathered

through recent NCDOT truck parking plans consistently highlighted concerns related to trucks staging on local streets or near residential and mixed-use areas. By redirecting this activity into facilities near freight centers, the Action Plan supports more orderly last-mile freight movement, reduces conflicts with local travel, and improves community connectivity.

ACTION PLAN OUTCOMES

The Action Plan will improve community cohesion by redirecting truck staging activity away from neighborhood streets and into planned, legal, and well-designed facilities, thereby reducing freight intrusions into residential and mixed-use areas. By decreasing truck circulation, particularly during nighttime hours, Action Plan projects will help reduce truck conflicts with pedestrians, cyclists, and transit riders. Improved availability of designated truck parking also enhances consistent access for local travelers, as reduced truck circulation helps prevent unexpected queues and congestion at intersections and signalized roadways near industrial sites. NCDOT will ensure that location-specific community concerns are incorporated into the project screening criteria.

Trailers parked on Equipment Drive in Charlotte near a light industrial area adjacent to I-85.

Economic Competitiveness and Opportunity

Truck parking capacity and technology projects identified through the Action Plan will strengthen North Carolina's economic competitiveness by addressing a well-documented source of freight inefficiency: limited access to safe, reliable truck parking and real-time parking information.

North Carolina's continued economic growth and expanding role as a logistics hub require modern and efficient freight infrastructure, including truck parking. Truck parking challenges are increasing while North Carolina strengthens its role as a leader in economic activity, commerce, and international trade. Ranked 11th in gross domestic product[14] and 9th in population[15] in 2024, North Carolina is a place where people come to work and live.

A recent study by the North Carolina State University Institute for Transportation Research and Education (ITRE) of 14 supply chains critical to North Carolina's economy evaluated the role of different modes in economic output. Industrial Machinery & Transportation Equipment relies greatly on North Carolina's multimodal transportation network, supporting over $40 billion in

economic output annually. Of this total output, approximately $33.8 billion is facilitated by truck transportation (82%).[16] Across the 14 supply chains, truck transportation accounts for 69% to 88% of total economic output, reflecting the importance of a safe and efficient transportation system for the state economy.

Many of North Carolina's largest trading partners are accessible by truck within a day of travel – extending from north Florida to eastern Pennsylvania, as far west as Nashville, and as far north as Cleveland. This footprint contains the Ports of Jacksonville, Savannah, Charleston, and Norfolk, and inland ports in Richmond, Charlotte, and Greenville, South Carolina. Many of these trips are on the edge of the 11-hour driving window and 14-hour on-duty window.

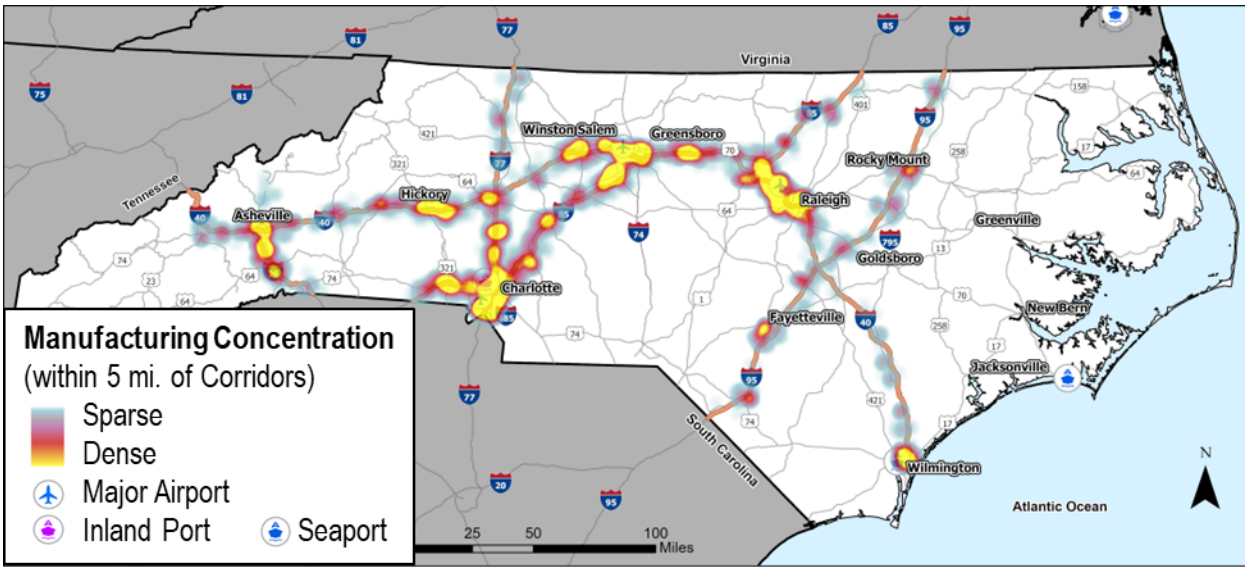
Many of North Carolina's top trading partners are near or within the 11-hour hours of service daily driving limit.

The corridors proposed for evaluation and project development within this Action Plan are within 1 mile of 6,159 freight-intensive establishments and within 5 miles of 18,128 freight-intensive establishments. These establishments support 66,400 jobs within 1 mile of the corridors and 427,020 jobs within 5 miles. New truck parking capacity and real-time parking availability information along these corridors is critical to reducing unauthorized parking and enhancing the efficiency of goods movement, supporting these businesses' growth and vitality. Manufacturing industry establishments, which rely heavily on trucks to facilitate the supply chain and distribute produced goods and equipment, are clustered within metropolitan areas adjacent to the Action Plan corridors (see **Figure 4**).

192 miles of the Action Plan corridors intersect 49 Opportunity Zones (with many of these in eastern North Carolina along the I-95 and I-40 corridors). In these areas, truck parking improvements can help small businesses grow, and economically challenged communities attract new development.

The military plays a pivotal role in North Carolina's economy. The state's seven Department of Defense bases and National Guard Units move military machinery, supplies, and equipment. Fort Bragg, the U.S. Army's largest installation by population, has 17 truck staging areas. The Action Plan will develop strategies that enhance information on the availability of these staging areas and nearby truck parking to support efficient distribution of equipment and personnel.

Figure 4. Manufacturing Establishment Concentration near Action Plan Corridors



ACTION PLAN OUTCOMES

New public truck parking or truck parking availability systems will position NCDOT to advance projects that will lower operating costs, enabling businesses to expand and truck drivers to maximize revenue potential. Key outcomes related to economic competitiveness include:

- **Increased Efficiency** – Investing in truck parking can increase efficiency for the trucking industry. With adequate parking spaces, drivers can plan their routes with greater certainty, reducing travel time and fuel costs.
- **Job Creation** – Investing in truck parking can also create jobs, particularly in the construction and maintenance of new parking facilities. This can have a positive impact on local economies, providing employment opportunities and generating revenue.
- **Boost to Local Economies** – Investing in truck parking can boost Local economies. Truck drivers need food, fuel, and other services while on the road, and the presence of adequate parking facilities can encourage them to stop and spend money in local businesses.
- **Local Land Value** – Research published in 2021 estimated that every 1% increase in distance from a truck parking facility was associated with a 0.3% decrease in commercial land values, which equates to a $2,500/acre reduction in value for an average parcel. [17]

State of Good Repair

Truck parking capacity and technology projects identified through the Action Plan will redirect trucks away from assets not designed for long-term parking, protecting pavement conditions, preserving asset life, and improving system performance.

North Carolina's freight network is experiencing state-of-good-repair pressures associated with truck parking, including shoulder cracking, edge breakup, and unplanned maintenance needs. These localized impacts compound broader statewide pavement and bridge challenges documented in the 2024 Maintenance Operations and Performance Analysis Report (MOPAR), accelerating the wear of freight-critical corridors already facing long-term deterioration pressures.[18]

Degraded ramps and shoulders on I-40 (near Old Fort) and I-95 (Nash County).

The persistence of truck parking shortages has also led to additional, and often costly, design considerations for roadway projects. For example, NCDOT's current project on I-85 west of Charlotte will improve traffic operations along a 9.8-mile segment, including upgrades at 19 interchanges. To address repeated shoulder damage and safety concerns, NCDOT decided to expand ramp shoulders from four feet to twelve feet, adding approximately 31,117 square yards of full-depth pavement and increasing the project's cost by roughly $3.1 million. This experience illustrates how unmanaged truck parking demand can translate into avoidable state-good repair impacts and long-term capital costs.

NCDOT's citizen action request enables citizens to report maintenance issues. NCDOT, through Division resources, responds to these requests and reports progress. From January 2022 through January 2026, there were 101 requests submitted and addressed on interstate ramps and ramp intersections, including 27 shoulder repairs and 74 pothole repairs.[19]

ACTION PLAN OUTCOMES

Providing sufficient, purpose-built truck parking and improving awareness of available spaces will help redirect trucks away from shoulders, ramps, and other assets not designed for long-term parking, protecting pavement conditions and preserving asset life. Through the Action Plan, NCDOT will use a data-driven framework to identify where unauthorized parking is contributing to avoidable infrastructure stress and to advance strategies that reduce preventable maintenance. Collectively, these efforts support preservation of Interstate and National Highway System assets and improve long-term system performance by addressing the root causes of premature deterioration rather than relying on reactive maintenance.

Partnership and Collaboration

Truck parking capacity and technology projects identified through the Action Plan will include initial guidelines and criteria for NCDOT to follow in the pursuit of public-private partnerships (P3) to design and construct additional truck parking facilities.

According to ATRI, there is 1 public truck parking space for every 6.8 private truck parking spaces in North Carolina (placing North Carolina as the 17th lowest ratio in the U.S.). Based on data collected for this same study, North Carolina's annual rest area service and maintenance budget per parking space is $24,000 (which is the 5th highest of 35 states providing this data).[9]

Stakeholder outreach in 2022, supporting the Truck Parking Plan, focused on convening a Truck Parking Advisory Group (TPAG). The project team met with private sector providers, including UpTime Trucking, Flying J, and Pilot Truck Stop. NCDOT will reconvene the TPAG for the Action Plan, in coordination with the Freight Advisory Committee, which is actively engaged as part of the ongoing Statewide Multimodal Freight Plan (SMFP) update.

The Truck Parking Action Plan will leverage existing NCDOT relationships with members of the Freight Advisory Committee,

In North Carolina, government entities may execute a public-private partnership (P3) for any public-private project for which the entity determines it has a critical need. For truck parking, reusing brownfield sites is one potential option for implementing a P3 arrangement. However, locations where this arrangement is feasible may be limited, particularly given development pressures and rising real-estate values.

ACTION PLAN OUTCOMES

The Action Plan will evaluate partnership models that will integrate public and private parking supply, consistent with BUILD's emphasis on collaborative investment. The 2022 Truck Parking Plan findings highlighted successful P3 models, including co-located facilities adjacent to private truck stops, shared-use arrangements, and leveraging private amenities to reduce state capital and O&M costs. These strategies will be incorporated into the Action Plan's feasibility screening to broaden NCDOT's toolbox for cooperatively expanding truck parking capacity.

Innovation

Truck parking capacity and technology projects identified through the Action Plan will incorporate technological solutions to complement truck parking capacity investments and leverage existing communications infrastructure to decrease driver idle time and ensure compliance with HOS regulations.

There are 37 rest areas along the Action Plan interstate corridors. Each rest area has standard amenities such as truck parking, public restrooms, water, and vending machines, and is patrolled by the North Carolina State Highway Patrol and local law enforcement.

NCDOT initiatives to enhance intelligent transportation system (ITS) infrastructure and expand rural broadband focus on improving emergency management, expanding traffic data for navigation, and enhancing operations and maintenance (O&M) contracts and revenue generation opportunities. ITS infrastructure includes NCDOT cameras (over 900 statewide along interstate, US highway, and state highway corridors), five regional transportation management centers, and dynamic roadway signage, which communicates information to travelers, including travel times, weather conditions, crashes, and event information.

NCDOT broadband expansion projects are constructing approximately 600 miles of fiber along interstate and US highway routes. NCDOT developed an innovative "multi-track" procurement process to enable design-builders, operate-maintainers, and investors to bid on the scope. Evaluation of proposals identified Design Build (DB) and Operate, Maintain, & Commercialize (OMC) as the best value. NCDOT received an INFRA Grant to fund the DB portion, and the up-front OMC costs are state-funded.[20]

The broadband project was vetted through a data-driven planning process that coordinated transportation needs with commercial viability and rural community broadband needs. Additionally, NCDOT completed market research and commercial market soundings to inform investment decisions, cost estimates, environmental approach, and technical feasibility. Similar processes to coordinate commercial truck parking viability with trucker needs and to establish procurement processes could be implemented to help prioritize future truck parking locations, establish standards for locating TPAS signs, and integrate NCDOT traveler information systems (NC511) and proprietary app-based truck parking availability.

ACTION PLAN OUTCOMES

The Action Plan will deliver a concept of operations and a delivery approach for a TPAS, potentially coordinated with neighboring states. TPAS delivery could occur in three stages: (1) implementation of technology at state-owned facilities to accurately assess and disseminate the availability of truck parking, (2) development of predictive analysis for future parking availability, and (3) incorporation of private parking locations for systemwide resource utilization.