

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



2026 BUILD GRANT

NC TRUCK PARKING ACTION PLAN

PROJECT DESCRIPTION

Secure
Accessible
Functional
Efficient

Table of Contents

Project Description	1
▶ Project Understanding.....	3
▶ Task 1. Stakeholder Engagement	3
▶ Task 2. Needs Assessment.....	4
▶ Task 3. Truck Parking Strategies.....	5
▶ Task 4. Truck Parking Opportunity Locations.....	5
▶ Task 5. Action Plan and Implementation.....	5

Table of Figures

Figure 1. NCDOT Truck Parking Planning Activities.....	2
Figure 2. Truck Parking Conditions (2022).....	2
Figure 3. NC Truck Parking Action Plan Approach.....	4

References

¹ Expanding Truck Parking at Public Rest Areas. ATRI, 2025. <https://truckingresearch.org/2025/04/truck-parking-index>

² North Carolina Office of State Budget and Management, Vintage 2025 Population Projections. January, 2026. <https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer/countystate-population-projections>

³ Bureau of Transportation Statistics, Freight Analysis Framework, 2024.

Note: For supplemental information relevant to the North Carolina Truck Parking Action Plan, please visit: <https://connect.ncdot.gov/resources/BUILD2026-TruckParking/Pages/default.aspx>



Project Description

SAFE – Secure, Accessible, Functional, Efficient – North Carolina Truck Parking Action Plan

The NCDOT is requesting a 2026 BUILD planning grant to develop a Truck Parking Action Plan that identifies truck parking solutions, including capital and operational projects, that NCDOT can advance toward implementation.

New federal mandates, combined with population growth, e-commerce, and industrial expansion, have led to a surge in truck parking demand that is overwhelming existing public facilities and resulting in unsafe truck parking. The lack of available truck parking is a critical industry issue receiving national attention. The [American Transportation Research Institute](#) (ATRI) estimates that there is just one truck parking space nationwide for every 11 truck drivers.¹

Three Factors Shape Truck Parking Challenges in North Carolina:

- 1. National Hours of Service (HOS) and Electronic Logging Devices (ELD) Mandate.** HOS regulations limit on-duty time for commercial truck drivers and require mandatory rest breaks. The required use of ELDs has tightened HOS compliance, compelling drivers to find parking in limited spaces or face fines. Consequently, truck parking demand has surged, straining existing facilities and complicating drivers' efforts to find safe and secure parking. There are 6,624 truck parking spaces in North Carolina, with 87% privately managed.
- 2. North Carolina's Growth as a Logistics Hub for the Southeast U.S.** A robust multimodal freight network positions the state and its metropolitan regions as supply-chain hubs for the Southeast. As the state expands as a freight gateway, including widespread growth in distribution centers, the state has experienced a significant increase in truck traffic. This trend will continue as North Carolina's population is projected to reach 11.7 million by 2030 and 14.5 million by 2060.²
- 3. Local Supply Chain Demands.** Truck parking shortages, particularly in the Charlotte metropolitan area, are intensified by population growth, which has driven up consumer spending, local freight distribution and delivery activity, and land-use demands. Rising real estate prices restrict opportunities to develop new truck parking facilities, and the development of distribution facilities in some locations requires trucks to utilize busy arterial roadways with mixed traffic and non-motorized users.

NC is the #31 state

For rest area truck parking per 1 million truck vehicle miles traveled

ATRI, Expanding Truck Parking at Public Rest Areas, 2025

NC is the #7 state

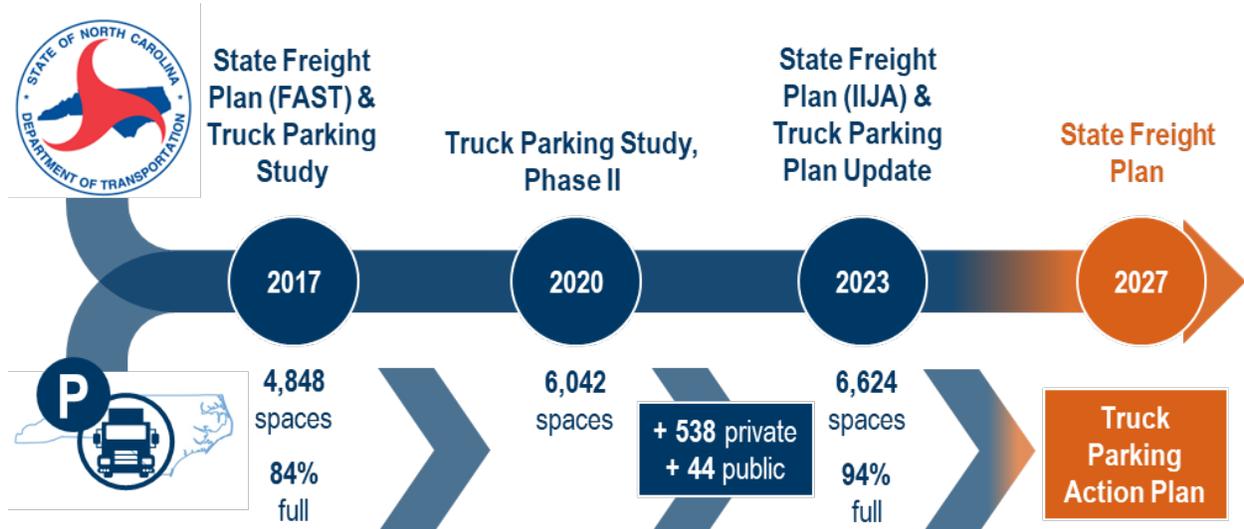
For unauthorized truck parking events on interstate ramps

Geotab, A Nationwide Study of Interstate Ramp Parking, 2026



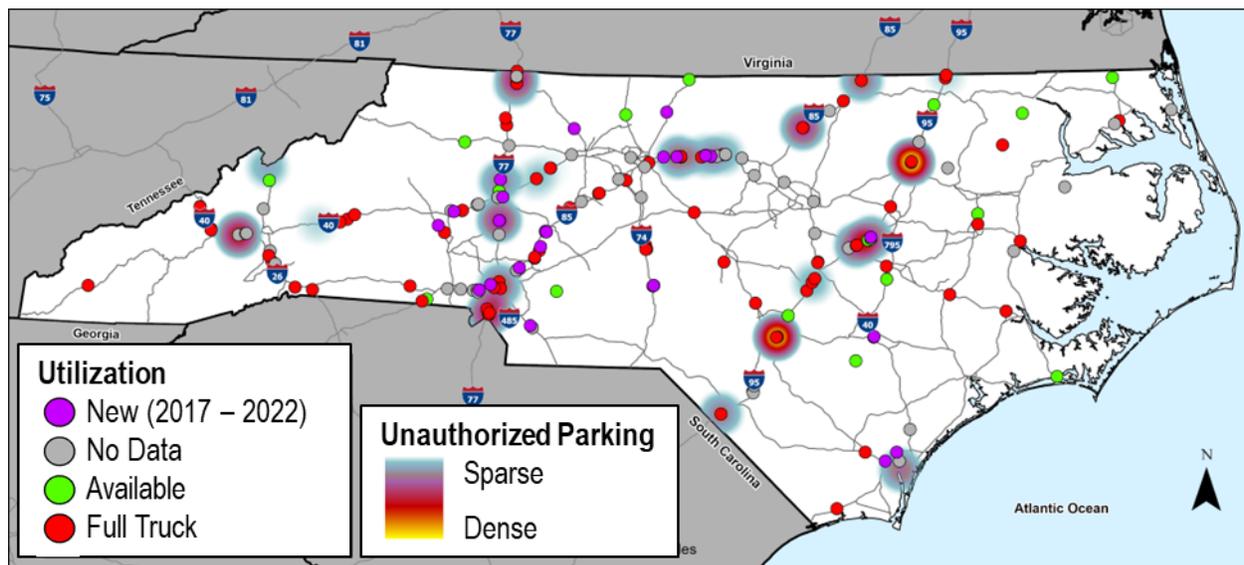
Truck Parking Plans developed by NCDOT over the last decade (see Figures 1 and 2) depict an increasingly critical truck parking situation in North Carolina.

Figure 1. NCDOT Truck Parking Planning Activities



- Truck parking utilization continues to rise and outpace new capacity, increasing from 84% full in 2017 to 94% full in 2023.
- There were over 9,200 unauthorized parking events near truck parking facilities in 2022.
- The evaluation of unauthorized parking found that 36% of truck-related crashes occurred on highway ramps within two miles of a truck parking facility.
- Complicating this situation is projected truck tonnage and value growth. Total truck tonnage in North Carolina will increase by 56% from 2024 to 2050 (from 409 million tons to 637 million tons), and total truck value will increase by 93% (\$599 billion to \$1.157 trillion).³

Figure 2. Truck Parking Conditions (2022)



► PROJECT UNDERSTANDING

Updated analysis and stakeholder engagement will inform actionable solutions within the North Carolina Truck Parking Action Plan (Action Plan). These solutions will include projects that position NCDOT and its partners, including the private sector, to improve truck parking by adding new truck parking capacity and providing information on truck parking availability. The Action Plan will examine five interstate highway corridors (I-95, I-85, I-77, I-40, and I-26) and will identify solutions to address needs through the following activities.

- Identify and prioritize truck parking hotspots, leveraging the inventory and utilization findings from the Statewide Multimodal Freight Plan (SMFP), to develop truck parking measures that consider safety, congestion, trucking costs, asset condition, emissions, and community impact.
- Collaborate with stakeholders to identify solutions within the truck parking hotspots, including capital investments (new public truck parking capacity), technology applications (including improved wayfinding and truck parking availability systems), and public-private partnerships to support parking expansions and facility management.
- Conduct feasibility screening of potential solutions at priority hotspot locations, considering a range of solutions to improve parking safety, access, and availability, including repurposing existing state assets to expand parking capacity.
- Document the results of the feasibility screening for all potential solutions and, through consultation with stakeholders, identify the top solutions by corridor and hotspots.
- Develop conceptual designs, planning-level cost estimates, and environmental screening for the highest opportunity (top five statewide) truck parking locations,
- Summarize findings and implementation activities within a Truck Parking Action Plan that NCDOT will use to guide future investment and partnership decisions.

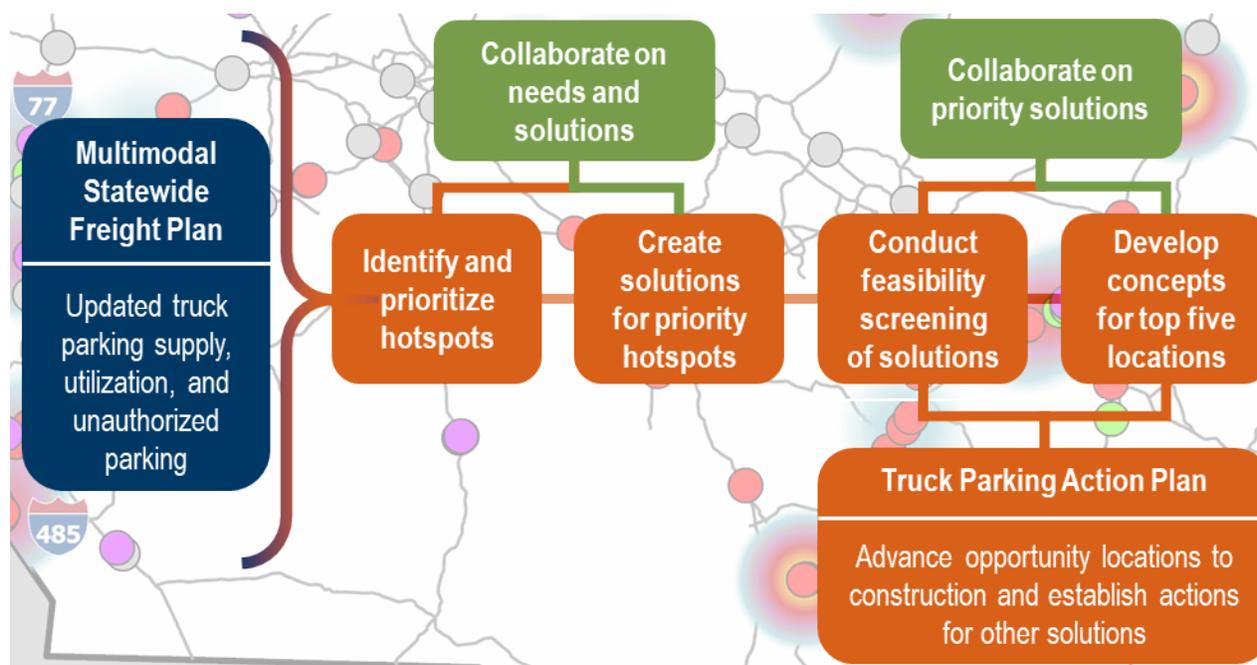
This FY 2026 BUILD planning grant includes five technical tasks supported by project management and coordination. NCDOT will complete the project within 12 months after a funding agreement (see **Project Readiness file**), resulting in capital projects ready to compete for funding and proceed to construction. Given the overlapping SMFP process (due by February 2027), NCDOT will ensure that this approach coordinates stakeholder engagement, data sharing, and analysis. A summary of the approach is presented in **Figure 3**.

► TASK 1. STAKEHOLDER ENGAGEMENT

Technical activities will be shaped through regular engagement with NCDOT leadership and Division staff. Along priority corridors, NCDOT will also engage regional and local partners. The NCDOT's internal Truck Parking Workgroup and existing members of the Freight Advisory Committee, which include private sector representatives, will be engaged through routine meetings to review analysis findings and discuss strategies. Interviews with the private sector will help uncover location-specific needs and potential investment and deployment strategies.



Figure 3. NC Truck Parking Action Plan Approach



► **TASK 2. NEEDS ASSESSMENT**

The SMFP is updating the truck parking inventory through satellite imagery, coordination with private truck stop providers and truckers, and crowdsourced information. The SMFP will also estimate truck parking demand, both authorized and unauthorized, based on data obtained from fleet-specialized electronic logging device providers. The SMFP data will be used to identify truck parking hotspots along five corridors that facilitate long-haul freight traffic and provide access to industries and intermodal facilities.

- **I-95:** Connects the Northeast and Mid-Atlantic regions to Southeast ports and cities, including Fayetteville, Wilmington, Charleston, Savannah, Brunswick, and Jacksonville.
- **I-85:** Connects the Mid-Atlantic region and Ports of Baltimore and Norfolk to the Piedmont Crescent, Charlotte Inland Port, upstate South Carolina, including the Greenville Inland Port, the Atlanta region, and the rest of the Southeast, including the Gulf Coast.
- **I-77:** Connects the Ports of Savannah and Charleston, the Charlotte region and the Charlotte Inland Port, the I-81 corridor, and into West Virginia, Ohio, and Pennsylvania.
- **I-40:** Connects east-west from the Port of Wilmington through Raleigh/Durham, Greensboro, Winston-Salem, and Asheville toward Nashville and Memphis.
- **I-26/I-40:** Connects the Ports of Savannah and Charleston and southern Georgia and South Carolina to western Tennessee, Kentucky, Cincinnati, Ohio, Michigan, and Ontario.



NCDOT will define hotspots (based on a common geography that enables facilities to be clustered into a hotspot) and conduct a performance analysis that considers the impacts on safety, delay, state of good repair, emissions, and community conditions. Based on the findings, NCDOT will tier the hotspots into priority levels to focus on solution development.

▶ **TASK 3. TRUCK PARKING STRATEGIES**

NCDOT will coordinate with stakeholders to identify capacity and operations strategies to address truck parking needs along the five corridors. Strategies will aim to resolve safety, security, and availability challenges and evaluate implementation feasibility within the next five years. NCDOT will start with a list of proven and innovative truck parking strategies, including:

- Construct truck parking at abandoned rest areas or other available state right-of-way,
- Leverage available space at weigh stations for truck parking,
- Pursue public-private truck parking arrangements,
- Conduct site exploration for new truck parking near major interstate interchanges,
- Repurpose excess passenger car parking at existing rest areas, and
- Install a truck parking availability system (TPAS) along interstate corridors.

▶ **TASK 4. TRUCK PARKING OPPORTUNITY LOCATIONS**

Through combining performance measure outcomes and strategy development, NCDOT will identify a shortlist (top five) of opportunity locations for new public truck parking. Projects will be prioritized based on potential cost, project readiness, geographic balance, competitiveness, and options for future funding (including BUILD capital grants). For the top five locations, NCDOT will develop a conceptual design, conduct environmental screening, assess potential benefits, and establish a cost estimate. This conceptual design will be coordinated through the NCDOT Division and shared with regional and local partners. This level of concept development will prepare the projects to compete for future state and federal grants.

▶ **TASK 5. ACTION PLAN AND IMPLEMENTATION**

The findings will be summarized through an executive-level report for agency leaders, private partners, and elected officials. The Action Plan will prepare NCDOT staff to advance solutions to secure funding for implementation through:

- Five project concept reports including costs, environmental screening results, and benefits;
- Cost compared to benefits for various truck parking solutions to inform NCDOT decisions on whether capital investment benefits justify expansion versus ongoing maintenance;
- A list of corridors for implementing truck parking availability systems, including a concept of operations and process for NCDOT and partners to advance implementation; and
- A multi-year investment strategy focused on the top five project concepts and other project opportunities identified (but not advanced into concept development).

