

The Wallace to Castle Hayne Railroad Corridor

A Strategic Infrastructure Asset Case for North Carolina

June 2026



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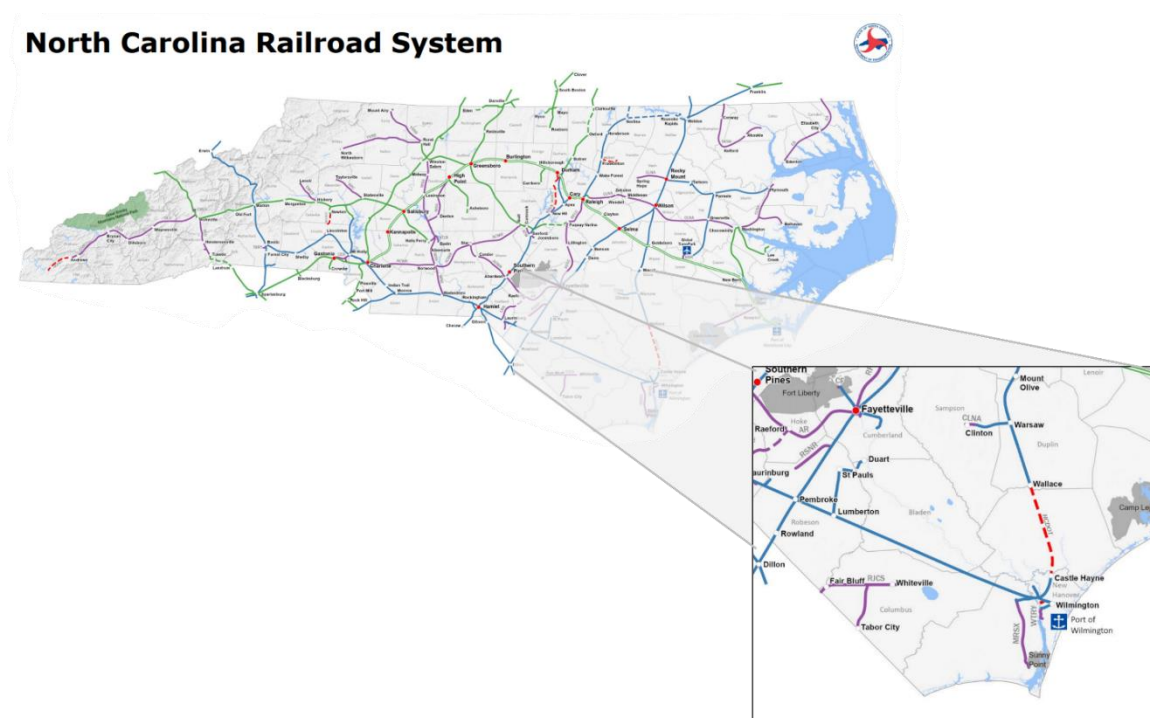
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Executive Summary

The Wallace to Castle Hayne (W2CH) rail corridor is a state-owned right-of-way of approximately 27 miles running from Wallace (Duplin County area) to Castle Hayne (New Hanover County area), connecting to the CSX network in the vicinity of Wilmington and the Port of Wilmington rail approach.¹ Track and key structures were removed in prior decades, and the State of North Carolina has held the right-of-way since approximately 1994.² Despite repeated legislative attention and multiple feasibility and planning efforts, the corridor remains non-operational today.

This paper argues that the W2CH corridor should no longer be analyzed as a standalone rail restoration project. It should be evaluated as a *multi-dimensional strategic asset* capable of advancing *at least* six distinct public interests simultaneously: agriculture supply chain competitiveness, port inland connectivity, rural economic development, public asset optimization, passenger rail optionality, and national defense logistics.



About the Strategic Supply Chain Assets Series

This paper is the first report in a NC Chamber Foundation's broader supply chain competitiveness research series, which examines how North Carolina's infrastructure assets, logistics systems, production regions, and market connections function together as a statewide economic platform. The series will explore topics including port and rail connectivity, inland logistics, freight mobility, industrial site readiness, rural production access, utility capacity, cold chain and air cargo opportunities, supply chain resilience, and the strategic governance or coordination gaps that affect how these systems perform.

¹ CSX Transportation. *Network and Operations Overview*. CSX Transportation, <https://www.csx.com/network>

² North Carolina General Assembly. *Eastern Infrastructure Improvement Study: A Report to the North Carolina General Assembly*. North Carolina General Assembly, <https://www.ncleg.gov/Files/Library/agency/dot14780.pdf>



Within that framework, the Wallace to Castle Hayne corridor is evaluated not as a standalone rail project, but as an underutilized public asset whose value depends on its ability to improve system performance, support real economic demand, and connect rural production regions to broader logistics and market networks. As the first case study in the series, this report illustrates the Foundation's broader approach to identifying where North Carolina already has strategic assets, where those assets are underutilized or poorly connected, and where targeted, demand-driven investment or improved coordination could strengthen long-term competitiveness.

The Core Strategic Opportunity

North Carolina is consistently ranked among the nation's top states for poultry and pork production, with the highest-concentration livestock and poultry activity clustered in the southeastern counties near the W2CH right-of-way.³ Those supply chains depend on high-volume inbound feed grains and other bulk inputs that are frequently sourced from long-distance origins, where rail-plus-transload can be cost-competitive if at volume, reliability, and commercial terms are secured.⁴ That gives the corridor a real starting point from inbound feed grain and agricultural products.

The Port of Wilmington is investing in intermodal and cold chain capacity to compete in a region dominated by larger ports. However, Wilmington's ability to reliably extend rail-enabled service into its nearest high-output agricultural hinterland is constrained by the absence of an active northward rail corridor between Castle Hayne and Wallace. If restored and commercially activated, W2CH would create a direct, in-state inland reach option that could support additional port volume in select cargo categories, subject to shipper adoption, service design, and rate competitiveness.

The southeastern counties served by the W2CH corridor, including Duplin, Sampson, and Pender counties, contain a high concentration of Tier 1 and Tier 2 economically distressed communities under North Carolina's own classification system.⁵ Rail access has historically been a differentiating factor for industrial site selection. Restoring viable rail infrastructure in this region would strengthen the competitive position of communities that have been largely bypassed by the state's urban and industrial economic boom.

What Evidence Supports

The case for W2CH restoration is strongest in the following areas:

- Feed grain and agricultural input logistics, where the corridor's route geography aligns closely with major feed users
- Port of Wilmington inland reach, where corridor restoration would extend Wilmington's viable service territory
- Rural industrial site competitiveness, where rail access remains a material differentiator
- Military logistics optionality, given the corridor's relationship to the US Army's Military Ocean Terminal Sunny Points (MOTSU) and related defense infrastructure

³ North Carolina Department of Agriculture and Consumer Services. *North Carolina Agricultural Statistics Book*. NCDA&CS, 2024, https://data.nass.usda.gov/Statistics_by_State/North_Carolina/Publications/Annual_Statistical_Bulletin/AgStat/NCAgStatBook.pdf

⁴ North Carolina Department of Transportation. *Southeastern North Carolina Passenger Rail Feasibility Study*. NCDOT, 2024, https://connect.ncdot.gov/resources/Rail-Division-Resources/Documents/SENC%20Passenger%20Rail%20Feasibility%20Study%202024_1105.pdf

⁵ North Carolina Department of Commerce. *County Distress Rankings (Tiers)*. NC Commerce, <https://www.commerce.nc.gov/grants-incentives/county-distress-rankings-tiers>



- Passenger rail long-term optionality, which the FRA's Corridor ID Program has already recognized

The case is less certain in the following areas:

- Near-term private freight demand, which remains speculative without anchor customer commitments
- Net financial returns to public investment, which depend heavily on assumptions about utilization rates and operating costs
- Speed of execution, which historically has been a significant constraint

The Recommended Framework

This paper recommends a phased, milestone-based approach structured around four strategic priorities including immediate environmental and engineering readiness work; a transload-first commercial validation strategy targeting agricultural inputs; early catalytic capital for high-confidence infrastructure elements; and a structured public-private partnership framework to share risk and accelerate execution.

The total capital requirement to fully restore the corridor is not yet established with precision. Historical estimates from 2004 and 2013 cited figures in the range of \$49 to \$65 million. Modern construction cost environments, the need to replace bridges, environmental permitting requirements, and current labor and material costs suggest that updated estimates, when completed, may be substantially higher. No credible current estimate exists, and this paper explicitly recommends that an updated, fully scoped engineering and cost estimate be completed as the first-priority action.

The corridor belongs to the public. The question is not whether to hold it. The question is whether to activate it. Continued passive holding without a clear strategic framework is itself a choice with real costs.

While previous studies of this corridor have emphasized a sequential approach to validating demand (volume) with capital thereafter, current conditions support a more proactive model. North Carolina can advance engineering, funding strategy, and targeted early-stage capital investments in parallel with commercial validation, provided that investment is structured around clear milestones and demand thresholds. This approach preserves fiscal discipline while enabling the state to move with the urgency required in a competitive infrastructure environment.

Federal Funding in The Mix

Federal grant programs including the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program and the Port Infrastructure Development Program (PIDP) offer realistic pathways to significant non-state funding for eligible project phases.⁶ North Carolina has already demonstrated competitive success in CRISI grant applications. The current CRISI cycle, with over \$2 billion available and a June 2026 deadline, represents an immediate federal opportunity.⁷

⁶ U.S. Department of Transportation, Maritime Administration. *Port Infrastructure Development Program (PIDP) Notice of Funding Opportunity*. MARAD, 2026, <https://www.maritime.dot.gov/grants/port-infrastructure-development-program>

⁷ U.S. Department of Transportation, Federal Railroad Administration. *Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program Notice of Funding Opportunity*. FRA, 2026, <https://railroads.dot.gov/elibrary/fy-2026-crisi-notice-funding-opportunity>



Why This Matters Now

The Wallace to Castle Hayne corridor has appeared in North Carolina transportation planning documents, legislative bills, and study reports for more than two decades. The fact that it remains unrestored is not primarily evidence of a weak case. It is primarily evidence of insufficient urgency, unclear governance, and the absence of a structured implementation framework. Several converging factors make the present moment materially different from prior periods of study and deliberation. The cost of delay should also be considered explicitly. Extended timelines increase exposure to construction cost escalation, reduce competitiveness for time-sensitive federal funding programs, and allow competing regions to continue strengthening their logistics networks. While disciplined validation remains essential, inaction or prolonged sequencing carries measurable economic risk.

North Carolina's Freight System Is Under Increasing Pressure

North Carolina's population and employment growth has increased pressure on the state's freight network, especially on rural highways that carry disproportionate shares of agricultural truck traffic.⁸ Rather than relying on precise, potentially disputable "headline numbers," the relevant point for decision-makers is structural, as continued growth increases congestion, pavement wear, safety exposure, and the cost of moving bulk commodities by truck-only networks.⁹

Southeastern North Carolina's road network carries a substantial burden of agricultural truck traffic, particularly during peak harvest and planting seasons. The region's highway infrastructure was not designed to accommodate the freight volumes generated by the modern concentrated livestock sector that now dominates the local economy. Rail diversion of bulk agricultural inputs, even partially, would generate measurable highway cost savings in addition to direct shipper benefits.¹⁰

Federal Capital Is Available and Active

The Infrastructure Investment and Jobs Act (IIJA), passed in 2021, quadrupled the funding available under the CRISI Program and appropriated significant new capital for port infrastructure, passenger rail, and freight rail safety improvements. North Carolina demonstrated competitive success in recent CRISI cycles, with the North Carolina Railroad Company securing a \$105.6 million CRISI award in October 2024, part of a \$170 million project, delivering estimated public benefits of \$214 million.¹¹

The current CRISI cycle (and other federal discretionary programs) continues to represent a major near-term opportunity for rail capital, including eligibility advantages for rural projects. W2CH's competitiveness will depend on demonstrating (1) clear public benefits, (2) implementable

⁸ North Carolina Office of State Budget and Management. *County and State Population Estimates*. NC OSBM, <https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer>

⁹ North Carolina Department of Transportation. *Traffic Survey Group Data (AADT and Truck Counts)*. NCDOT, <https://connect.ncdot.gov/resources/TrafficSurvey/Pages/default.aspx>

¹⁰ North Carolina Department of Transportation. *North Carolina Statewide Freight Plan*. NCDOT, <https://connect.ncdot.gov/resources/freight/Pages/default.aspx>

¹¹ U.S. Department of Transportation, Federal Railroad Administration. *Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program*. <https://railroads.dot.gov/grants-loans/consolidated-rail-infrastructure-and-safety-improvements-crisi-program>



governance and operating concepts, and (3) credible non-federal match and stakeholder commitments.¹²

The Port of Wilmington Is Investing Aggressively

NC Ports has reported growth in rail and intermodal activity and has continued to invest in on-dock rail, yard capacity, and refrigerated container infrastructure.¹³ For W2CH purposes, the key point is not a single “record year,” but the strategic direction. Wilmington is building capabilities that become more valuable if the port can reliably access nearby inland supply chains, not only distant metro markets.

The absence of an active rail connection north of Castle Hayne limits the Port of Wilmington’s inland rail optionality into a region with significant agricultural production. This gap may reduce the port’s competitiveness for certain bulk, refrigerated, and input-related movements. Restoration of the Wallace to Castle Hayne corridor could partially address this limitation, particularly if paired with transload and logistics development.

Eastern North Carolina's Economic Gap Is Real and Growing

North Carolina’s economic development-tier system classifies counties based on indicators such as unemployment, income, and population change. Several counties most directly proximate to the W2CH corridor including Duplin, Sampson, and Pender have historically ranked in the more distressed tiers in recent cycles. That matters because rail-enabled industrial recruitment is often most consequential precisely in places where private capital is least likely to arrive without infrastructure readiness and public coordination.¹⁴

Rail-enabled infrastructure plays a critical role in industrial site selection and economic development. Rail access expands the range of industries that can be competitively recruited, particularly in manufacturing, logistics, and bulk commodity sectors. In regions where private capital investment has lagged, infrastructure readiness and public coordination are often necessary to attract new development. As a result, communities with viable rail access are typically able to compete for a broader set of industrial prospects than those reliant solely on highway connectivity. Restoring the Wallace to Castle Hayne corridor and positioning it as a rail-enabled industrial development asset could improve the competitive position of eastern North Carolina communities that have been more limited in their recent ability to attract large-scale industrial investment.

Scarcity of Right-of-Way

The corridor’s physical integrity, preserved since NCDOT’s purchase in 1994, represents an asset of genuine scarcity. One of only a few preserved yet inactive corridors, W2CH is special. Once right-of-way is lost to encroachment, subdivision, development, or abandonment, it is essentially irreplaceable in modern infrastructure environments.¹⁵ The cost of assembling comparable right-

¹² U.S. Department of Transportation, Federal Railroad Administration. *Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program Notice of Funding Opportunity, Fiscal Year 2026*. FRA, 2026, <https://railroads.dot.gov/elibrary/fy-2026-crisi-notice-funding-opportunity>

¹³ North Carolina State Ports Authority. *Annual Report Fiscal Year 2024*. NC Ports, <https://www.ncports.com/wp-content/uploads/2024/11/NC-Ports-Annual-Report-FY24.pdf>

¹⁴ U.S. Department of Transportation, Federal Railroad Administration. *Freight Rail and Economic Development*. FRA, <https://railroads.dot.gov>

¹⁵ American Association of State Highway and Transportation Officials (AASHTO). *Transportation Asset Management Guide*. AASHTO, <https://www.transportation.org>



of-way from scratch in populated areas of southeastern North Carolina would be orders of magnitude higher than the cost of activating preserved corridor.¹⁶

Active preservation has kept the corridor available as a future transportation option. The next question is whether and how to move it toward restoration readiness.

The Agriculture-Led Business Case

The most commercially grounded near-term case for W2CH restoration rests on the economics of North Carolina's dominant agricultural industries and their extraordinary dependence on imported feed grains and other agricultural inputs.



Feed grains lead North Carolina agricultural demands. (Image Credit: NC State University)

North Carolina's Agricultural Dominance

North Carolina is one of the nation's leading agricultural states, ranking first in poultry and egg cash receipts and second in pork production. The state is consistently among the top producers of broilers and turkeys nationally. In 2022, North Carolina generated approximately \$18.7 billion in farm cash receipts, with livestock, dairy, and poultry accounting for roughly three-quarters of total production.¹⁷ When including processing, manufacturing, and supply chain activity, the state's broader agricultural and agribusiness economy has been estimated at more than \$100 billion annually.¹⁸

The geographic concentration of this production is critically important to the W2CH case. The counties in and around the W2CH corridor, particularly Duplin and Sampson, represent two of the

¹⁶ U.S. Government Accountability Office. *Transportation Infrastructure: Acquisition Challenges and Costs*. GAO, <https://www.gao.gov>

¹⁷ North Carolina Department of Agriculture and Consumer Services. *North Carolina Agricultural Statistics Book*. NCDA&CS, 2024, https://data.nass.usda.gov/Statistics_by_State/North_Carolina/Publications/Annual_Statistical_Bulletin/AgStat/NCaAgStatBook.pdf

¹⁸ Walden, Michael L., et al. *Economic Impact of Agriculture and Agribusiness in North Carolina*. NC State University, <https://cals.ncsu.edu>



most concentrated livestock production counties in the eastern United States. Duplin County has been described by industry observers as the single highest-concentration hog and poultry county in the country. This concentration creates a geographically bounded zone of extraordinary freight demand for agricultural inputs.

The Feed Grain Dependency

Concentrated poultry and hog production at North Carolina's scale requires massive ongoing imports of corn, soybean meal, and other feed grains that the state does not produce domestically in sufficient quantities. North Carolina's corn production meets only a fraction of its livestock sector's feed requirements. The balance must be imported, predominantly from the Midwest corn belt, via truck or rail transload.

Much of the inbound movement of feed grains and agricultural inputs into southeastern North Carolina relies on truck transportation, either directly from origin or as the final leg of rail-served shipments, reflecting the limited reach of active rail infrastructure within the region. Rail transportation, however, is widely recognized as significantly more fuel-efficient than trucking for long-haul bulk movements, often achieving multiple times the ton-mile efficiency of highway freight.¹⁹

For an industry that buys feed grain by the millions of bushels annually, even modest per-bushel rail cost advantages compound into material total cost reductions. The precise magnitude of savings depends on origin-destination lane pricing, rail service reliability, and transload facility economics, none of which can be calculated with precision absent actual commercial negotiations. But the directional logic is sound and well-established in comparable agricultural rail markets.

Fertilizer and Agricultural Chemical Logistics

Beyond feed grains, the agricultural system in southeastern North Carolina is a significant consumer of fertilizers, crop protection chemicals, and other bulk inputs. These commodities share key logistics characteristics, including high volumes, bulk handling requirements, price sensitivity, and supply chains that often originate across multiple regions.²⁰ Agricultural transportation data consistently show that such commodities benefit from rail's economies of scale over longer distances, particularly when supported by efficient transload and distribution systems.²¹ A functioning rail corridor with transload capacity could serve as a multi-commodity logistics hub, increasing utilization density and improving the economics of infrastructure investment by spreading fixed costs across a broader range of freight.

The Transload Facility Model

The most commercially viable, near-term implementation model for W2CH freight development is the agricultural transload facility. Rather than requiring full corridor build-out to initiate commercial activity, a transload facility positioned at an accessible point on the corridor could begin aggregating freight volume before full restoration is complete.

¹⁹ U.S. Department of Energy. *Freight Transportation Energy Efficiency*. DOE, <https://www.energy.gov>

²⁰ U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. USDA AMS, <https://www.ams.usda.gov/services/transportation-analysis/grain-transportation-report>

²¹ Association of American Railroads. *Freight Rail's Role in the U.S. Economy*. AAR, <https://www.aar.org>



Transload facilities receive commodities by rail, typically through carload or general merchandise service, and transfer those products to trucks for final delivery to local or regional end users. Depending on the commodity, they can also provide temporary storage, inventory management, and shared handling capacity. This model has been successfully deployed in comparable agricultural markets across the Southeast and Mid-Atlantic. It allows commercial validation to precede maximum capital commitment, reduces the risk of stranded infrastructure investment, and can generate operating cash flows that help support debt service on later corridor investment phases.²²

In addition to enabling freight aggregation, expanded regional storage capacity associated with a transload facility can improve supply chain resilience for agricultural producers. Greater on-hand storage for feed grains, fertilizer, and other inputs provides a buffer against supply disruptions, price volatility, and transportation delays. In a production system that depends on continuous input availability, the ability to stage and manage inventory locally can reduce operational risk for farms and processors, especially during periods of market disruption or extreme weather.²³

A transload-first strategy is particularly appropriate for the W2CH corridor because it enables initial commercial activity while allowing market demand to be demonstrated rather than projected. Actual throughput from an operating transload facility would provide credible evidence to support subsequent capital investment in broader corridor development. At the same time, co-locating storage, handling, and distribution functions would create a more resilient and flexible regional logistics platform, strengthening both day-to-day operations and the system's ability to absorb disruptions. This approach is not a substitute for full corridor activation, but rather an early commercial anchor within a broader implementation strategy that advances infrastructure elements in parallel. In doing so, it allows North Carolina to capture near-term value while positioning the corridor for full operational capability.

Protein Processing Potential

A longer-term agricultural opportunity exists around expanded protein processing, value-added food manufacturing, and cold chain logistics. North Carolina's livestock sector already supports significant processing capacity, but opportunities remain to deepen value-added production, diversify downstream manufacturing, and expand export-oriented supply chains, particularly in regions that have not captured as much recent industrial investment.²⁴

Rail-connected industrial sites can be a differentiator for these uses, especially where operations depend on high-volume inbound inputs, temperature-controlled distribution, or cost-sensitive outbound logistics. A rail-enabled corridor in southeastern North Carolina would expand the pool of viable sites for food processing, cold storage, and agricultural manufacturing, improving the region's ability to compete for projects that may otherwise locate in areas with stronger logistics infrastructure.²⁵

²² Association of American Railroads. *Freight Rail's Role in the U.S. Economy*. AAR, <https://www.aar.org>

²³ U.S. Department of Agriculture, Economic Research Service. *Farm Sector Risk Management and Input Supply Chains*. USDA ERS, <https://www.ers.usda.gov>

²⁴ U.S. Department of Agriculture, Economic Research Service. *Livestock, Dairy, and Poultry Outlook*. USDA ERS, <https://www.ers.usda.gov/publications/pub-details/?pubid=109633>

²⁵ Harris, Adam. "Rail Access Still Drives Industrial Site Selection." *Site Selection Magazine*, <https://siteselection.com/issues/2020/mar/rail-access-still-drives-industrial-site-selection.cfm>



The agricultural logistics case for W2CH does not depend on speculative industries. It rests on the supply chain needs of industries that already exist at large scale in the exact geography the corridor would serve.

This opportunity depends on market conditions, recruitment competition from other states, and the extent of site development and supporting infrastructure delivered alongside any corridor investment. However, the directional case is credible and consistent with observed development patterns in rail-served agricultural regions, where logistics readiness has supported incremental gains in value-added production and supply chain integration.

The Port of Wilmington Competitiveness Case

The Port of Wilmington operates in a southeastern port market shaped by larger gateways with deeper scale, larger inland rail networks, and more extensive intermodal reach. Savannah, Charleston, and Virginia all compete for cargo that could otherwise move through North Carolina. Wilmington's advantage is not size. Its advantage is service, productivity, specialized cargo strengths, and proximity to North Carolina shippers that would benefit from a practical in-state port option.

The competitive landscape is clear. The Port of Savannah, operated by the Georgia Ports Authority, is among the largest container ports in the United States and continues to expand its inland rail network. The Port of Charleston is advancing harbor deepening to 52 feet while investing in intermodal capacity. Hampton Roads, anchored by the Port of Virginia, already offers 50-foot depth with further expansion planned. By comparison, the Port of Wilmington operates at a smaller scale and is pursuing channel improvements to approximately 47 feet, positioning it to serve a more targeted set of cargo opportunities.

NC Ports leadership has consistently emphasized that Wilmington's strategy is not to compete on scale alone, but to build and defend niche competitive advantages. The port's recognition as the most productive container port in North America by S&P Global Market Intelligence shows its strong operational performance relative to size.²⁶ Sustaining that performance over time will require continued differentiation, and inland connectivity is increasingly a decisive factor in how ports capture and retain cargo. Expanding access to inland markets does not guarantee volume growth, but it can materially improve the port's competitive position in attracting discretionary cargo and supporting regional supply chains.

²⁶ The World Bank, and S&P Global Market Intelligence. *The Container Port Performance Index 2022*. World Bank, <https://www.worldbank.org/en/topic/transport/publication/container-port-performance-index>





The Port of Wilmington (Image Credit: NC Ports)

The Inland Reach Gap

The Port of Wilmington's inland rail service currently includes the Queen City Express to Charlotte, the Wilmington Midwest Express to Chicago via the CSX Carolina Connector terminal in Rocky Mount, and the Wilmington to Rocky Mount Express. These services provide meaningful national market access and support the port's intermodal strategy, but they are oriented primarily toward containerized cargo moving between major metropolitan markets and inland distribution hubs.²⁷

What Wilmington lacks is direct rail connectivity to portions of its own agricultural and industrial hinterland immediately to the north and west. The dense agricultural region of southeastern North Carolina, including Duplin, Sampson, and Pender counties and extending toward Goldsboro and the broader eastern North Carolina production base, is among the most concentrated livestock production areas in the United States. Despite this, relatively little agricultural cargo associated with this region currently moves to or from the port via rail, with most movements relying on truck transportation or existing logistics pathways that do not utilize rail connectivity to Wilmington.²⁸

The Wallace to Castle Hayne corridor has the potential to partially address this gap by providing a direct rail connection between the Class I network at Wallace and the Castle Hayne junction near the port. This would extend Wilmington's inland rail reach into a region with significant agricultural production and input demand. Much of this depends on commercial adoption, service economics, and supporting infrastructure such as transload facilities. The corridor represents a logical extension of the port's inland connectivity strategy and could improve its ability to compete for certain bulk, refrigerated, and input-related movements.

Cold Chain and Growth in Temperature Controlled Cargo

NC Ports has made targeted investments in refrigerated container capacity, including expansion of its refrigerated container yard and development of a dedicated Reefer Service Area. Public

²⁷ North Carolina State Ports Authority. *Annual Report Fiscal Year 2024*. NC Ports, <https://www.ncports.com/wp-content/uploads/2024/11/NC-Ports-Annual-Report-FY24.pdf>; North Carolina State Ports Authority. *Strategic Plan 2031*. NC Ports, <https://www.ncports.com/wp-content/uploads/2023/02/NC-Ports-Strategic-Plan-2031.pdf>

²⁸ North Carolina Department of Transportation. *Traffic Survey Group Data (AADT and Truck Counts)*. NCDOT, <https://connect.ncdot.gov/resources/TrafficSurvey/Pages/default.aspx>



reporting indicates continued growth in refrigerated cargo volumes, reinforcing Wilmington's position as a specialized gateway for temperature-controlled freight.²⁹

Cold chain cargo has become a meaningful competitive strength for the port, particularly for protein exports and other temperature-sensitive products. The agricultural production base of southeastern North Carolina generates significant volumes of poultry and pork products that rely on cold chain logistics for both domestic distribution and export.³⁰

A functioning rail corridor connecting this production region to Wilmington's reefer infrastructure could improve the efficiency and scalability of these flows.³¹ By enabling aggregation of temperature-controlled cargo and supporting higher-volume movements to the port, rail connectivity has the potential to reinforce Wilmington's competitive position in cold chain logistics. The extent of this impact would depend on commercial adoption, processing location decisions, and supporting infrastructure such as transload and cold storage facilities.

Cargo Leakage and Competition

A meaningful share of cargo generated in North Carolina moves through ports outside the state. Shippers in southeastern North Carolina that generate maritime cargo, including agricultural products, manufactured goods, and bulk commodities, make routing decisions based on the total door-to-port cost and service reliability.³² When trucking is the only viable mode and rail connectivity to the Port of Wilmington is limited or indirect, the relative cost of using Wilmington can increase compared to alternative gateways.³³

Competing ports such as Savannah and Charleston benefit from more extensive inland rail networks and higher cargo volumes, which can support more competitive rate structures and service offerings.³⁴ Wilmington can compete effectively on operational performance and service quality, but it faces structural challenges in certain high-volume or cost-sensitive markets where rail access and network scale influence routing decisions.

The freight case for the Wallace to Castle Hayne corridor does not depend on large-scale diversion of existing cargo from competing ports. Rather, it is based on improving service options for cargo that is currently underserved by rail within southeastern North Carolina. This includes movements that rely heavily on truck transportation or that may not move through the Port of Wilmington due to cost or logistics constraints.³⁵

NC Ports has recently expanded its intermodal rail capabilities at the Port of Wilmington, supported in part by federal discretionary funding. The Ports' strategy highlights that include increasing rail utilization and shifting a portion of container movements from truck to rail over time. As this on-dock rail capacity grows, the strategic value of developing additional in-state inland

²⁹ North Carolina State Ports Authority. *Annual Report Fiscal Year 2024*. NC Ports, <https://www.ncports.com/wp-content/uploads/2024/11/NC-Ports-Annual-Report-FY24.pdf>

³⁰ U.S. Department of Agriculture, Economic Research Service. *Livestock, Dairy, and Poultry Outlook*. USDA ERS, <https://www.ers.usda.gov>

³¹ Association of American Railroads. *Freight Rail's Role in the U.S. Economy*. AAR, <https://www.aar.org>

³² North Carolina Department of Transportation. *North Carolina Statewide Freight Plan*. NCDOT, <https://connect.ncdot.gov/resources/freight/Pages/default.aspx>

³³ U.S. Department of Transportation. *Freight and Supply Chain Assessment*. USDOT, <https://www.transportation.gov>

³⁴ Georgia Ports Authority. *Annual Report*. GPA, <https://gaports.com>; South Carolina Ports Authority. *Annual Report*. SC Ports, <https://scspa.com>

³⁵ North Carolina Department of Transportation. *Southeastern North Carolina Passenger Rail Feasibility Study*. NCDOT, 2024, https://connect.ncdot.gov/resources/Rail-Division-Resources/Documents/SENC%20Passenger%20Rail%20Feasibility%20Study%202024_1105.pdf



corridors becomes more apparent, provided those corridors can be operated reliably and priced competitively.³⁶

A functioning Wallace to Castle Hayne corridor could contribute to this strategy by extending inland rail access into a currently under-connected region. It's not a standalone solution, but it could provide a pathway for incremental cargo development from the north, complementing existing intermodal services to Charlotte and the Midwest.

Rural Growth and Community Prosperity

North Carolina's economic growth has not been uniform across regions. Metropolitan areas such as the Research Triangle, Charlotte, and parts of the Triad have experienced sustained population growth, job creation, and investment, while portions of eastern North Carolina have seen more uneven economic outcomes.³⁷

The counties along and adjacent to the Wallace to Castle Hayne corridor reflect this divergence. Many are classified as Tier 1 or Tier 2 under North Carolina's county distress ranking system, which evaluates all 100 counties based on unemployment, median household income, population growth, and property tax base. Tier 1 counties represent the 40 most economically distressed in the state. This designation is not a stigma, but rather an indication of both economic need and eligibility for targeted development programs.³⁸

The geography of the corridor presents a notable contrast. It passes through one of the most agriculturally productive regions in the state, yet many surrounding communities have experienced limited industrial diversification and slower growth in wages and employment. Agricultural production generates significant economic value, but that value is not always retained locally in ways that translate into broader community prosperity.³⁹

Expanding industrial opportunity in these regions has historically depended on infrastructure readiness and site competitiveness. Rail access can expand the range of industries that can be viably recruited, especially in manufacturing, bulk logistics, and processing sectors. Although rail access alone does not guarantee development, it is a recognized factor in site selection and can help position rural communities to compete for a broader set of industrial opportunities when paired with site development and workforce readiness.⁴⁰

Rail Access as an Economic Development Differentiator

Rail access is a differentiating factor for a defined subset of industrial users, particularly in sectors such as food processing, agricultural manufacturing, bulk materials handling, energy logistics, and certain manufacturing subcategories. Site selection research indicates that the presence or absence of rail service can materially influence whether a location is considered for these uses,

³⁶ North Carolina State Ports Authority. *Strategic Plan 2031*. NC Ports, <https://www.ncports.com/wp-content/uploads/2023/02/NC-Ports-Strategic-Plan-2031.pdf>

³⁷ North Carolina Office of State Budget and Management. *County and State Population Estimates*. NC OSBM, <https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer>

³⁸ North Carolina Department of Commerce. *County Distress Rankings (Tiers)*. NC Commerce, <https://www.commerce.nc.gov/grants-incentives/county-distress-rankings-tiers>

³⁹ U.S. Department of Agriculture, National Agricultural Statistics Service. *Census of Agriculture, 2022*. USDA, 2024, <https://www.nass.usda.gov/AgCensus/>

⁴⁰ Harris, Adam. "Rail Access Still Drives Industrial Site Selection." *Site Selection Magazine*, <https://siteselection.com/issues/2020/mar/rail-access-still-drives-industrial-site-selection.cfm>



as rail access enables cost-efficient movement of high-volume inputs and outputs that cannot be easily replicated by truck alone.⁴¹

North Carolina provides a relevant precedent through the North Carolina Railroad Company's economic development programs. Initiatives such as NCRR Invests and the Build Ready Sites program demonstrate how rail-connected infrastructure, when paired with site readiness and coordinated development strategy, can support large-scale private investment. Since 2016, NCRR Invests has committed more than \$17 million in private railroad revenue, leveraging over \$8 billion in total capital investment and supporting more than 12,000 jobs. These outcomes have been concentrated along an active, well-maintained rail corridor that is capable of supporting industrial users.⁴²

The Wallace to Castle Hayne corridor, by contrast, is currently dormant and does not provide comparable access or development opportunity for the communities along its route. As a result, these communities are less competitive for the subset of industrial prospects that require or strongly prefer rail connectivity.



*Industrial Parks like the Borealis Compounds site supported by Alexander County EDC, others.
(Image Credit: Alexander County, NC)*

Industrial Park and Site Readiness

A central constraint on industrial recruitment in southeastern North Carolina is not simply the availability of land, but the availability of fully prepared, competitive industrial sites. Modern site selection increasingly depends on “shovel-ready” conditions, including utility access, permitting

⁴¹ Ibid.

⁴² North Carolina Railroad Company. *NCRR Invests and Economic Development Programs*. NCRR, <https://www.ncrr.com>.



readiness, and transportation infrastructure. For a subset of industries, rail service is a required component of that readiness.⁴³

The absence of an active W2CH corridor limits the ability to develop rail-served industrial sites in this region. While significant acreage exists that could be converted to industrial use, the lack of rail connectivity constrains the range of viable development opportunities and reduces the competitiveness of these sites relative to rail-served locations elsewhere in the state and region.

Programs such as NCRR's Build Ready Sites initiative have addressed this gap along the active NCRR corridor by pairing infrastructure investment with proactive site development. No equivalent effort has been directed toward the W2CH corridor, in part because the corridor is not currently operational. Restoration of the corridor would create the physical precondition for developing rail-served industrial parks along its 27-mile alignment.

The region also offers relevant precedent. The Global TransPark in Kinston demonstrates how transportation infrastructure, when combined with site development and strategic positioning, can support industrial recruitment in eastern North Carolina. Although the W2CH corridor would not replicate this model directly, it could enable a network of smaller-scale, rail-served sites that expand the region's overall industrial capacity.

Workforce Retention and Regional Competitiveness

One of the persistent economic challenges in rural North Carolina is workforce outmigration. Younger workers and skilled labor often relocate to metropolitan areas where employment opportunities are more diverse and wages are higher. Addressing this dynamic requires not only workforce development, but also the presence of employers capable of offering competitive, stable jobs.

Infrastructure investments that enable industrial recruitment can influence these outcomes by expanding the range of employment opportunities available locally. Rail-enabled industrial development can support sectors that generate higher wages and more stable employment than those typically associated with purely local or service-based economies.⁴⁴

The corridor would not create jobs or higher wages by itself. What it would do is make certain kinds of development more realistic in a region that is currently harder to serve by rail.

To turn that advantage into economic outcomes, North Carolina would still need prepared sites, targeted business recruitment, aligned incentives, utility capacity, and workforce partnerships tied to the industries most likely to use the corridor. W2CH should be treated as an enabling asset, not a standalone economic development strategy.

Agricultural Community Benefits

Even absent industrial recruitment, restoration of rail service along the corridor could provide direct benefits to the agricultural communities it serves. Farmers and integrators in southeastern North Carolina rely on large volumes of feed grain, fertilizer, and other inputs, much of which is transported over long distances. Where rail-served transload facilities are available, these inputs

⁴³ U.S. Department of Commerce, Economic Development Administration. *Infrastructure Investments and Economic Development*. EDA, <https://www.eda.gov>

⁴⁴ U.S. Department of Transportation, Federal Railroad Administration. *Freight Rail and Economic Development*. FRA, <https://railroads.dot.gov>



can often be delivered at lower per-unit cost than truck-only supply chains, particularly at higher volumes.⁴⁵

Reduced transportation costs can improve farm-level economics in what are often low-margin operations. Over time, lower input costs can support farm profitability, enhance operational resilience, and help maintain the economic viability of working lands. These effects, while incremental, are consistent with broader community goals related to agricultural preservation and rural economic stability.⁴⁶

Infrastructure alone does not create prosperity. In regions where logistics constraints limit both agricultural efficiency and industrial development, improved transportation access can address a key structural barrier. In that context, rail access is an enabling condition that supports, but does not guarantee, broader economic outcomes.

Value from Existing Assets in Our State

One of the most instructive precedents for the Wallace to Castle Hayne corridor is the strategic management model of the North Carolina Railroad Company. NCRR is a private corporation wholly owned by the State of North Carolina, with a 317-mile corridor extending from Charlotte through the Research Triangle to Morehead City. The corridor is leased for freight operations by the Class I railroad Norfolk Southern and managed as both transportation infrastructure and a long-term economic development asset.

NCRR has demonstrated that a state-owned rail corridor can be managed with commercial discipline while supporting public policy objectives. Its economic development programs, including NCRR Invests and Build Ready Sites, deploy private railroad revenue to leverage substantially larger private capital investment.⁴⁷ Since 2016, these efforts have supported billions in private investment and thousands of jobs along the corridor. More recently, NCRR secured a \$105.6 million federal CRISI award as part of a \$170 million project with estimated public benefits exceeding \$200 million.⁴⁸ This approach reflects a model of corridor-scale asset management that maintains infrastructure quality, partners with commercial operators, invests strategically to unlock private capital, and evaluates performance based on economic outcomes such as jobs, investment, and freight activity.

The Wallace to Castle Hayne corridor is also publicly owned, with right-of-way held by the North Carolina Department of Transportation. Unlike the NCRR corridor, however, it is not leased to an operating tenant, does not have a commercial rail operator, and does not currently have a dedicated restoration investment program. As a result, its potential value as a future rail asset depends on further demand validation, operating model analysis, and funding strategy. As a result, its potential value as a strategic asset is not being fully realized.

Improving corridor management for W2CH would begin with several foundational steps including an updated engineering and environmental assessment; establishment of a formal governance structure, whether within NCDOT, through a dedicated authority, or via a public-private

⁴⁵ U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. USDA AMS, <https://www.ams.usda.gov/services/transportation-analysis/grain-transportation-report>

⁴⁶ U.S. Department of Agriculture, Economic Research Service. *Farm Income and Wealth Statistics*. USDA ERS, <https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/>

⁴⁷ North Carolina Railroad Company. *NCRR Economic Development Programs and Investments*. NCRR, <https://www.ncrr.com>

⁴⁸ U.S. Department of Transportation. *CRISI Grant Awards Announcement*. USDOT, <https://www.transportation.gov>



partnership; targeted commercial outreach to potential anchor customers; and a structured capital formation approach aligned with available federal and private funding sources.

Experience from comparable infrastructure and corridor development efforts suggests that investments in readiness can influence market outcomes when paired with credible commercial strategy. Potential users are unlikely to commit to infrastructure that is not yet operational or does not have a clear path to delivery. At the same time, large-scale capital investment without demonstrated demand carries its own risks.

The resulting challenge is familiar. Shippers are reluctant to commit without infrastructure, while investors are hesitant to fund infrastructure without committed users. Successful corridor development efforts typically resolve this through targeted, early-stage public investment that establishes credibility, reduces uncertainty, and enables private capital participation.

North Carolina has already made a foundational investment in the corridor through acquisition and preservation of the right-of-way. Advancing the corridor toward active use would build on that foundation rather than starting from zero. The NCRR model demonstrates that state-owned rail assets, when combined with commercial and economic development objectives, can generate value well beyond their underlying infrastructure. The Wallace to Castle Hayne corridor presents a similar opportunity, provided it is approached with comparable discipline and strategic intent.

Passenger Rail: A Secondary but Real Opportunity

This analysis treats passenger rail as a secondary, long-term benefit of restoring the Wallace to Castle Hayne corridor rather than the primary driver of investment. The freight case, particularly for agriculture and logistics, is more immediate and more directly tied to tangible demand. However, excluding passenger rail entirely would overlook an important element of the corridor's long-term strategic value.

Federal Planning Context

The Federal Railroad Administration's Corridor Identification and Development (CID) Program, established under the Infrastructure Investment and Jobs Act, provides a structured pathway for developing future intercity passenger rail corridors.⁴⁹ The Raleigh-to-Wilmington corridor, which would include the Wallace to Castle Hayne segment under certain alignments, has been evaluated within this broader planning framework by the NCDOT Rail Division.

NCDOT's 2024 *Southeastern North Carolina Passenger Rail Feasibility Study* examined multiple route options for restored Raleigh–Wilmington service, including a eastern alignment that traverses the former W2CH segment. The study estimated annual ridership in the range of approximately 100,000 to 310,000 riders depending on service assumptions.⁵⁰ These projections should be interpreted as planning-level estimates rather than indicators of near-term financial performance.⁵¹

⁴⁹ U.S. Congress. *Infrastructure Investment and Jobs Act*. Public Law 117–58, 2021, <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>

⁵⁰ North Carolina Department of Transportation Rail Division. *Southeastern North Carolina Passenger Rail Feasibility Study*. Prepared by WGI, Inc. September 2024. https://connect.ncdot.gov/resources/Rail-Division-Resources/Documents/SENC%20Passenger%20Rail%20Feasibility%20Study%202024_1105.pdf

⁵¹ North Carolina Department of Transportation. *Southeastern North Carolina Passenger Rail Feasibility Study*. NCDOT, 2024, https://connect.ncdot.gov/resources/Rail-Division-Resources/Documents/SENC%20Passenger%20Rail%20Feasibility%20Study%202024_1105.pdf





*North Carolina's Piedmont Service has experienced several years of ridership growth across the state.
(Image Credit: NCDOT Rail Division)*

Shared-Use Corridor Strategy

Freight-oriented corridor development can be designed to accommodate future passenger service at relatively modest incremental cost if appropriate standards are incorporated early, including alignment geometry, grade separation considerations, and clearance envelopes. Retrofitting a freight-only corridor for passenger service at a later stage is typically more complex and costly.⁵² Preserving passenger rail optionality at the outset allows the state to maintain future flexibility without requiring near-term investment in passenger operations.⁵³

Implementation Timelines and Constraints

Intercity passenger rail development timelines in the United States are typically measured in extended planning and phased capital investment cycles rather than near-term implementation. NCDOT's feasibility work indicates that restoring Raleigh–Wilmington service would require not only track improvements, but also station development, operating agreements, and sustained operating support.⁵⁴

North Carolina's recent passenger rail performance provides relevant context. The state-supported NC By Train network has experienced record ridership in recent years, with continued growth through 2026. This trend reflects increasing demand for intercity rail options and supports the long-term rationale for preserving corridor opportunities, even where freight remains the primary near-term use case.⁵⁵

⁵² U.S. Department of Transportation, Federal Railroad Administration. *Corridor Identification and Development Program*. FRA, <https://railroads.dot.gov/corridor-ID-program>

⁵³ U.S. Department of Transportation, Federal Railroad Administration. *Shared-Use Rail Guidance and Planning Resources*. FRA, <https://railroads.dot.gov>

⁵⁴ North Carolina Department of Transportation. *NC By Train Ridership Reports*. NCDOT, <https://www.ncbytrain.org>

⁵⁵ Amtrak. *State-Supported Services Ridership Reports*. Amtrak, <https://www.amtrak.com>



Military and Supply Chain Resilience Value

The military logistics case for the Wallace to Castle Hayne corridor is real but requires precise framing. Overstating its importance risks undermining credibility; dismissing it entirely would overlook a legitimate resilience consideration. The most accurate interpretation is that military and resilience value represent a meaningful supporting benefit rather than a primary driver of investment. Preliminary engagement with Department of Defense logistics stakeholders has indicated interest in infrastructure investments that enhance routing flexibility and reduce single-point-of-failure risks, consistent with established military logistics planning principles.

Military Ocean Terminal, Sunny Point

Military Ocean Terminal Sunny Point (MOTSU) is one of the largest military ocean terminals in the United States and serves as a critical node for the movement of munitions and other sensitive cargo between rail, truck, and maritime modes. The facility's mission depends on secure and reliable multimodal connectivity to the national transportation network.⁵⁶

MOTSU's external rail connectivity is provided through existing CSX infrastructure in the Wilmington area. The Wallace to Castle Hayne corridor, by extending rail access north from Castle Hayne toward the CSX network at Wallace, would introduce an additional potential routing option for freight moving to and from the MOTSU service area. Whether this routing would be operationally viable depends on engineering standards, operating agreements, and coordination with both the Department of Defense and freight rail carriers.



U.S. Marines and Sailors refuel a Lighter Amphibious Resupply Cargo at the Military Ocean Terminal Sunny Point (MOTSU), Southport, North Carolina. (Image Credit: U.S. Marine Corps)

⁵⁶ U.S. Army. *Military Ocean Terminal Sunny Point Overview*. U.S. Department of the Army, <https://www.sddc.army.mil/sites/TEA/Functions/SunnyPoint>



What This Means in Practice

Military and logistics planners regularly emphasize the value of network redundancy. Facilities that rely on a limited number of access routes are more vulnerable to disruption, whether from extreme weather, infrastructure failure, or operational constraints. The W2CH corridor would not eliminate these risks, but it could provide an additional routing option under certain scenarios, improving overall system flexibility.

Coastal North Carolina is regularly exposed to hurricane and flooding events that can disrupt both highway and rail infrastructure. Past storms, including Hurricane Florence and Hurricane Matthew, caused widespread damage to transportation networks across the region, with recovery periods extending over weeks in some areas. These disruptions illustrate the potential value of diversified transportation access for both civilian and military logistics.⁵⁷

The North Carolina General Assembly has previously recognized this connection. Legislation associated with corridor restoration referenced the potential to improve military logistics by enhancing access to the Port of Wilmington, including reduced transit times relative to alternative routing through out-of-state ports.⁵⁸ These estimates should be treated as indicative rather than definitive, given the age and context of the underlying analysis.

Resilience Broadly

Beyond military applications, supply chain resilience has become a central consideration in infrastructure planning. Disruptions experienced during the 2020–2022 period highlighted the vulnerability of freight systems that rely heavily on single modes or limited routing options. Rail corridors that provide alternative pathways for bulk commodities, agricultural inputs, and port-bound cargo can improve system resilience by diversifying transportation options.⁵⁹

The resilience value of the W2CH corridor is an enabling benefit. It provides optionality and redundancy that may prove valuable under certain conditions, but it is not a standalone justification for investment. The corridor's primary case remains grounded in commercial freight and agricultural logistics, with military and resilience considerations reinforcing, rather than driving, the overall argument.

⁵⁷ North Carolina Department of Transportation. *Hurricane Florence and Transportation System Impacts*. NCDOT, <https://www.ncdot.gov>

⁵⁸ North Carolina General Assembly. *House Bill 86 (2013 Session)*. NCGA, <https://www.ncleg.gov>

⁵⁹ U.S. Department of Transportation. *Freight and Supply Chain Assessment*. USDOT, <https://www.transportation.gov>; U.S. Department of Agriculture. *Agricultural Transportation Indicators*. USDA, <https://www.ams.usda.gov/services/transportation-analysis/ati>





Railroad hopper cars carry bulk product like grain and other agricultural commodities. (Image Credit: Freightwaves)

Cost, Capital, and Delivery Strategy

The Wallace to Castle Hayne corridor is a publicly owned asset, and its long-term value depends on how actively it is managed. North Carolina provides a relevant precedent through the North Carolina Railroad Company, which has demonstrated that state-owned rail corridors can be managed with commercial discipline while supporting economic development objectives.⁶⁰

At present, the W2CH corridor is preserved but not actively developed. It lacks a defined governance structure, a commercial operating framework, and a coordinated investment strategy. As a result, its potential value is largely unrealized.

Moving from preservation to activation does not require full capital commitment at the outset. Traditional infrastructure delivery models assume that demand validation, engineering, funding, and construction occur in discrete phases. A more effective approach advances these workstreams in parallel. This can reduce overall delivery timelines while preserving decision points tied to demand and progress. It also initiates the shift toward active corridor management, including updated engineering, commercial engagement with potential users, and a clear framework for phased investment. Establishing this foundation is a prerequisite for any credible long-term development strategy.

This shift is particularly important in the current capital environment. Construction costs for transportation infrastructure have increased materially over the past decade, and historical cost estimates are no longer reliable indicators of present-day investment requirements.⁶¹ Advancing the corridor to a point where it has a current engineering estimate, defined scope, and credible

⁶⁰ North Carolina Railroad Company. *Economic Development and NCRR Invests Program*. NCRR, <https://www.ncrr.com>

⁶¹ U.S. Bureau of Labor Statistics. *Producer Price Index by Commodity: Inputs to Construction Industries*. BLS, <https://www.bls.gov/ppi/>



delivery framework is essential not only for planning purposes, but also for accessing external funding.

Federal infrastructure programs provide a meaningful opportunity to offset state and local costs, but they are competitive and require projects to demonstrate readiness, public benefit, and a credible path to execution. Federal discretionary programs operate on defined cycles, and successful applications favor projects that demonstrate near-term readiness and credible delivery pathways. Advancing the corridor to a level where it can compete effectively for these funds may require early state commitment to engineering, planning, and select enabling infrastructure. Modest early capital investment may catalyze larger federal participation.⁶² Programs administered by the Federal Railroad Administration, including the Consolidated Rail Infrastructure and Safety Improvements (CRISI) program, as well as the Maritime Administration’s Port Infrastructure Development Program (PIDP) and broader U.S. Department of Transportation discretionary programs such as BUILD, are all potentially relevant to components of the W2CH corridor.⁶³

North Carolina has demonstrated success in securing these types of federal awards in recent years, including major CRISI funding for freight rail improvements and discretionary grants supporting port infrastructure. However, these programs do not fund concepts. They fund projects that are sufficiently advanced in planning, engineering, and stakeholder alignment to be considered implementation-ready.⁶⁴

In this context, early-stage investment serves a distinct and strategic purpose. It does not require full corridor commitment but instead focuses on targeted deployment in high-confidence areas such as engineering, bridge and drainage assessment, site development, and initial logistics infrastructure. These investments reduce uncertainty, signal credibility to the market, and position the project to attract private and federal participation.

Advancing the corridor will require a coordinated effort that includes updated engineering and environmental assessments, direct engagement with potential anchor customers, and evaluation of near-term activation strategies such as transload or segment-based service. It will also require alignment with relevant federal funding programs and close coordination among state agencies and private partners. Experience from comparable infrastructure efforts suggests that projects which advance planning, engineering, and market validation early are significantly better positioned to secure external funding and unlock private investment.⁶⁵ The objective is not to commit maximum capital prematurely, but to establish sufficient readiness and confidence so that additional public and private capital can follow in a disciplined and scalable manner.

Capital Source	Applicable Program	Estimated Share	Notes
Federal (FRA)	CRISI Program	Up to 80%	Rural set-aside strengthens competitiveness
Federal (MARAD)	PIDP	Varies	Port connectivity improvements

⁶² U.S. Department of Transportation. *Project Readiness Checklist*. January 2024, https://www.transportation.gov/sites/dot.gov/files/2024-01/Project%20Readiness%20Checklist_January2024.pdf

⁶³ U.S. Department of Transportation. *Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants*. USDOT, <https://www.transportation.gov/RAISEgrants>

⁶⁴ U.S. Department of Transportation. *Benefit-Cost Analysis Guidance for Discretionary Grant Programs*. USDOT, <https://www.transportation.gov>

⁶⁵ U.S. Government Accountability Office. *Public Private Partnerships: Lessons Learned for Infrastructure Development*. GAO, <https://www.gao.gov>



Capital Source	Applicable Program	Estimated Share	Notes
Federal (DOT)	BUILD Grants	Competitive	Multimodal, economic development focus
State of NC	NCDOT Rail Capital	~10-15%	Required as match for federal programs
NCRR	NCRR Invests / Dividends	~5-10%	Precedent from other NC rail projects
Private	Anchor customers / PPP	Negotiable	Rate agreements, access fees, facility investment

A conditional acceleration model could include:

- Initial capital deployment linked to completion of engineering/cost validation
- Additional funding triggered by anchor customer commitment/commercial participation
- Construction phases aligned with demonstrated throughput or contracted demand
- Federal funding as gate mechanism for larger capital phases

This approach allows North Carolina to move forward with urgency while retaining flexibility and financial discipline.

What Has to Be True

Advancing the Wallace to Castle Hayne corridor from preserved right-of-way to an operational asset depends on a set of conditions that can be tested, but not assumed. The most immediate is the presence of critical commercial demand, particularly from agricultural shippers and input suppliers, to support initial rail service. This includes not only outbound products, but inbound feed grain, fertilizer, and other bulk inputs where rail can offer cost advantages at scale with material enough to influence modal choice. Agricultural transportation data consistently show that rail can be more efficient for high-volume, long-distance movements, but actual adoption depends on lane-specific economics, service reliability, and the availability of transload infrastructure.⁶⁶

Several enabling conditions are also required. A current engineering and cost estimate is necessary to determine whether bridge reconstruction and corridor restoration can be delivered within a viable capital structure, particularly in a construction environment where inflation is a factor. Environmental permitting for multiple bridge replacements must be achievable within a reasonable timeframe, and operational access to the national rail network must be secured through coordination with Class I rail partners. This also involves the STB. At the same time, realizing cargo growth will depend on coordinated commercial execution, including alignment with NC Ports' market strategy and direct engagement with potential users. Federal discretionary grant programs and infrastructure funding guidance emphasize that projects must demonstrate readiness, defined scope, and credible public benefits to compete effectively for funding.

The corridor's long-term success will depend on sustained institutional alignment and disciplined execution. State-level commitment, clear governance, and the ability to attract private capital can all be strengthened through early progress in planning, engineering, and commercial validation. Early-stage capital should be deployed in a targeted, milestone-driven manner to ensure that investment remains aligned with demand. This approach reinforces credibility with both public

⁶⁶ U.S. Department of Agriculture, Agricultural Marketing Service. *Agricultural Transportation Indicators*. USDA, <https://www.ams.usda.gov/services/transportation-analysis/ati>



and private stakeholders and preserves flexibility as the project advances. These outcomes, however, are not guaranteed.

Risks and Counterarguments

This paper presents the strongest credible case for W2CH corridor development. Intellectual honesty requires equal attention to the risks, counterarguments, and potential failures that could undermine that case. Many of these risks correspond directly to the underlying conditions required for success outlined in the preceding section. Where those conditions are not met, the following risks become more likely.

No Guaranteed Freight Demand

The most fundamental risk is that commercial freight demand that may not materialize at the scale required to justify full corridor investment. Agricultural shippers and logistics providers are sophisticated market participants who evaluate transportation options based on total landed cost, reliability, and operational fit. If rail service cannot deliver competitive pricing or consistent performance, demand may remain limited. A transload-first strategy allows demand to be tested before major capital commitment. Direct engagement with potential anchor customers and conditional investment thresholds should precede large-scale construction.

Truck Competition

Trucking remains highly competitive and adaptable, particularly in regions like southeastern North Carolina where truck-based logistics networks are well established. Rail has structural advantages in bulk, long-distance transport, but those advantages do not automatically translate into market share in competitive freight environments. Rail competitiveness is strongest in high-volume, long-haul, and cost-sensitive commodity flows.⁶⁷ Feed grain movements from Midwest origins to southeastern North Carolina fit this profile, providing a defensible but not guaranteed opportunity for modal shift.

Construction Cost Escalation

Infrastructure construction costs have increased significantly due to supply chain volatility, inflation, labor constraints, and regulatory complexity. Projects based on outdated assumptions risk substantial overruns. A phased investment approach can help manage this risk by limiting committed capital and incorporating updated information over time. At the same time, if validation, engineering, and funding are pursued too rigidly in sequence, the project may lose momentum, increase costs, and miss time-sensitive opportunities.

Political Context

Infrastructure projects face competing priorities and stakeholder concerns, including fiscal constraints, environmental considerations, and regional competition for limited public funding. The W2CH corridor has historically experienced periods of interest followed by inaction. Building a

⁶⁷ U.S. Department of Transportation. *Freight and Supply Chain Assessment*. USDOT, <https://www.transportation.gov>



broad coalition across agricultural, port, military, and economic development stakeholders can strengthen political durability.

Opportunity Cost

Public investment in W2CH must be evaluated against other transportation and infrastructure priorities across the state. Decision-makers must consider whether this corridor represents the most effective use of limited public resources. Federal grant leverage materially alters this calculus. Projects that can attract significant federal and private capital relative to state investment offer a different value proposition than those reliant primarily on state funding.

The Risk of Strategic Loss

Maintaining the status quo does not preserve the corridor's value. Over time, land use changes, development pressures increase, and the cost of restoration rises. At the same time, competing regions continue to invest in infrastructure and capture available economic opportunities. In this context, inaction is not a neutral choice. It represents a gradual erosion of a strategic public asset and a missed opportunity to strengthen long-term competitiveness.

Conclusion: From Preservation to Decision

The Wallace to Castle Hayne corridor has remained in a state of preservation for more than two decades. During that time, North Carolina's economy, freight system, agricultural base, and port strategy have all evolved in ways that make the corridor more relevant today than at any point since its original operation. What has not evolved, until now, is a structured and disciplined approach to moving the corridor from concept to execution.

This paper does not argue that full corridor restoration should proceed immediately or unconditionally. The evidence does not support that conclusion. The evidence offers that the corridor represents a credible, multi-dimensional opportunity that warrants advancement to the next stage of validation, engineering, and commercial development.

The case is strongest where geography, industry, and logistics needs align. Southeastern North Carolina contains one of the most concentrated livestock production regions in the country, with a corresponding dependence on inbound feed grain, fertilizer, and bulk inputs. The Port of Wilmington is investing in capabilities that become more valuable with improved inland connectivity. Rural communities along the corridor face well-documented challenges in industrial recruitment and economic diversification where rail access can be a differentiating factor. These elements do not guarantee success, but they establish a logical and defensible foundation for further action.

The uncertainties identified in this paper are real. Freight demand must be validated, capital costs must be updated through current engineering, operating conditions must be negotiated with freight rail partners, and public and private stakeholders must align around a governance and delivery framework.

The central decision facing North Carolina is not whether to commit to full buildout. It is whether to commit to readiness.



That means advancing engineering and environmental work, engaging potential anchor customers, positioning the corridor for federal funding, and creating a pathway for private capital participation tied to demonstrated demand rather than speculation. This disciplined approach reduces the risk of overbuilding, strengthens the case for external funding, and allows the corridor's future to be shaped by measurable demand.

The alternative is the status quo. That may avoid near-term decisions, but it does not preserve long-term value. Over time, restoration costs rise, strategic relevance becomes harder to maintain, and opportunities to align with federal funding cycles and private investment diminish. Inaction is not neutral. It is a gradual forfeiture of an asset the state has already chosen to preserve.

North Carolina has already made a foundational investment in the Wallace to Castle Hayne corridor by acquiring and maintaining the right-of-way. The next step is not to decide its final form, but to advance it far enough to support an informed, data-driven decision about its future. That decision can be made now.



A preserved Wilmington & Weldon Railroad caboose on the line preserved in Burgaw, NC (Image Credit: Flickr)

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