

North Carolina Ferry System

History

The North Carolina Ferry System has served the state moving people, goods, and services for over **75 years**. Of the 37 states with ferry systems, North Carolina's is the second largest, operating seven regular routes (and one seasonal route) along the coast with 23 ferries.

North Carolina's ferries are an integral part of the state highway system. Two routes, the Hatteras-Ocracoke and the Ocracoke-Cedar Island, are officially part of the Outer Banks Scenic Byway. Many people only consider the substantial impact of ferries on tourism, however they also provide routes for daily commuters and are vital in providing goods and services, including emergency services and evacuation routes, to islands that are otherwise inaccessible. Without this critical resource, life in certain parts of the Outer Banks would be unsustainable.

Over 700,000 Vehicles in SFY 2024 Over 1.5 Million
Passengers in SFY 2024

2nd Largest

State Operated Ferry System in the U.S.

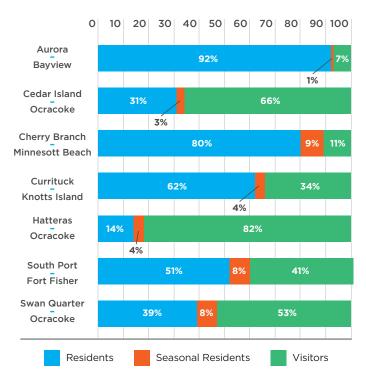
23 Ferries	11 Support Fleet Vessels
7	1
Year-round Routes	Seasonal Route

Economic Engine for the Coast

The North Carolina Ferry System's role in the state economy is substantial. Ferry routes provide vital transportation connections for local communities. Ferries enable residents to reach work, school, and services. The Aurora-Bayview ferry route provides a connection for workers at a phosphate plant near Aurora, the Currituck-Knotts Island route provides a connection for students and educators traveling to school, and the Cherry Branch-Minnesott Beach route provides a connection for civilians and military personnel commuting to Marine Corps Air Station (MCAS) Cherry Point.

Other ferry routes such as the Sound routes provide visitors access to the Outer Banks. These visitors come to North Carolina from destinations throughout the nation. Most drive to ferry terminals and spend money at all legs of their journey.

Residents, Seasonal Residents, and Visitors by Route



As shown in the graphic, the North Carolina Ferry System supports almost 6,000 jobs and generates over \$735 million in direct, indirect, and induced revenue. It returns over \$32 million annually in local and state tax dollars.



5,860 Jobs
Direct, Indirect and Induced



\$217.3 million

Direct, Indirect and Induced
In North Carolina Employee Earnings



\$735.2 million

Direct, Indirect and Induced In Statewide Economic Input



\$32.5 million

In Local and State Tax Dollars Collected



\$40.3 Million

In Ferry Passenger Benefits

- •\$18.1 million in vehicle cost savings
- •\$13.9 million in travel time savings
- •\$18.1 million in safety benefits

ITRE Economic Contribution of North Carolina's Ferry System Report (2018)

Budget Overview

The NCDOT Ferry Division provides three core functions:

- Operations
- Asset Management
- Planning & Programming

FY 2023-24
CERTIFIED BUDGET
FERRY OPERATIONS: 7825

(in millions)



Budget Item	Amount
FY 2023-24 Base Budget	\$58.61
Expansion Budget	\$15.42
Certified Budget	\$74.03

In SFY 2023, the Division experienced historically high diesel fuel prices that reached a peak of \$5.28 per gallon in November 2022. The fuel budget for the entire fiscal year was depleted by mid-March 2023. Due to the restriction on over drafting its budget, the Division began to suspend certain operations and maintenance activities to reduce spending. In order for the Division to maintain the departure schedule through the end of the fiscal year, a loan for up to \$2 million was received from the highway maintenance program. The Division expended approximately \$1.75 million of the loan.

The North Carolina General Assembly appropriated the largest ever budget in SFY 2024 of \$74 million. The Division was required to pay back the SFY 2023 loan which resulted in a reduced budget of approximately \$72.3 million and the Division finished SFY 2024 within that amount.

Challenges for the Ferry Division

Long Term Funding Stability

- The 2021 Appropriations Act (SL 2021-180) addressed a longstanding structural deficit in the Ferry Division's budget by appropriating a one-time overdraft forgiveness and implementing policy changes to prevent budget overspending. Overspending for the Division is now prohibited. To provide more transparency, the special capital fund was created to separate operations and maintenance expenditures, capital expenditures, and toll revenue.
- Funding uncertainty is heightened due to multiple variable costs creating budget forecasting challenges, such as shifting channel conditions, emergency marine and facility asset repairs, diesel fuel prices, inflation, emergency vessel maintenance and repairs, weatherrelated costs, unfunded US Coast Guard (USCG) mandates, and required credit dry docks (CDD).
- Code of Federal Regulations (CFR) subchapter H requires all vessels to be drydocked and inspected by the USCG at least twice in five years, not exceeding 36 months between inspections. Each CDD includes routine inspection and maintenance of the vessel, including hull exams, sandblasting, painting, and mechanical checks, and any necessary repairs are completed. The required maintenance and repairs needed for a vessel are difficult to predict as the condition and extent of deterioration are not fully known until a vessel is dry docked and inspected. As a vessel ages, CDD costs are anticipated to increase over time due to more maintenance and repairs needed.

- North Carolina General Statute (NCGS) § 136-82(b) authorizes tolls on four routes: Southport-Fort Fisher, Cedar Island-Ocracoke, Swan Quarter-Ocracoke, and the Hatteras-Ocracoke passenger ferry.
 NCGS § 136-82(d) limits toll revenue to be used exclusively for vessel replacement projects in the Highway Division in which proceeds are earned.
- Similar to previous funding cycles, Strategic Transportation Investments (STI) Law Prioritization 7.0 includes no capital funding for the Ferry Division. A long term capital funding plan is needed to address the aging infrastructure and assets of the Ferry Division. Without necessary funding, the Division's ability to continue to meet their mission of providing safe, cost-effective and dependable service for the traveling public may be in jeopardy.
- No emergency funding is included in the Ferry
 Operations budget. In the event of unforeseen
 emergencies during the SFY, budget designated for
 routine operations and maintenance activities must be
 reallocated, resulting in a reduction of resources for
 these critical daily functions.
- Since 2020, the Ferry Division has won six federal discretionary grants for a total of over \$6 million to augment the program. To be competitive on federal grants, funding to meet the required state match of typically 20% is essential and would need to come out of the operations budget.

Ocracoke Vehicle Ferry

- Both the Hatteras Inlet channel used by the ferry route and the state-owned facilities associated with the Hatteras-Ocracoke vehicle ferry are in jeopardy due to the shifting coastline and the movement of submerged sandbars. Funding is needed to address changes or the future viability of the route is at risk.
- The Hatteras Inlet complex, including the beach and the estuary, are in constant flux. Extensive erosion has notably widened Hatteras Inlet.
 As recently as 1993, the inlet was approximately one-third of a mile wide, but now it spans over two miles.
- South Dock on Ocracoke Island is continuously faced with environmental challenges, threatening the terminal's future. Channel shoaling, vessel damages, and erosion of the land adjacent to the facility are constant battles that require resources and impact the ability to serve riders efficiently and reliably. The stacking lanes to board the ferry vessels have fallen into the ocean despite numerous attempts to save them. No amount of funding is likely to save South Dock from increasingly unfavorable environmental challenges.
- To serve additional visitors to Ocracoke Island and avoid the environmental challenges at South Dock, a seasonal passenger ferry route was added to the Ferry system in 2019. In 2023, over 16,500 passengers rode the Ocracoke Express. 91% of passengers reported the \$15 round trip (\$7.50 each way) toll was an adequate price to pay to reach Ocracoke. The Ocracoke Express runs out of the Hatteras dock and drops passengers off at the Silver Lake dock, avoiding the complicated South Dock that Hatteras vehicle ferries must contend with. The Ferry Division is exploring adding additional seasonal passenger ferries to the fleet given the condition of the South Dock.



Shoreline Erosion

Reports show the

Hatteras-Ocracoke
route is responsible for

3,360 jobs and \$123 million
in wages annually.

In **2018**, this translated to **\$19.5 million** in local and State tax revenue.





Electrification

- The continued variability of diesel fuel prices and the environmental issues associated with diesel fuel are a continuing cause for concern. The Ferry Division has evaluated proposals to transition the fleet to a more reliable and efficient fuel source. A 2022 Vessel Electrification Study recommends transitioning replacements of aging vessels to hybrid vessels capable of decreasing cost variability and being more environmentally friendly.
- The time needed to transition from early, concept planning stages to in-water implementation of electric vessels is likely 15 years. Additional studies are needed to develop a more detailed plan to transition to hybrid and then electric ferries.

Worker Shortage

- Ferry Division staffing consists of nearly 500 FTEs and 100 seasonal employees. As of June, 2024, the permanent employee vacancy rate is over 16%.
- Upcoming retirements are of great concern. 22% of staff are eligible for retirement in three years (eligible in 2027) and 30% are eligible in five years (eligible in 2029).
- Despite ongoing recruitment efforts, hiring new employees with experience in marine operations is challenging in rural areas. A USDOT Maritime Administration grant was awarded to train and certify employees in three required disciplines to enhance productivity in vessel repairs.
- The Ferry Division's SFY 2023-2025 budget provides a recurring \$140,000 annually for U.S. Coast Guardrequired license schooling. USCG licensed prep schools will continue to help the Division ensure advancement within the ranks and better allow for succession planning.

Aging Facilities and Fleet

- Construction and maintenance projects are increasing in frequency and cost due to the age and condition of the vessels, facilities, and marine assets.
- 16 ferry vessels (70%) are more than 20 years old. Aging vessels lead to increased maintenance costs and unplanned/emergency repairs. A Ferry Division Vessel Replacement Study completed in 2024 rated each vehicle ferry vessel in the Ferry Division's fleet by class. The average vessel score is "adequate", a score that indicates the average vessel has experienced four planned or emergency repairs between 2016 and 2023.
- Based on the 2024 Vessel Replacement Study, the recommended strategy of replacing two vessels every three years is estimated at a total cost of \$1.4 billion for the entire fleet over 37 years.

- The Ferry Division would be able to pursue a federal discretionary grant for vessel construction if they were provided the required 20% non federal matching funds of approximately \$20 million per vessel.
- A 2022 Facility Assets Inspection Report found the total cost of assets that needed replacement or repairs totaled approximately \$8.27 million. Since 2022, additional facility projects have been identified to address critical replacements and repairs of aging infrastructure. These costs are variable due to inflation and industry trends.
- In order to have enough vessels to run the full historic departure schedule, it is critical to stay on schedule with the required USCG credit dry dock schedule.
 A capacity model was developed for the 2024 Ferry Division Maintenance Capacity Study which found that more staff and shipyard space is needed beyond what is available in Manns Harbor today.

Vessel Functional Condition

