



COASTAL RESILIENCE CENTER

A U.S. Department of Homeland Security Center of Excellence

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July 31, 2023

The Honorable Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, DC 20590

Dear Secretary Buttigieg,

Please accept this letter of support for the **Solving Access for NC 12 in Dare County (SAND, or “the Project”)** application to the USDOT’s 2023 PROTECT Grant program. This collaborative project, spearheaded by the North Carolina Department of Transportation (NCDOT) with support from federal project partners US Fish and Wildlife Service and National Park Service, will undertake a Planning and Environmental Linkages (PEL) study. This study will establish a solid foundation for a streamlined National Environmental Policy Act (NEPA) process, permitting, and construction, with the goal of securing the long-term resiliency of NC 12 in the Outer Banks of North Carolina.

SAND is requesting PROTECT funding to perform comprehensive resiliency planning, alternatives development and evaluation, and extensive public and stakeholder engagement for an 11-mile section of NC 12 between Oregon Inlet and Rodanthe in Dare County, North Carolina. This stretch of NC 12 is vital to the safety, quality of life, and economy of the Outer Banks. It is a critical lifeline connecting residents, tourists, and property owners in Hatteras Island to the rest of Dare County and mainland North Carolina. Moreover, it traverses areas with substantial ecological and recreational value in the Cape Hatteras National Seashore and Pea Island National Wildlife Refuge, which provide recreational opportunities, while conserving a diverse array of habitats that support migratory waterfowl and endangered species like the loggerhead sea turtle.

Storms, ocean currents, and wave and wind action are continually and dynamically reshaping the low-lying barrier islands that NC 12 traverses. Rising sea levels, coupled with the increasing severity and frequency of coastal storms are accelerating the impacts of these forces, leading to flooding, shoreline erosion, and sand and ocean overwash that damage the roadway and cause extensive repair and cleanup costs. Since 2010, NCDOT has spent more than \$72 million to keep NC 12 south of Oregon Inlet passable following storm events. These persistent challenges disrupt the lives of residents and visitors, negatively impact the Cape Hatteras National Seashore and the Pea Island Wildlife Refuge, and lead to negative impacts on the regional economy.

To address these concerns, SAND will build upon prior decision-making and environmental analyses for phases I, IIa, and IIb of State Transportation Improvement Program project B-2500 and the efforts of the NC 12 Task Force to identify a range of reasonable alternatives for subsequent NEPA evaluation and support the identification of a preferred alternative. The Project will perform environmental screening and develop conceptual roadway and structure design for these alternatives, including preliminary hydraulic modeling, to understand their cost, constructability, and environmental impacts. Resiliency and mitigation planning will also be a key focus, and the Project will identify opportunities to incorporate innovative strategies such as oyster reef restoration and nature-based solutions for stormwater management. SAND will also identify permitting and resource needs required for successful implementation. Robust public and stakeholder engagement will occur throughout the project, ensuring that all diverse perspectives are considered in the decision-making process. These project elements will address vulnerabilities at projected future breach locations as well as the Canal Zone and Pea Island Visitor Center Hot Spots. At these locations, rising tides are breaching dunes, and sand and ocean overwash are a major challenge during and after coastal storms.

The mission of the Department of Homeland Security, Coastal Resilience Center of Excellence (CRC) is to conduct research and education to enhance the resilience of the nation's people, infrastructure, economies, and the natural environment to the impacts of coastal hazards such as floods and severe storms, including the effects of future climate trends. Recently, the CRC and NCDOT have partnered to make CRC's coastal flood model forecasts available via NCDOT decision support software to help identify potential impacts of surge and wave conditions on coastal transportation infrastructure including roads, bridges and ferry terminals. The CRC is pleased to expand our collaboration with NCDOT to the proposed SAND project and its efforts to protect a critical and highly vulnerable stretch of NC 12.

If funded, SAND will bring together Federal and state agencies, local communities, academia, and advocacy groups to build a common framework for decision-making

and advance the development of long-term solutions to enhance the resilience of this critical transportation link. Thank you for your consideration of the SAND grant application for funding through the PROTECT program.

Sincerely yours,

A handwritten signature in black ink that reads "Rick Luetlich". The signature is written in a cursive style with a large initial "R".

Rick Luetlich
Alumni Distinguished Professor
Director, Coastal Resilience Center of Excellence