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March 23, 2022

Secretary Pete Buttigieg
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC, 20590

Subject: Letter of Support 2022 RAISE Grant Application:
Fixing Low Water Bridges for Emergency, Transportation, Technology, Equity, and Resilience
("FLOW BETTER") Project

Dear Secretary Buttigieg,

Please accept this letter of support for the North Carolina Department of Transportation's (NCDOT) *Fixing Low Water Bridges for Emergency, Transportation, Technology, Equity, and Resilience* Project ("FLOW BETTER" or "the Project" hereafter) application for USDOT RAISE Program funds. This Project will reconstruct 28 bridges in Avery, Ashe, Alleghany, Caldwell, Watauga, and Wilkes Counties in North Carolina—including 26 low water bridges, 1 scour critical bridge, and 1 bridge with pedestrian fatalities. The reconstruction of these bridges will provide many benefits, including economic competitiveness, safety, equity, resilience, and mobility in rural western North Carolina by improving important access points in North Carolina's High Country for industry, emergency response, school bus, and transit service.

This Project supports the goals of the RAISE program to invest in multi-jurisdictional projects that achieve national objectives to create a transportation system that is the safest, most efficient, and modern in the world. The Project accomplishes the following goals:

State of Good Repair: The Project is needed to bring the bridges into a state of good repair by reconstructing them according to current NDCOT and Federal standards—14 of the Project bridges are structurally deficient, 23 meet the legacy definition of functionally obsolete, and 26 have reached the end of their useful life.

Improve Safety: The addition of improvements, notably barrier rails on 26 bridges, will reduce the likelihood of a crash by 32 percent, lowering the potential for fatalities and injuries. This will also ensure emergency services can access remote areas, particularly during emergency weather events.

Improve Environmental Sustainability: The Project will increase the resilience of at-risk infrastructure by raising each Project bridge as close to the 25-year storm elevation as its physical setting will allow, which addresses the ongoing impacts of precipitation and increasingly frequent flood events, while lengthening bridge spans and upgrading from timber to steel frames to reduce repetitive loss and damage. By reducing the incidence of bridge

closures, vehicle miles traveled due to detours will be reduced, thereby reducing Greenhouse Gas (GHG) emissions in the Project area.

Enhance Quality of Life: The Project will benefit the low-income and rural communities that rely on the Project bridges, by improving access for agricultural equipment and vehicles, emergency vehicles, school buses, and transit. The bridge postings and frequent loss of service during flooding events is a barrier to essential services, healthcare, and job opportunities

Economic Competitiveness: By improving the reliability of the region's transportation network, the Project will facilitate movement of goods from the over 850 local Christmas tree farms that produce approximately 20% of U.S. Christmas trees, which improves productivity and efficiency and bolsters local economic growth.

Mobility and Community Connectivity: The Project will increase mobility and expand connectivity for both motorized and non-motorized users of the Project bridges by reducing the incidence of flooding and closures and making the bridges safer to traverse for pedestrians, bicyclists, and transit riders. The project will also improve connectivity for motorists by improving conditions on existing single-lane and posted bridges, reducing barriers for commuters, school buses, and regional industry.

Innovation: The Project deploys technologies to address safety and resilience to improve economic outcomes for disadvantaged communities. Six Project bridges will be constructed with flood gages that tie into NCDOT's BridgeWatch Pilot Program and FINMAN-T to monitor and forecast flood risk/conditions in real-time. Six additional bridges will include conduit to accommodate future fiber optic cable installation. This Project component will remove barriers to opportunity for disadvantaged rural populations while positioning the region for adoption of emerging technologies such as Connected and Autonomous Vehicles (CAV). The Project will also incorporate several project delivery innovations including NCDOT's Categorical Exclusion Checklist, Integrated Project Delivery (IPD), and Express Design-Build.

Partnership: NCDOT is partnering with the North Carolina Department of Information Technology to install fiber conduit in 6 Project bridges, which will help remove barriers to opportunity for the region's underserved populations. NCDOT is also collaborating with High Country COG and Greater Hickory MPO to ensure that equity considerations are meaningfully incorporated into planning and project development.

This RAISE grant would position North Carolina to move forward and prevent future loss. Thus, Alleghany County Schools strongly encourages you to support the FLOW BETTER Project and NCDOT's application for federal RAISE grant funding to accelerate the reconstruction of the Project's bridges.

Sincerely,

Dr. Steve Hall

Dr. Steve Hall

Director of Technology, Testing and Accountability, Public Information, and Grant Writing