

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J. ERIC BOYETTE Secretary

October 27, 2020

The Honorable K. Jane Williams Acting Administrator Federal Transit Administration 1200 New Jersey Avenue, SE Washington, DC 20590

Dear Acting Administrator Williams:

We write in strong support of the North Carolina's Department of Transportation's (NCDOT) application for funding under The Public Transportation COVID-19 Research Demonstration Grant Program.

As identified under the NC Transit Cares project, one of the biggest challenges currently facing NC Transit is how to keep transit passengers and operators safe. Public health experts, including faculty from the Johns Hopkins University and the University of North Carolina, suggest that transit agencies can fundamentally work to improve airflow patterns, filtration efficiency, and outdoor air ventilation in their vehicles and facilities to help reduce the risk of COVID-19 transmission. In the near-term, transit agencies can optimize their existing vehicles, facilities, and their associated HVAC systems. In the long-term, transit agencies can consider new HVAC system designs that will more effectively help control the spread of human disease while still balancing the needs for thermal comfort and energy efficiency.

To aid NC transit agencies in effective indoor air management, research is needed to move to new HVAC design concepts for transit vehicles and facilities, based on concepts used in the healthcare industry. Step one of this research is to complete Computational Fluid Dynamics (CFD) modeling of typical vehicles and facility common areas to guide effective improvements in airflow patterns, filtration efficiency and air change rates for new HVAC concepts. Step two will be to develop standard HVAC design specifications for typical vehicles used by NC Transit and facility common areas, and this step will be accomplished working in collaboration with public health experts. These design specifications may then be applied to vehicles offered under the NC State Vehicle Procurement Contract and will be universally relevant to rural and urban transit agencies throughout North Carolina and the United States.

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We fully support NCDOT in this application for grant funding. As public transit providers in North Carolina, we do not have the resources to pursue this type of research and so your leadership in initiating a State-wide effort is much appreciated. The benefits of this research and follow-on work will enable us to work to keep our transit passengers and operating staff as safe as possible, which is our primary goal.

DocuSigned by:

Sincerely,

North Carolina Public Transportation Systems

