

Padma Raghavan, Ph.D. Vice Provost for Research and Innovation Chief Research Officer Senior Advisor to the Chancellor Distinguished Professor of Computer Science

July 25, 2024

U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, D.C. 20590

Dear Secretary Buttigieg,

We are proud to partner with the *Nashville Department of Transportation and Multimodal Infrastructure* (NDOT) on their application for the USDOT SMART Grant Stage 2 proposal, *Leveraging Advanced Data to Deliver Multimodal Safety* (LADDMS). The project is a collaborative effort led by NDOT, and with support from University of Tennessee (Chattanooga), Tennessee State University, Vanderbilt University, the Tennessee Department of Transportation, and other local stakeholders.

The LADDMS project will enhance safety within the Nolensville Pike Corridor and in North Nashville by identifying safety incidents beyond traditional crash reports. By implementing cutting-edge technologies such as LiDAR at key intersections and mid-block segments, LADDMS will significantly improve safety for all transportation network users, with a particular focus on pedestrians and bicyclists. As part of the Stage 2 project, our team of faculty, professional research staff, and students commit to the following activities as described in the project narrative and implementation plan and as directed by NDOT.

- We will provide data infrastructure, data management services, and advanced data analytics work in collaboration with NDOT and other project partners.
- We will lead the system evaluation activities to validate the results of the at-scale deployment.
- We will lead lidar equipment configuration and testing activities in collaboration with NDOT and Ouster staff.
- We will lead workforce development activities with electricians and NDOT staff and publish our training materials for others to use free of charge.
- We will support technology transfer activities to scale the most innovative results beyond the geographic boundaries of the project.

We are fully committed to ensuring the stage 2 grant is a success, building safer roadways for all road users through advanced technology demonstration.

Sincerely,

Padma Raghavan, Ph.D.

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Vanderbilt University