

Memorandum

To: Charlottesville-Albemarle Metropolitan Planning Organization's (CA-MPO) Committees
From: Taylor Jenkins, Transportation Director, TJPDC/CA-MPO
Date: April 15, 2025
Reference: FY25 CA-MPO SS4A Grant Application – *Crash Analytics and Injury Research (CAIR): Holistic Approach to Vulnerable Road User Safety*

Purpose:

CA-MPO staff are seeking support for the submission of a Safe Streets and Roads for All (SS4A) supplemental planning and demonstration grant application for FY25. The proposed project, titled *Crash Analytics and Injury Research (CAIR): Holistic Approach to Vulnerable Road User Safety*, aims to develop a supplemental action plan focused on improving outcomes for Vulnerable Road Users (VRUs) in the CA-MPO area.

Background:

The CAIR initiative responds to the growing need for an integrated and systems-level approach to VRU safety. From 2018–2022, the CA-MPO area experienced 89 VRU fatalities or serious injuries—highlighting the urgent need for targeted action. The project combines infrastructure analysis, behavioral research, vehicle technology review, and clinical injury assessment through a collaborative effort involving VDOT, Honda Research America, and multiple research centers at the University of Virginia.

The grant proposes a dual-track research and demonstration strategy, including:

- Behavioral Studies and Virtual Reality Simulation: Studying how roadway environments influence interactions between drivers and VRUs.
- Injury Modeling and Medical Research: Predicting the consequences of collisions and assessing the benefits of intervention strategies.
- Data-Driven Action Plan Development: Establishing a roadmap to improve safety through infrastructure, technology, education, and policy interventions.

This work will build upon the ongoing planning efforts and complement the Comprehensive Safety Action Plan currently being developed under SS4A funding awarded to the Thomas Jefferson Planning District Commission.

The anticipated grant funding request is \$4,620,000 over three years, with the 20% match requirement to be covered by project partners (UVA and Honda).

Recommendations:

CA-MPO Technical Committee: Staff recommends a motion to recommend the MPO Policy Board provide a resolution of support for submission of an FY25 SS4A supplemental planning and demonstration grant application.

CA-MPO Policy Board: Staff recommends a motion to provide a resolution of support for submission of an FY25 SS4A supplemental planning and demonstration grant application.

CA-MPO Citizens Transportation Advisory Committee: Staff recommends a motion to recommend the MPO Policy Board provide a resolution of support for submission of an FY25 SS4A supplemental planning and demonstration grant application.

If there are any questions or comments, please contact Taylor Jenkins at tjenkins@tjpd.org.