FY26 SS4A Grant

V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety in Washington, D.C.

Submitted by: Metropolitan Washington Council of Governments (MWCOG) on behalf of the National Capital Region Transportation Planning Board (TPB)

Project Overview and Safety Context

Executive Summary: The National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Washington region, in partnership with the District Department of Transportation (DDOT), is requesting $3.22 M in FY26 Safe Streets and Roads for All (SS4A) Demonstration Grant funding for the V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety (Project) in Washington, D.C., herein referred to as DC. The Project will deploy micromobility (two-wheeled vehicles such as bicycles, scooters, e-bikes, etc.) and vehicle-mounted alerting devices and roadside units for data collection purposes at selected high-risk corridors to test network-based Vehicle-to-Network (V2N) communications and direct Vehicle-to-Everything (V2X) messaging to demonstrate and evaluate their potential to improve safety for vulnerable road users.

If successful, the Metropolitan Washington Council of Governments (MWCOG) will be TPB's administrative and fiscal agent in administering the grant funding. The TPB/MWCOG team will utilize the demonstration project to produce a concise set of deployments, evaluation, and implementation lessons that can inform future connected safety applications across the metropolitan area and United States.

Action Plan Connection: The Project aligns with DDOT's Vision Zero and Safe System priorities by targeting locations where bicyclists face elevated risk from turning movements, constrained visibility, and access conflicts, and by testing proactive technology-based countermeasures that can reduce the likelihood and severity of crashes involving vulnerable road users. The Project directly advances implementation of the District's original Vision Zero Plan and 2022 Update by testing technology-enabled countermeasures at high-injury corridors and conflict locations identified through DDOT's data-driven Safe System Approach. The demonstration activities will generate site-specific evidence on roadway risk, user behavior, and countermeasure effectiveness to inform the Action Plan's safety analysis, strategy selection, and implementation priorities and identify scalable, evidence-based strategies that improve safety for all road users.

Safety Need: The Project's corridors show a concentrated micromobility safety need at locations where turning vehicles, constrained sightlines, and access activity create recurring conflict risk. The proposed four corridors have experienced 995 injury crashes, including two (2) fatal and 147 incapacitating injury crashes between 2011 and 2026 pulled from the DDOT crash dashboard. These conditions support a targeted demonstration focused on high-risk urban conflict points where proactive warnings may reduce severe outcomes involving vulnerable road users.

Technology Pilot Experience: The Project aligns with concurrent technology pilots in DC that are advancing real-time, data-driven safety solutions. The US Ignite AVO Zone Challenge is monitoring interactions between emerging vehicle technologies and other road users, while the ITS America M Street Pilot tests digital infrastructure and ITS solutions to address multimodal safety risks. Together, these efforts reinforce the value of layered safety approaches. The Project adds a complementary user-level component by deploying direct micromobility–vehicle alerting at conflict points, strengthening the overall safety ecosystem.

Jurisdiction Profile and High-Injury Network: DC is a dense, multimodal urban jurisdiction with frequent intersections, curb access points, transit, and micromobility travel in close proximity. DDOT's High Injury Network (HIN) and micromobility priority network make the DC area an

appropriate setting for a micromobility-focused safety technology pilot due to its micromobility demand and serious-crash risk overlap.

Location-Specific: The Project's corridors are part of or directly connected to DDOT's bicycle priority network and include facilities intended to support low-stress micromobility travel. The following table provides a list of the four (4) proposed corridors. Maps of the Project area are also attached.

Table 1. Project Corridors

Corridor	Bicycle Facilities	Injuries/Fatalities
1st St SE (I St SE to Potomac Ave SE)	Bicycle Access Corridor	94 injury crashes
I St SE (4th St SE to 7th St SW)	Protected Bicycle Lanes	367 injury crashes
M St SE (10th St SE to S Capitol St SW)	Bicycle Access Corridor	436 injury crashes, 2 fatalities
New Jersey Ave SE (H St SE to Tingey Sq SE)	Protected Bicycle Lanes	98 injury crashes

Demonstration Activities/Pilot Project

The Demonstration Activities will include site selection and field validation; final deployment design; procurement, installation, testing, and operation of roadside, vehicle, and micromobility alerting equipment; establishment of data governance and privacy protocols; participant recruitment and onboarding; baseline data collection; system monitoring and maintenance; post-deployment analysis and evaluation; and preparation of findings and recommendations to inform Action Plan development, implementation, and future safety investments.

TPB/MWCOG and DDOT will implement a temporary, pilot-scale connected micromobility-vehicle alerting demonstration at selected high-risk corridors and access points identified through corridor crash patterns, DDOT's High Injury Network, the bicycle priority network, and field confirmation of conflict conditions. The pilot will test both network-based V2N communications and direct V2X alerts to assess the safety value of each approach in real-world operating conditions. The project also involves private sector participation (WSP, Audi of America, General Motors, Spoke Safety, and Qualcomm among others) who wish to demonstrate the effectiveness in DC and show the potential of scaling beyond DC.

The demonstration will recruit participating bicyclists, shared micromobility users where feasible, and DDOT fleet or other participating vehicles consistent with the pilot design. Participants will be equipped with the user-facing applications, devices, or in-vehicle interfaces needed to receive alerts. The pilot is intended to be limited in scale and duration to evaluate feasibility, operational performance, and potential safety benefits before broader deployment is considered

Evaluation Approach

Evaluation Design: Compare baseline conditions, V2N-enabled operations, and direct V2X-enabled operations to assess safety effects and the incremental value of layered connected warnings.

Privacy/Data Governance: Minimize and protect sensitive information by using privacy-by-design data handling (limited data collection, encryption where applicable, access controls, retention limits, and de-identified reporting to the maximum extent feasible).

Surrogate Safety Measures: Time-to-collision and post-encroachment time; frequency and severity of vehicle–bicyclist conflicts; unsafe passing distance (where measurable); hard braking/rapid deceleration events; and near-miss rates by crash typology.

Data Sources & Analytics: Device logs, vehicle telemetry (as available), roadside sensing, and cloud-based risk data will be integrated to evaluate changes in conflicts, driver response, and system performance across pilot phases.

Behavioral & Operational Metrics: Changes in approach speed near bicyclists; yielding and gap-acceptance behavior; and driver response rates to V2N versus direct V2X messages.

System Performance Metrics: Message latency and delivery reliability; device/roadside unit (RSU) uptime; data completeness; and interoperability across participating device types and fleets.

Schedule

The following table provides the tentative schedule for the Project.

Table 1. Project Schedule

Milestone/Activity	Project Period
Confirm Pilot Sites, Finalize Deployment Design, & Establish Data Governance Procedures	Months 1 - 3
Baseline Data Collection & Participant Recruitment/Onboarding	Months 4 – 6
Active Deployment & Field Operation	Months 7 – 12
Post-Deployment Analysis	Months 13 - 15
Integrate Lessons Learned into Action Plan Implementation & Complete Final Reporting	Months 16 - 18

Stakeholder Engagement and Coordination

Engagement will focus on validating candidate conflict locations, coordinating deployment logistics, recruiting participants, and incorporating community insight on how bicycle facilities, turning movements, and access conditions affect perceived and observed safety. Participant recruitment will be designed to reach riders and vehicle operators who reflect the operating conditions and user types represented in the pilot area. TPB/MWCOG and DDOT will coordinate targeted outreach through community-based bicycling and safety organizations, employer and commuter networks, bicycle and micromobility partners, DDOT-supported communications channels, and direct engagement near candidate corridors to recruit volunteer participants. Recruitment will include outreach to bike commuters who regularly travel through the pilot area; bikeshare and scooter-share companies to engage users and, where feasible, support participation by shared micromobility riders; delivery partners and fleets such as Amazon DSPs, USPS, UPS, FedEx, and other urban delivery operators whose vehicles frequently navigate turning movements and curb access conditions along the study corridors; and DDOT fleet divisions whose vehicles may be equipped to participate in the demonstration. This broader recruitment approach will help ensure the pilot captures interactions among bicyclists, micromobility users, fleet vehicles, and urban delivery operators in the types of real-world conditions the demonstration is intended to address.


Legend
Crash Severity
Fatal
Major
Minor
Unknown
Selected Corridors
Southwest Employment Area
Southwest / Waterfront
Capitol Hill
Near Southeast
Washington Navy Yard
Independence Ave SW
Independence Ave SE
Pennsylvania Ave SE
Virginia Ave SE
M St SE
M St SW
I St SE
Capitol Driveway SE
S Capitol St SE
Southwest Fwy S
Southeast Blvd
Folger Park
Marion Park
Garfield Park
Randall
Diamond Teague Park

National Capital Region
Transportation Planning Board

May 22, 2026

The Honorable Sean Duffy
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: FY 2026 SS4A TPB/MWCOG Connected Bicycle-Vehicle Alerting Demonstration

Dear Secretary Duffy:

On behalf of the National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Washington region, we are pleased to formally submit this FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, in partnership with the District Department of Transportation (DDOT), for the **V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety (Project) in Washington, D.C.** TPB is committed to participating as the lead applicant with the Metropolitan Washington Council of Governments (MWCOG) serving as TPB's administrative and fiscal agent in administering the grant funding.

TPB has identified roadway safety and the protection of vulnerable road users as a top policy priority and TPB/MWCOG staff currently lead a robust program of safety planning, analysis, technical assistance, and coordination across the entire region. The TPB/MWCOG team will utilize the demonstration to produce a concise set of deployments, evaluation, and implementation lessons that can inform future connected safety applications across the metropolitan area and guide future policy and investment. This application reflects strong interjurisdictional coordination and the unique capacity of TPB/MWCOG to convene transportation, public safety, and community partners across the region.

On May 1st, the TPB Steering Committee adopted the attached resolution SR31-2026 approving the submission of FY 2026 grant application for a connected bicycle-vehicle demonstration project in the District of Columbia to protect vulnerable riders under the federal SS4A program. The resolution notes that this proposed project will have regional benefits and that a successful demonstration of this technology can be applied in the future to other parts of the region.

We appreciate the opportunity to collaborate with DDOT and the broader project team to advance the U.S. DOT's Safe System Approach and improve safety outcomes for vulnerable road users. If you have any questions regarding this commitment, please contact me at 202-962-3257 or by email at ksrikanth@mwcog.org.

Sincerely,

Srikanth K.N.

Mr. Kanti Srikanth
Executive Director, TPB

Attachment

TPB SR31-2026
May 1, 2026

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION APPROVING THE SUBMISSION OF A SS4A APPLICATION FOR CONNECTED VEHICLE DEMONSTRATION PROJECT IN THE DISTRICT OF COLUMBIA

WHEREAS, the National Capital Region Transportation Planning Board (TPB), as the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the Infrastructure Investment and Jobs Act (IIJA) for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the safety of all users is a core goal of the TPB that, in July 2020, adopted Resolution R3-2021 establishing a policy on roadway safety that reaffirms road user safety as a top priority; and

WHEREAS, TPB's recent assessments of regional roadway safety performance have shown that the region is not meeting its targets for reducing fatalities and serious injuries on the region's roadways; and

WHEREAS, the Secretary of Transportation, United States Department of Transportation, is authorized to make grants for transportation projects; and

WHEREAS, the Safe Streets and Roads for All (SS4A) Grant Program FY 2026 Notice of Funding Opportunity (NOFO) is funded to award up to $993,488,194 for FY 2026 grants, with $687,809,874 available for Implementation Grants and $305,678,320 for Planning and Demonstration Grants to be awarded by the United States Department of Transportation for federal fiscal year 2026; and

WHEREAS, funds for the SS4A Grant Program are to be awarded on a competitive basis to support planning, infrastructure, behavioral, and operational initiatives to prevent death and serious injury on roads and streets involving all roadway users, including pedestrians, bicyclists, public transportation, personal conveyance, micro mobility users, motorists, and commercial vehicle operators; and

WHEREAS, the SS4A grant program provides federal funds to eligible applicants for supplemental planning and demonstration projects that include pilots of new technology; and

WHEREAS, the SS4A grant program is eligible to Metropolitan Planning Organizations (MPOs) and local governments but does not allow applications from state DOTs such as the District Department of Transportation (DDOT); and

WHEREAS, the TPB staff have collaborated with DDOT and private industry partners to develop a demonstration project proposal to design, deploy, and evaluate the use of Vehicle-to-everything (V2X) connected vehicle technology to alert drivers about the general presence of bicyclists in the vicinity of the vehicle and provide critical safety information to drivers to prevent collisions and to improve the safety of cyclists and other riders of micromobility devices; and

WHEREAS, the project will have regional benefits given that the travelers on the District of Columbia roads are often not District residents and that a successful demonstration of this technology can be applied in the future to other parts of the region; and

WHEREAS, grant applications to the federal SS4A program are due by May 26, 2026.

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board approves the submission of a FY 2026 grant application for a connected vehicle demonstration project in the District of Columbia to protect vulnerable riders under the federal SS4A program, subject to staff being able to reach acceptable arrangements on the role, responsibility and resources for TPB staff to administer the project and fulfill its obligations as a federal grant recipient.

Adopted by the TPB Steering Committee at its meeting on Friday, May 1, 2026.

Government of the District of Columbia

Department of Transportation

May 26, 2026

US Department of Transportation
Office of the Secretary of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Safe Streets and Roads for All Grant (SS4A) for the V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety in Washington, D.C. project

Dear Secretary Duffy:

I am writing to establish the understanding between the District Department of Transportation (DDOT) and the National Capital Region Transportation Planning Board (TPB) for the **V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety in Washington, D.C. project**. As the agency responsible for the planning, design, construction, and maintenance of the District's roadway network, DDOT recognizes the significance of this initiative and is committed to supporting its successful implementation.

The District of Columbia adopted its first Vision Zero action plan in 2015 and released an updated plan in 2022. Through this commitment, the District Department of Transportation has made safety our number one priority and has launched an effort to implement safety improvements on every corridor in the District's High-Injury Network (HIN).

The proposed project will evaluate multimodal traffic sensing technologies, particularly those that enhance the detection and protection of vulnerable road users, and identify pathways to translate these innovations into practical, deployable safety solutions. Through real-world demonstrations, the project will generate strong, evidence-based insights into the effectiveness and feasibility of advanced sensing and V2X applications from three critical perspectives: network-level safety, vehicle safety, and vulnerable road user safety. These findings will not only validate the technologies' safety benefits but also highlight actionable strategies and countermeasures that can be readily replicated and scaled across Washington, DC, and throughout the greater Washington metropolitan area.

If successful, the TPB will act as the grant recipient and Metropolitan Washington Council of Governments (MWCOG), acting as TPB's administrative agent, will administer the grant including payments to DDOT and other contractors for eligible project activities. DDOT will serve as a technical partner in all phases of the project to ensure successful delivery. TPB will

engage a private industry partner to lead the technological and operational aspects of the demonstration project.

DDOT will also provide the necessary financial and other reporting documentation to TPB to meet the federal requirements of the SS4A grant implementation. The specifics of this relationship will be established by a formal agreement between DDOT and TPB once an award is made.

Thank you for your consideration of the V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety in Washington, D.C. project for the SS4A grant.

Sincerely,

Sharon Kershbaum
Director, District Department of Transportation

May 21, 2026

The Honorable Sean Duffy

U.S. Department of Transportation

1200 New Jersey Avenue, SE

Washington, DC 20590

Re: **Safe Streets and Roads for All Grant (SS4A) for the V2X DC: Vehicle to Everything (V2X) Reference Deployment to Avance Vulnerable Road User safety in Washington, D.C.**

Dear Secretary Duffy,

WSP is pleased to provide this Letter of Commitment in support of the Metropolitan Washington Council of Governments (MWCOG)/Transportation Planning Board (TPB) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT), for the V2X DC: Vehicle to Everything (V2X) Reference Deployment to Advance Vulnerable Road User Safety in Washington D.C. WSP is committed to participating as a project partner and to expertise, and coordination support as described below to help deploy and evaluate a scalable connected safety demonstration that reduces bicyclist, scooter and motorist conflicts in complex urban environments

Once the award is made, WSP will work on a Memorandum of Agreement with MWCOG/TCB. While the specifics of his relationship will be formalized at that time, in general WSP will conduct project management, planning and design of the concept, deployment of the pilot demonstration and evaluation of its effectiveness. WSP will be lead and coordinate the industry partners needed to carry out the demonstration project. Additionally, WSP will ensure compliance with 2 CRF 200 and other grant requirements such as reporting.

WSP has the managerial and technical skillset and relevant skillset necessary experience to contribute to the project's success. We appreciate the opportunity to collaborate with MWCOG, DDOT, and the broader project team to advance the U.S. DOT's Safe System Approach and improve safety outcomes for vulnerable road users.

If you have any questions regarding this commitment, please contact me at jag.mallela@wsp.com, 1-202-661-5317.

Sincerely,

Yours sincerely,

Jagannath Mallela

Senior Vice President

WSP USA, Inc

Audi of America, Inc. • 1950 Opportunity Way • Reston, VA 20190

Brad Stertz
Director
External Affairs
+1 703-344-1320
brad.stertz@audi.com

May 6, 2026

The Honorable Sean Duffy
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Audi of America

1950 Opportunity Way
Reston, VA 20190
+1 703 364 7000
www.audiusa.com

Subject: FY 2026 SS4A Letter of Commitment for MWCOG's Connected Bicycle-Vehicle Alerting Demonstration

Dear Secretary Duffy,

On behalf of Volkswagen Group of America, Inc., I am pleased to provide this Letter of Commitment in support of the Metropolitan Washington Council of Governments (MWCOG) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT), for the **Connected Bicycle-Vehicle Alerting Demonstration** in Washington, DC. Volkswagen Group and its Audi brand are committed to participating as a project partner and to contributing resources, expertise, and coordination support as described below to help deploy and evaluate a scalable connected safety demonstration that reduces bicyclist, scooter and motorist conflicts in complex urban environments

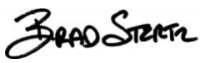
Partner Commitments and Contributions

- **Role in the demonstration:** Serve as vehicle and application partner to support the design, integration, deployment, and evaluation of connected bicycle-vehicle alerting capabilities.
- **Technical resources:** Provide access to or support for vehicle integration and communications interoperability needed for V2N awareness messaging and/or direct V2X (5.9 GHz ITS) communications in safety-critical scenarios.
- **Vehicle participation:** Provide 1 participating vehicle(s) for data collection and reference deployment validation purposes, plus support for a second Audi vehicle on loan to a participating partner.
- **Data and evaluation support:** Support the projects evaluation plan by providing appropriate system logs, performance information, and user feedback mechanisms, consistent with the projects privacy and data governance requirements and any applicable corporate policies.
- **Project coordination:** Participate in project management meetings, technical working sessions, and demonstration planning activities; designate a

primary technical point of contact and an alternate; and collaborate on implementation planning and risk management.

We appreciate the opportunity to collaborate with MWCOG, DDOT, and the broader project team to advance the U.S. DOT's Safe System Approach and improve safety outcomes for vulnerable road users. If you have any questions regarding this commitment, please contact Brad Stertz, Director, External Affairs, Audi/ VW Group at +1 703-344-1320 and brad.stertz@audi.com.

Sincerely,



Brad Stertz

Re: Support for Protecting the VRU with V2X Deployment Framework

To Whom It May Concern,

Blue Jay Transit Inc dba Bird (Bird) is pleased to express its support for the proposed initiative currently being explored in collaboration with industry stakeholders and the U.S. Department of Transportation to evaluate the real-world safety impacts of Network- and Direct- Vehicle-to-Everything (V2X) communications.

As a leading provider of micromobility solutions serving millions of riders in urban environments, Bird is deeply aligned with efforts that seek to improve the safety, confidence, and operational awareness of vulnerable road users (VRUs). The proposed scope's focus on:

- Evaluating the comparative effectiveness of Network and Direct V2X communication technologies and approaches
- Measuring both objective safety outcomes with surrogate metrics
- Assessing user perception and behavioral impact

This represents an important step toward accelerating scalable safety solutions for mixed-mode transportation ecosystems.

We believe that advancing interoperable safety technologies that enhance interaction between vehicles and micromobility riders aligns strongly with our long-term commitment to rider safety, city partnerships, and responsible system integration within the broader transportation network.

Based on our understanding of the concept currently under development, we are supportive of continued exploration of this initiative and its potential to generate actionable insights that could inform adoption and scalable deployment strategies across the industry.

Subject to final program structure, scope, and partnership decisions, Bird would be open to exploring potential avenues for participation in future phases of this effort.

We appreciate the collaborative leadership demonstrated by the proposing organizations and recognize the importance of convening a cross-sector ecosystem to address VRU safety challenges at scale.

Sincerely,

John Lankford
Blue Jay Transit, Inc. dba Bird
Senior Director, Government Partnerships

May 12, 2026

The Honorable Secretary Duffy
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: FY 2026 SS4A Letter of Commitment for MWCOG's Connected Bicycle-Vehicle Alerting Demonstration

Dear Secretary Duffy,

On behalf of General Motors LLC (GM), I am pleased to provide this Letter of Commitment in support of the Metropolitan Washington Council of Governments (MWCOG) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT), for the **Connected Bicycle-Vehicle Alerting Demonstration** in Washington, DC. GM is committed to participating as a project partner and to contributing resources, expertise, and coordination support as described below to help deploy and evaluate a scalable connected safety demonstration that reduces bicyclist, scooter and motorist conflicts in complex urban environments.

Were the team selected for an award, GM plans to focus on integrating connected vehicles with roadside infrastructure to enhance system capabilities and lay the groundwork for future safety and mobility applications.

GM activities under the project include:

- **Demonstration vehicle:** Develop and build one vehicle with integrated connectivity platform and cyclist safety applications including HMI to be used for application and system performance assessment and demonstration in the deployed environment to support product deployment readiness.
- Develop in-vehicle software (applications and HMI) that can receive and process the communicated information from the deployed area and bicycles.
- Provide engineering and technical support in collaboration with the project team to develop systems specifications, test procedures and conduct compliance testing to ensure that the V2X deployments comply with the minimum

performance requirements of vehicular applications planned for the day one vehicle product deployments.

- **Data and evaluation support:** Support the projects evaluation plan by providing appropriate system logs, performance information, and user feedback mechanisms, consistent with the projects privacy and data governance requirements and any applicable corporate policies.

GM's commitment is contingent upon MWCOG receiving an award and successful negotiation of terms and conditions of a project agreement. GM appreciates the opportunity to collaborate with MWCOG, DDOT, and the broader project team to advance the U.S. DOT's Safe System Approach and improve safety outcomes for vulnerable road users.

Sincerely,

Dr. Alon Capua
Director, Connected Experience and Agentic Systems Research
General Motors Research & Development

Spoke Corporation USA
201 Columbine Street, Suite 150
Denver, CO 80206

www.spokesafety.com

May 18, 2026
The Honorable Sean Duffy
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

cc: WSP USA, Dr. Nithin Agarwal WSP PM

Re: Spoke Safety, Inc., Letter of Commitment - Washington Council of Governments (MWCOG) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT), for the Connected Bicycle-Vehicle Alerting Demonstration in Washington, DC.

Dear Mr. Duffy,

On behalf of Spoke Safety, Inc., I am pleased to provide this Letter of Commitment in support of the Metropolitan Washington Council of Governments (MWCOG) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT), for the Connected Bicycle-Vehicle Alerting Demonstration in Washington, DC. Spoke Safety, Inc. is committed to participating as a project partner and to contributing resources, expertise, and coordination support as described below to help deploy and evaluate a scalable connected safety demonstration that reduces bicyclist, scooter and motorist conflicts in complex urban environments.

Partner Commitments and Contributions

Role in the demonstration: Serve as technology provider of On-board Units for bicycles, scooters and vehicles, provide licenses to Spoke VRU2X network and direct system communications with Spoke HUB, connection to RSU's and infrastructure and licenses to the Spoke Hub access portal for data to support the design, integration, deployment, and evaluation of connected bicycle-vehicle alerting capabilities.

SS4A Non-Federal Match:

- **Construction of custom application and human machine interface (HMI)** (implementation specific to the MWCOG / DDOT SS4A Federal Grant and its Participants). This application and HMI will be provided for both (Spoke VUE™ and Connect™) or (Non-Spoke) OBU/RSU hardware. **Including: Rider App Specification and Approach, Fleet Integration App Approach, and Portal for Agency Network Operating Center.**
- **VRU2X™ Network-Direct-Digital Infrastructure:** Software Licenses, HUB Portal Access, SS4A software licenses, testing validation and support for all project devices both (Spoke VUE™ and Connect™) or (3rd party) OBU/RSU hardware to the **Spoke Proprietary, Patented and Patent Pending VRU2X™ software platform** including the Spoke HUB.
- **Supporting Mounting Installation Hardware** of OBU's on bicycles, scooters, vehicles and integration with RSU's and infrastructure.

These relevant developments and services constitute **$507,500** of commercial value.

SS4A Federal Request:

- **Equipment and support: 50 Total OBU units** (15 Cyclist OBUs, 15 Scooter OBUs, 20 Vehicle OBU's) and integration and support for devices, **VRU2X software including the Spoke HUB and SS4A custom human machine interface (HMI)** and support for recruitment, **installation and validation of OBU's on bicycles, scooters, vehicles and integration with RSU's and infrastructure**.
- **Technical resources:** Provide access, integration and support for On-board Units, software, API's and access to Spoke HUB portal V2N awareness messaging and/or direct V2X (5.9 GHz ITS) communications in safety-critical scenarios.
- **Vehicle participation:** Provide one (1) pre-production demonstration vehicle to showcase the driver in-vehicle experience
- **Data and evaluation support:** Support the projects evaluation plan by providing appropriate system logs, performance information, and user feedback mechanisms, consistent with the projects privacy and data governance requirements and any applicable corporate policies.
- **Project coordination:** Participate in project management meetings, technical working sessions, and demonstration planning activities; designate a primary technical point of contact and an alternate; and collaborate on implementation planning and risk management.

These equipment, development, products and services constitute **$1,495,600** of commercial value.

Implementation Total:

In-Kind Contribution (Non-Federal Match): **$507,500** (25.34%)
SS4A Federal Request: **$1,495,600** (74.66%)
Total Project: **$2,003,100** (100%)

SS4A Efficacy: the combined In-Kind Contribution and Federal Request deliver the network, direct, and digital infrastructure necessary to prove efficacy and supports the Connected Awareness on DDOT's Network, serving as the basis for national deployment.

We appreciate the opportunity to collaborate with MWCOG / DDOT, and the broader project team to advance the U.S. DOT's Safe System Approach and improve safety outcomes for vulnerable road users. If you have any questions regarding this commitment, please contact Reid Sigety, Chief Strategy Officer, Spoke Safety, Inc., (720) 296-7220, reid.sigety@spokesafety.com.

Sincerely,

R. Reid Sigety
Chief Strategy Officer
Spoke Safety, Inc.

Re: Support for Protecting the VRU with V2X Deployment Framework

To Whom It May Concern,

Veo is pleased to express its support for the proposed initiative currently being explored in collaboration with industry stakeholders and the U.S. Department of Transportation to evaluate the real-world safety impacts of Network- and Direct- Vehicle-to-Everything (V2X) communications.

As a leading operator of shared bicycle and scooter systems serving millions of riders in cities and towns across the United States, VEO is deeply aligned with efforts that seek to improve the safety, confidence, and operational awareness of vulnerable road users (VRUs). The proposed scope's focuses on:

- Evaluating the comparative effectiveness of Network and Direct V2X communication technologies and approaches
- Measuring both objective safety outcomes with surrogate metrics
- Assessing user perception and behavioral impact represents an important step toward accelerating scalable safety solutions for mixed-mode transportation ecosystems.

Advancing interoperable safety technologies that enhance interaction between vehicles and micromobility riders aligns strongly with our long-term commitment to rider safety, city partnerships, and responsible system integration within the broader transportation network.

Based on our understanding of the concept currently under development, we are supportive of continued exploration of this initiative and its potential to generate actionable insights that could inform adoption and scalable deployment strategies across the industry.

Subject to final program structure, scope, and partnership decisions, Veo would be open to exploring potential avenues for participation in future phases of this effort.

We appreciate the collaborative leadership demonstrated by the proposing organizations and recognize the importance of convening a cross-sector ecosystem to address VRU safety challenges at scale.

Sincerely,

Alexander Keating

Alex Keating
Vice President, Policy and Partnerships
Veo

3221 Donald Douglas Loop South,
Santa Monica, CA 90405

855.VEO.2256
hello@veoride.com

www.veoride.com

WABA
WASHINGTON AREA
BICYCLIST ASSOCIATION

May 20, 2026

The Honorable Sean Duffy
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: FY 2026 SS4A Letter of Support for MWCOG/DDOT's Planning and Demonstration Grant Application; Connected Bicycle–Vehicle Alerting Demonstration

Dear Secretary Duffy,

On behalf of the Washington Area Bicyclist Association (WABA), I am writing in support of the Metropolitan Washington Council of Governments' (MWCOG) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT). This effort seeks federal support to deploy and evaluate a connected bicycle–vehicle alerting demonstration to reduce bicyclist–motorist conflicts at complex urban environments in Washington, DC.

This proposed demonstration project advances U.S. DOT's Safe System Approach by improving situational awareness, road safety, and traffic efficiency by designing for human mistakes, prioritizing the protection of vulnerable road users, and using measurable safety outcomes to guide future policy and investment. As the regional membership organization for bicyclists, we are all too aware of the risks that people on bikes face from dangerous interactions with drivers in Washington, DC's busy streets, particularly where sightlines are constrained and decision time is limited—conditions under which drivers can endanger people walking and biking through right-hook/left-hook turning conflicts, turning encroachments into bicycle space, and unexpected bicycle approach at complex locations.

The project's focus on better understanding these high-risk interaction points also aligns with the District's Vision Zero priorities and provides an opportunity to reduce serious injuries and fatalities while generating transferable lessons for peer jurisdictions.

WABA
WASHINGTON AREA
BICYCLIST ASSOCIATION

MWCOG and DDOT's proposed layered, evidence-based approach progresses from network-based vehicle-to-network (V2N) awareness messaging to direct V2X (5.9 GHz ITS) communications for safety-critical, crash-imminent scenarios. Importantly, the project will produce a replicable approach including site selection criteria, performance measures (e.g., surrogate safety measures such as time-to-collision and post-encroachment time), deployment considerations, and an implementation playbook that other member agencies of the Metropolitan Planning Organization can apply to accelerate Safe System outcomes. WABA encourages the project team to evaluate the impact of the project on changes to vehicle miles traveled to better understand the broader impact of the technology.

This application reflects strong interjurisdictional coordination and leverages the experience and capacity of MWCOG to convene transportation, public safety, and community partners across the region. The demonstration's commitment to responsible privacy and data governance (including limited data collection, de-identification to the maximum extent feasible, retention limits, and access controls) will help ensure the project can be implemented effectively and serve as a model for future connected safety deployments. By focusing on conflict-prone locations and engaging stakeholders this effort also supports safety outcomes for all road users, especially vulnerable road users.

For these reasons, WABA supports MWCOG's grant application and respectfully encourages the U.S. Department of Transportation to give it full consideration. Thank you for your continued leadership and commitment to improving roadway safety nationwide.

Sincerely,

Elizabeth Kiker
Executive Director
Washington Area Bicyclist Association
Washington, DC

ITS AMERICA

Friday, May 22, 2026

The Honorable Sean Duffy
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: FY2026 SS4A Letter of Support for the MWCOG Planning and Demonstration Grant Application for Connected Bicycle–Vehicle Alerting Demonstration

Dear Secretary Duffy,

On behalf of the Intelligent Transportation Society of America (ITS America), I am writing in strong support of the Metropolitan Washington Council of Governments (MWCOG) FY 2026 Safe Streets and Roads for All (SS4A) Planning and Demonstration Grant application, submitted in partnership with the District Department of Transportation (DDOT). This effort seeks federal support to deploy and evaluate a connected bicycle–vehicle alerting demonstration that reduces bicyclist–motorist conflicts at complex urban environments in Washington, DC. This brings together several great partners in the road safety technology space, including active ITS America members DDOT, Spoke Safety, and Audi, to apply technology as a layer of protection through the Safe System Approach.

We applaud this SS4A demonstration project bringing together proven vehicle-to-everything (V2X) road safety technologies to improved attentiveness and awareness of vulnerable road users to help prevent a crash from occurring and finetune the widespread use of V2X for vulnerable road users in the DC region. We feel this demonstration project bring together another exciting M Street Road Safety Technology Reverse Pitch And Pilot that ITS America is currently lead and where ITS America is based in the Navy Yard neighborhood across from USDOT.

In a dense, multimodal street network like our city and region, bicyclists face heightened risk, particularly where sightlines are constrained and decision time is limited—conditions that can contribute to right-hook/left-hook turning conflicts, turning encroachments into bicycle space, and unexpected bicycle approach at complex locations. The project focus

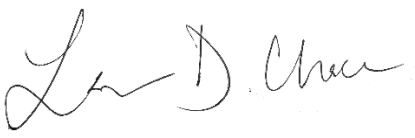
on these high-risk interaction points aligns with the District's Vision Zero priorities and provides an opportunity to reduce serious injuries and fatalities while generating transferable lessons for peer jurisdictions.

MWCOG with DDOT propose a layered, evidence-based approach that progresses from network-based vehicle-to-network (V2N) awareness messaging to direct V2X (5.9 GHz ITS) communications for safety-critical, crash-imminent scenarios. The demonstration will integrate a cloud-based digital safety platform with bicycle- and vehicle-mounted components and roadside detection systems at selected conflict locations, supported by structured before/after evaluation. Importantly, the project will produce a replicable approach including site selection criteria, performance measures (e.g., surrogate safety measures such as time-to-collision and post-encroachment time), deployment considerations, and an implementation playbook that other regional member agencies can apply to accelerate improving road safety.

This application reflects strong interjurisdictional coordination and the unique capacity of MWCOG to convene transportation, public safety, and community partners across the region. The demonstration's commitment to responsible privacy and data governance (including limited data collection, de-identification to the maximum extent feasible, retention limits, and access controls) will help ensure the project can be implemented effectively and serve as a model for future connected safety deployments. By focusing on conflict-prone locations and engaging stakeholders this effort also supports safety outcomes for all road users.

For these reasons, ITS America strongly supports this MWCOG grant application and respectfully encourages the United States Department of Transportation (U.S. DOT) to give it full consideration. Thank you for your continued leadership and commitment to improving roadway safety nationwide.

Regards,



Laura D. Chace
President and CEO
ITS America