



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



William Cass, P.E.
Commissioner

David Rodrigue, P.E.
Assistant Commissioner

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The Honorable Ken Weyler, Chairman
Fiscal Committee of the General Court
State House
Concord, New Hampshire 03301

Division of Aeronautics, Rail, & Transit
July 15, 2025

Her Excellency, Governor Kelly A. Ayotte
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Pursuant to RSA 14:30-a, VI, authorize the New Hampshire Department of Transportation to accept and expend revenue in the amount of \$459,284 from a SMART (Strengthening Mobility and Revolutionizing Transportation) Grant from the United States Department of Transportation, Office of the Secretary, to purchase and upfit a Mobile Command Emergency Response Vehicle (MCERV) to expand the use of innovative aerial technology to improve disaster response and recovery efforts, and to document the status of transportation infrastructure during catastrophic events and emergencies statewide in New Hampshire, upon the date of Fiscal Committee and Governor and Council approval, through June 30, 2026. 100% Federal Funds.

In SFY 2026, funds shall be accepted and expended within 04-096-096-964010-2107, Aeronautics, as follows:

Table with 4 columns: Code, Current Budget FY2026, Requested Change, Revised Budget FY2026. Rows include Aeronautics Expenses: 010 500100 Personal Services Perm Class, 011 500126 Personnel Services-Unclassified, 017 500147 FT Employees Special Payments, 018 500106 Overtime, 019 500105 Holiday Pay, 020 500200 Current Expenses, 022 500255 Rents-Leases Other than State, 023 500291 Heat Electricity Water, 024 500228 Maint Other Than Build-Grn, 026 500251 Organizational Dues, 029 500290 Intra-Agency Transfers, 030 500311 Equipment New / Replace, 037 500173 Technology-Hardware, 038 500177 Technology-Software.

04-096-096-964010-21070000	Current Budget FY2026	Requested Change	Revised Budget FY2026
039 500188 Telecommunications	19,100	4,856	23,956
040 501587 Indirect Costs	111,050	0	111,050
050 500109 Personal Service-Temp/Appointed	70,198	0	70,198
057 500531 Books Periodicals Subscriptions	500	0	500
060 500601 Benefits	388,194	0	388,194
065 500541 Board Expenses	500	0	500
066 500546 Employee Training	900	0	900
070 500703 In State Travel Reimbursement	1,100	0	1,100
073 500581 Grants-Non-Federal	350,000	0	350,000
080 500713 Out of State Travel Reimbursement	6,050	0	6,050
081 509081 Out of State Travel Fed Reimb	54,817	5,778	60,595
Total Expenses	\$1,925,869	\$459,284	\$2,385,153
Source of Funds			
Revenue			
000 409151 Federal Funds	\$121,787	\$459,284	\$581,071
004 408189 Intra-Agency Transfer	167,135	0	167,135
009 407571 Agency Income	250,000	0	250,000
00S 000010 General Fund	1,386,947	0	1,386,947
Total Revenue	\$1,925,869	\$459,284	\$2,385,153

EXPLANATION

The Department requests authorization to accept and expend the proceeds from a Federal Grant.

The SMART (Strengthening Mobility and Revolutionizing Transportation) Grant from the United States Department of Transportation, Office of the Secretary, in the amount of \$459,284 will fund the purchase and upfit of a Mobile Command Emergency Response Vehicle (MCERV). The Bureau of Aeronautics' MCERV proposes to expand the use of emerging aerial technology to improve disaster response and recovery efforts and to monitor and document the status of transportation infrastructure during critical events and emergencies statewide in New Hampshire.

Project Funding - Mobile Command Emergency Response Vehicle (MCERV)

SMART Grant	<u>\$459,284.00</u>
Total Project Cost	\$459,284.00

Specific explanations relating to the Department's spending requests are as follows:

Aeronautics (AU 21070000) – 72.0% General Fund, 8.7% Intra Agency Transfers, 13.0% Agency Income, and 6.3% Federal Funds.

Class 020 Increase Current Expenses by \$10,613 to purchase supplies associated with the SMART grant project.

- Class 024 Increase Maint Other Than Build-Grn by \$1,206 to procure equipment installation services associated with the SMART grant project.
- Class 029 Increase Intra-Agency Transfers by \$100,405 to reimburse work done by other Bureaus, funded with Highway Funds within the Department on the SMART grant project.
- Class 030 Increase Equipment New/Replace by \$311,344 to purchase equipment associated with the SMART grant project.
- Class 037 Increase Technology-Hardware by \$4,439 to purchase computer hardware associated with the SMART grant project.
- Class 038 Increase Technology-Software by \$20,643 to purchase UAS processing software associated with the SMART grant project.
- Class 039 Increase Telecommunications by \$4,856 to purchase one (1) year of Starlink (internet) services associated with the SMART grant project.
- Class 081 Increase Out of State Travel Fed Reimb by \$5,778 to cover travel expenses associated with the SMART grant project.

In the event that Federal Funds become no longer available, General Funds will not be requested to support this program.

Your approval of this resolution is respectfully requested.

Sincerely,



William J. Cass, P.E.
Commissioner

Attachments

ASSISTANCE AGREEMENT

1. Award No. 69A3552541007		2. Modification No.		3. Effective Date 05/15/2025		4. CFDA No. 20.941	
5. Awarded To NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION Attn: JOAN E CASTEELLANO 7 HAZEN DR CONCORD NH 033016502			5. Sponsoring Office OFFICE OF THE SECRETARY Off of Asst Sec for Research & Tech 1200 New Jersey Avenue, East Building, 3rd Washington DC 20590			7. Period of Performance 05/15/2025 through 11/14/2026	
8. Type of Agreement <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other		9. Authority Pub. L. 117-58, November 15, 2021 IIJA Section 25005			10. Purchase Request or Funding Document No. OS2025R1SMG047		
11. Remittance Address NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION Attn: DEPARTMENT OF TRANSPORTATION 7 HAZEN DR PO BOX 483 CONCORD NH 033020483			12. Total Amount Govt. Share: \$459,284.00 Cost Share : \$0.00 Total : \$459,284.00		13. Funds Obligated This action: \$459,284.00 Total : \$459,284.00		
14. Principal Investigator CAROL L. NIEWOLA Phone: 603-271-1675		15. Program Manager THY H. NGUYEN Phone: 202-875-0520		16. Administrator OFFICE OF THE SECRETARY Off of Asst Sec for Research & Tech 1200 New Jersey Avenue, East Building, Washington DC 20590			
17. Submit Payment Requests To OST Delphi eInvoicing System https://einvoice.esc.gov			18. Paying Office OST Delphi eInvoicing System https://einvoice.esc.gov		19. Submit Reports To See Reporting Requirements Checklist attachment		
20. Accounting and Appropriation Data 1734X2400B.2025.POLX000GRT.54000SMART.41000.61006600.0000000000.0000000000.0000000000.0000000000							
21. Research Title and/or Description of Project Procuring & Evaluating Mobile Command Vehicles for Critical UAS Missions Statewide in New Hampshire							
For the Recipient				For the United States of America			
22. Signature of Person Authorized to Sign 				25. Signature of Grants/Agreements Officer THY HOANG NGUYEN Digitally signed by THY HOANG NGUYEN Date: 2025.05.13 13:56:22 -05'00'			
23. Name and Title Michelle L. Winters Director		24. Date Signed 06/25/25	26. Name of Officer THY H. NGUYEN		27. Date Signed		

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
69A3552541007

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NAME OF OFFEROR OR CONTRACTOR
NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00014	<p>UEI: DMA7LGZ3RMT1</p> <p>GRANT AGREEMENT UNDER THE FISCAL YEAR 2024 STRENGTHENING MOBILITY AND REVOLUTIONIZING TRANSPORTATION (SMART) GRANTS PROGRAM</p> <p>This agreement between the United States Department of Transportation (the USDOT) and the NH DOT reflects the selection of the Recipient to receive a Strengthening Mobility and Revolutionizing Transportation (SMART) Stage 1 Grant for the project entitled "Procuring & Evaluating Mobile Command Vehicles for Critical UAS Missions Statewide in New Hampshire".</p> <p>The Recipient therefore agrees to all applicable Federal Financial Assistance law and regulations, and award TERMS & CONDITIONS, as provided in the following attachments:</p> <ol style="list-style-type: none"> 1. DOT OST-R SMART Reporting Requirements Checklist May092025 2. DOT OST-R SMART Specific T&Cs Article 1-6 May092025 3. DOT OST-R SMART General T&Cs Article 7-30 May092025 4. DOT OST-R SMART Program Exhibits May092025 5. Letter to USDOT Financial Assistance Recipients April242025 <p>Prepay Indicate: NO</p> <p>NH DOT Obligated Amount: \$459,284.00</p> <p>The total amount of award: \$459,284.00. The obligation for this award is \$459,284.00.</p>				459,284.00

**U.S. DEPARTMENT OF TRANSPORTATION GRANT AGREEMENT UNDER THE FISCAL YEAR 2024
STRENGTHENING MOBILITY AND REVOLUTIONIZING TRANSPORTATION (SMART) GRANTS
PROGRAM**

SPECIFIC TERMS AND CONDITIONS ARTICLES 1-6

Version Date: May 9, 2025

ARTICLE 1 GENERAL TERMS AND CONDITIONS

1. In this agreement, “General Terms and Conditions” means the content of the document titled “General Terms and Conditions Under the Fiscal Year Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program,” dated May 9, 2025, which is available at <https://www.transportation.gov/grants/smart/smart-terms-and-conditions-0>.

Articles 7–30 are in the General Terms and Conditions. The General Terms and Conditions are part of this agreement.

2. The Recipient states that it has knowledge of the General Terms and Conditions. Recipient also states that it is required to comply with all applicable Federal laws and regulations including, but not limited to, the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (2 CFR part 200); National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.); and Build America, Buy America Act (IIJA, div. G §§ 70901-27).

3. The Recipient acknowledges that the General Terms and Conditions impose obligations on the Recipient and that the Recipient’s non-compliance with the General Terms and Conditions may result in remedial action, termination of the SMART Grant, disallowing costs incurred for the Project, requiring the Recipient to refund to the USDOT the SMART Grant, and reporting the non-compliance in the Federal-government-wide integrity and performance system.

ARTICLE 2 AWARD INFORMATION

1. Award Number: 69A3552541007
2. Award Amount: \$459,284
3. Budget Period: 5/15/2025 – 11/14/2026

ARTICLE 3 PROJECT INFORMATION

1. Project Title: Procuring & Evaluating Mobile Command Vehicles for Critical UAS Missions Statewide in New Hampshire
2. Period of Performance:

Effective date: 5/15/2025 End date: 11/14/2026

3. Statement of Work: This project will design and acquire a prototype mobile command unit in support of using unmanned aircraft systems (UAS) to address the inability to get real-time images and resource needs to transportation departments throughout New Hampshire during times of natural disasters and transportation emergencies.
4. Additional information: See Proposal and the FINAL Budget and Budget Justification documents, as provided by the Recipient and are located in the Supporting Docs folder in PRISM.

ARTICLE 4 RECIPIENT INFORMATION

1. Recipient Unique Entity Identifier: DMA7LGZ3RMT1

2. Recipient Contact(s):

Name: Jason Leavitt
Title: UAS Planner
Phone: 603-271-7396
Email: jason.r.leavitt@dot.nh.gov

Name: Danielle Hutchinson
Title: Aviation Program Supervisor
Phone: 603-271-1094
Email: danielle.r.hutchinson@dot.nh.gov

Name: Thomas Scott Martin
Title: Budget & Grants Administrator
Phone: 603-271-9701
Email: thomas.s.martin@dot.nh.gov

3. Recipient Key Personnel/ Principal Investigator

Name: Carol L. Niewola
Title: Senior Aviation Planner
Phone: 603-271-1675
Email: carol.l.niewola@dot.nh.gov

4. USDOT SMART Contact(s)

Name: Alfreda Johnson
Title: Grants Management Specialist
Phone: 202- 658-9917
Email: alfreda.johnson@dot.gov

Thy H. Nguyen
Agreements Officer
202-875-0520
thy.nguyen@dot.gov

ARTICLE 5 US DOT ADMINISTRATIVE INFORMATION

- 5.1 Office for Subaward and Contract Authorization.

- a) USDOT Office for Subaward and Contract Authorization: Office of the Assistant Secretary for Research and Technology SUBAWARDS AND CONTRACTS APPROVAL.

Note: See 2 CFR §200.331, Subrecipient and contractor determinations, for definitions of subrecipient (who is awarded a subaward) versus contractor (who is awarded a contract).

Recipients with a procurement system deemed approved and accepted by the Government or by the Awarding Office (AO) are exempt from the requirements of this clause. See 2 CFR 200.317 through 200.327.

- b) Unless described in the application and funded in the approved award, the Recipient must obtain prior written approval from the AO for the subaward, transfer, or contracting out of any work under this award above the Simplified Acquisition Threshold. This provision does not apply to the procurement of goods and services. Approval of each subaward or contract is contingent upon the Recipient's submittal of a written fair and reasonable price determination, and approval by the AO for each proposed contractor/sub-recipient. Consent to enter into subawards or contracts will be issued through written notification from the AO or a formal amendment to the Agreement.
- c) The following subawards and contracts are currently approved under the Agreement by the AO. This list does not include supplies, material, equipment, or general support services which are exempt from the pre-approval requirements of this clause.

***See FINAL Budget and FINAL Budget Justification located in PRISM*

5.2 Reimbursement Requests

- a) The Recipient may request reimbursement of costs incurred in the performance of this agreement if those costs do not exceed the funds available and are allowable under the applicable cost provisions of 2 CFR Part 200, Subpart E. The Recipient shall not request reimbursement more frequently than monthly.
- b) The Recipient shall use the DELPHI e-Invoicing System to submit requests for reimbursement to the payment office. When requesting reimbursement of costs incurred or credit for cost share incurred, the Recipient shall electronically submit supporting cost detail with the SF-270 (Outlay Report and Request for Reimbursement for Non-Construction Programs) or SF-271 (Outlay Report and Request for Reimbursement for Construction Programs) to clearly document all costs incurred.
- c) The Recipient's supporting cost detail shall include a detailed breakout of all costs incurred, including direct labor, indirect costs, other direct costs, travel, etc., and the Recipient shall identify the Federal share and the Recipient's share of costs. If the

Recipient does not provide sufficient detail in a request for reimbursement, the AO may withhold processing that request until the Recipient provides sufficient detail.

- d) The USDOT shall not reimburse costs unless the Agreement Officer's Representative (the "AOR") reviews and approves the costs to ensure that progress on this agreement is sufficient to substantiate payment.
- e) The USDOT may waive the requirement in section 19.7(a) that the Recipient use the DELPHI e-Invoicing System. The Recipient may obtain waiver request forms on the DELPHI e-Invoicing website (<http://www.dot.gov/cfo/delphi-einvoicing-system>) or by contacting the AO. A Recipient who seeks a waiver shall explain why they are unable to use or access the Internet to register and enter payment requests and send a waiver request to:

Director of the Office of Financial Management US Department of Transportation,
Office of Financial Management B-30, Room W93-431 1200 New Jersey Avenue SE
Washington DC 20590-0001 or DOTElectronicInvoicing@dot.gov.

- f) To seek reimbursement from DOT, the Recipient shall submit documentary evidence of all expenditures associated with the Grant Project (those to be covered by the local and/or state contribution, as well as those covered by the Federal contribution) on a monthly basis. All reimbursement requests to DOT shall include sufficient documentation to justify reimbursement of the Recipient, including invoices and proof of payment of the invoice. In seeking reimbursements, grant recipients must provide invoices or other evidence of the expenditure, details about the expenditure and how it relates to the grant project, and evidence of payment.

The requirements set forth in these terms and conditions supersede previous financial invoicing requirements for Recipients.

ARTICLE 6 SPECIAL GRANT TERMS

- 6.1 SMART funds must be expended by the budget period end date as specified in Article 10.3 of the "General Terms and Conditions Articles 7-30".
- 6.2 The Recipient should demonstrate compliance with civil rights obligations and nondiscrimination laws, including Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act, and implementing regulations, and 49 CFR Part 21, as amended thereto. This should include a current Title VI plan, completed Community Participation Plan, and a plan to address any legacy infrastructure or facilities that are not compliant with ADA standards. The Department's and the applicable Operating Administrations' Offices of Civil Rights may work with awarded grant recipients to ensure full compliance with Federal civil rights requirements.

ATTACHMENT A Performance Measurement Information

1. Baseline Measurement Date: Due 90 days after award
2. Baseline Report Date ('Evaluation Plan'): Due 90 days after award

Table 1: Performance Measure Table

Measure	Category and Description	Measurement Frequency
Safety and Reliability	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on emergency response and the safety of systems for pedestrians, bicyclists, and the broader traveling public	End of period of performance
Resiliency	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on the reliability and resiliency of the transportation system including cybersecurity.	End of period of performance
Access	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on connecting or expanding access to jobs, education, and essential services.	End of period of performance
Partnerships	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on the economic competitiveness and private sector investments or partnerships including technical and financial commitments	End of period of performance
Integration	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on the integration of systems and the connectivity of infrastructure, connected vehicles, pedestrians,	End of period of performance

	bicyclists, and the broader traveling public	
Costs	Project Costs: Quantification of the cost of the proof-of-concept or prototype carried out using the grant (Stage 1)	End of period of performance
Costs	Project Costs: Quantification of the anticipated cost of at-scale implementation (Stage 2)	End of period of performance
Lessons Learned and Recommendations	Lessons Learned and Recommendations: Description of lessons learned and recommendations for future deployment strategies	End of period of performance

ATTACHMENT B Changes From Application

INSTRUCTIONS FOR COMPLETING ATTACHMENT B: Describe all material differences between the scope, schedule, and budget described in the application and the scope, schedule, and budget described in Article 3. The purpose of this attachment B is to document the differences clearly and accurately in scope, schedule, and budget to establish the parties' knowledge and acceptance of those differences.

1. *Scope*
2. *Schedule:*
3. *Budget: See the FINAL Budget and FINAL Budget Justification in the Supporting Docs folder in PRISM*

ATTACHMENT C Reserved

ATTACHMENT D Reserved

ATTACHMENT E Labor and Workforce

Efforts to Support Good-Paying Jobs and Strong Labor Standards

The Recipient states that rows marked with "X" in the following (table) are accurate:

The Recipient or a project partner promotes robust job creation by supporting good-paying jobs directly related to the project with free and fair choice to join a union. (Describe robust job creation and identify the good-paying jobs in the supporting narrative below.)

The Recipient or a project partner will invest in high-quality workforce training programs such as registered apprenticeship programs to recruit, train, and retain skilled workers, and implement policies such as targeted hiring preferences. (Describe the training programs in the supporting narrative below.)

The Recipient or a project partner will partner with high-quality workforce development programs with supportive services to help train, place, and retain workers in good-paying jobs or registered apprenticeships including through the use of local and economic hiring preferences, linkage agreements with workforce programs, and proactive plans to prevent harassment. (Describe the supportive services provided to trainees and employees, preferences, and policies in the supporting narrative below.)

The Recipient or a project partner will partner and engage with local unions or other worker-based organizations in the development and lifecycle of the project, including through evidence of project labor agreements and/or community benefit agreements. (Describe the partnership or engagement with unions and/or other worker-based organizations and agreements in the supporting narrative below.)

The Recipient or a project partner will partner with communities or community groups to develop workforce strategies. (Describe the partnership and workforce strategies in the supporting narrative below.)

The Recipient or a project partner has taken other actions related to the Project to create good-paying jobs with the free and fair choice to join a union and incorporate strong labor standards. (Describe those actions in the supporting narrative below.)

The Recipient or a project partner has not yet taken actions related to the Project to create good-paying jobs with the free and fair choice to join a union and incorporate strong labor standards but, before beginning construction of the Project, will take relevant actions described in Article 3. (In the supporting narrative below, identify the relevant actions from Article 3.)

The Recipient or a project partner has not taken actions related to the Project to improve good-paying jobs and strong labor standards and will not take those actions under this award.

Supporting Narrative:

[Recipient- Insert supporting text on last page as described in the table above.]

ATTACHMENT F: Reserved

Recipient Narrative - Labor and Workforce:

The "Mobile Command Vehicle for Critical UAS Missions Statewide" project is designed to not only enhance the ability to document New Hampshire's transportation infrastructure following natural disasters and other critical transportation events, but also to contribute positively to the local economy by supporting the creation of good-paying jobs that adhere to strong labor standards. As the project progresses, it aims to foster a work environment that upholds the principles of fair compensation, worker rights, and equal opportunities for all employees involved.

Job Creation and Union Support

The project emphasizes creating high-quality technical employment opportunities by prioritizing jobs that offer competitive wages and benefits consistent with or exceeding prevailing standards. By engaging in project labor agreements and encouraging union participation, the initiative ensures that workers have the free and fair choice to join a union, thereby promoting collective bargaining and enhancing worker representation. This approach not only protects worker rights but also fosters a collaborative work environment that is conducive to productivity and innovation.

Workforce Development and Inclusion

To further strengthen its commitment to labor standards, the project incorporates registered apprenticeship programs and pre-apprenticeships that provide pathways to skilled employment. These programs are designed to equip workers with the necessary skills and knowledge to excel in their roles, ensuring a well-trained workforce that meets the demands of modern transportation systems. The project also prioritizes workforce development programs aimed at historically under-represented groups, providing opportunities for these individuals to gain employment in high-demand fields and contribute to the local economy.

By investing in workforce development and supporting the creation of good-paying jobs with robust labor standards, the project not only enhances the quality of New Hampshire's transportation infrastructure but also contributes to a more equitable and prosperous economy. This commitment to fair labor practices and inclusivity ensures that the benefits of the project are widely distributed, supporting the community's economic growth and stability. Overall, the project serves as a model for integrating strong labor standards into infrastructure support, demonstrating a holistic approach to economic and social progress.

U.S. DEPARTMENT OF TRANSPORTATION

**GENERAL TERMS AND CONDITIONS UNDER THE STRENGTHENING MOBILITY AND
REVOLUTIONIZING TRANSPORTATION (SMART) GRANT PROGRAM**

**GENERAL TERMS AND CONDITIONS Articles 7-30
Version Date: May 9, 2025**

The Infrastructure Investment and Jobs Act (IIJA) (Pub. L. 117–58, November 15, 2021) established the Strengthening Mobility and Revolutionizing Transportation (**SMART**) Discretionary Grant Program (IIJA Section 25005) and appropriated additional funds to the United States Department of Transportation (the “**USDOT**”) under Division J, Title VIII of IIJA to implement the program. The funds are available to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety. The program funds projects that are focused on using technology interventions to solve real-world challenges and build data and technology capacity and expertise in the public sector.

The USDOT published a Notice of Funding Opportunity (the “**NOFO**”) to solicit applications for Federal Financial assistance for the **SMART** program.

These general terms and conditions are incorporated by reference in a project-specific Financial Assistance agreement under the SMART Grants Program. The project specific portion of the agreement can be found in the document titled “Specific Terms and Conditions Articles 1-6”. The term “Recipient” is defined in the project-specific portion of the agreement. Attachments A through F in Article 6 of that document are project-specific attachments.

ARTICLE 7 PURPOSE

7.1 Purpose.

The purpose of this award is to is to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety. The program funds projects that are focused on using technology interventions to solve real-world challenges and build data and technology capacity and expertise in the public sector. The parties will accomplish that purpose by achieving the following objectives:

- a) timely completing the Project; and
- b) ensuring that this award does not substitute for non-Federal investment in the Project, except as proposed in the Grant Application, as modified by Attachment B in Article 6 of the Specific Terms and Conditions Articles 1-6.

ARTICLE 8 USDOT ROLE

8.1 Division of USDOT Responsibilities.

The Office of the Secretary of Transportation—Research and Technology (OST-R) is ultimately responsible for the USDOT’s administration of the SMART Grant Program.

8.2 USDOT Program Contacts.

U.S. Department of Transportation
Office of the Assistant Secretary for Research and Technology
1200 New Jersey Avenue, SE
Washington, DC 20590 SMART@dot.gov

ARTICLE 9 RECIPIENT ROLE

9.1 Statements on the Project

The Recipient states that:

- a) all material statements of fact in the Grant Application were accurate when the application was submitted; and
- b) Attachment B of Article 6 in the Specific Terms and Conditions Articles 1-6 documents all material changes in the information contained in that application.

9.2 Statements on Authority and Capacity

The Recipient states that:

- a) it has the authority to receive Federal Financial Assistance under this agreement, and it has the legal authority to complete the Project
- b) it has the capacity, including institutional, managerial, and financial capacity, to comply with its obligations under this agreement
- c) not less than the difference between the “Total Eligible Project Cost” and the SMART “Award Amount” listed in Article 2 of the Specific Terms and Conditions Articles 1-6 are committed to fund the Project
- d) the individual executing this agreement on behalf of the Recipient has authority to enter this agreement and make the statements in this Article 9 and in Article 24.7 on behalf of the Recipient.

9.3 USDOT Reliance

The Recipient acknowledges that:

- a) the USDOT relied on statements of fact in the Grant Application to select the Project to receive this award
- b) the USDOT relied on statements of fact in both the Grant Application and this agreement to determine that the Recipient and the Project are eligible under the terms of the NOFO
- c) the USDOT relied on statements of fact in both the Grant Application and this agreement to establish the terms of this agreement; and
- d) the USDOT's selection of the Project to receive this award prevented awards under the NOFO to other eligible applicants.

9.4 Project Delivery

- a) the Recipient shall complete the Project under the terms of this agreement
- b) The Recipient shall ensure that the Project is financed, constructed, operated, and maintained in accordance with all applicable Federal laws, regulations, and policies
- c) the Recipient shall provide any certifications or assurances deemed necessary by the USDOT in ensuring the Recipient's compliance with all applicable laws, regulations, and policies
- d) the Recipient shall provide access to records as provided at 2 CFR 200.337.

9.5 Rights and Powers Affecting the Project

- a) the Recipient shall not take or permit any action that deprives it of any rights or powers necessary to the Recipient's performance under this agreement without written approval of the USDOT
- b) the Recipient shall act, in a manner acceptable to the USDOT, promptly to acquire, extinguish, or modify any outstanding rights or claims of right of others that would interfere with the Recipient's performance under this agreement
- c) the Recipient shall ensure that the funds provided by USDOT are not misappropriated or misdirected to any other account, need, project, line-item, or the like.

9.6 Notification of Changes to Key Personnel.

The Recipient shall notify all USDOT representatives who are identified in section 4 of Article 4 in the Specific Terms and Conditions Articles 1-6 in writing within 30 calendar days of any change in key personnel who are identified in section 3 of Article 4.

ARTICLE 10 AWARD AMOUNT, OBLIGATION, AND TIME PERIODS

10.1 Federal Award Amount

The USDOT hereby awards to the Recipient the amount listed in section 2 of Article 2 in the Specific Terms and Conditions Articles 1-6 as the SMART Grant amount.

10.2 Federal Obligations.

This agreement obligates funds for the Period of Performance listed in section 2 of Article 3 in the Specific Terms and Conditions Articles 1-6.

10.3 Budget Period

The Budget Period for this award begins on the date of this agreement and ends on the budget period end date as specified in section 3 of Article 2 in the Specific Terms and Conditions Articles 1-6.

In this agreement, "Budget Period" is used as defined at 2 CFR 200.1.

10.4 Period of Performance

This award begins on the "Effective date" and ends on the "End date" as specified in section 2 of Article 3 in the Specific Terms and Conditions Articles 1-6.

In this agreement, "Period of Performance" is used as defined at 2 CFR 200.1.

ARTICLE 11 STATEMENT OF WORK, SCHEDULE, AND BUDGET CHANGES

11.1 Notification Requirement

The Recipient shall notify all USDOT representatives who are identified in section 4 of Article 4 in the Specific Terms and Conditions Articles 1-6 in writing within 30 calendar days of any change in circumstances or commitments that adversely affect the Recipient's plan to complete the Project. In that notification, the Recipient shall describe the change and what actions the Recipient has taken or plans to take to ensure completion of the Project.

11.2 Statement of Work Changes

If the Project's activities differ from the statement of work that is described in section 3 of Article 3 and Attachment B of Article 6 in the Specific Terms and Conditions Articles 1-6, then the Recipient shall request an amendment of this agreement.

11.3 Schedule Changes

If one or more of the following conditions are satisfied, then the Recipient shall request an amendment of this agreement:

- a) a substantial completion date for the Project or a component of the Project

- b) a schedule change would require the Period of Performance to continue after the period of performance end date listed in Section 2 of Article 3 in the Specific Terms and Conditions Articles 1-6.

For other schedule changes, the Recipient shall request an amendment of this agreement unless the USDOT has consented, in writing consistent with applicable requirements, to the change.

11.4 Budget Changes

- a) the Recipient acknowledges that if the cost of completing the Project increases:
 - 1. that increase does not affect the Recipient's obligation under this agreement to complete the Project
 - 2. the USDOT will not increase the amount of this award to address any funding shortfall
- b) For budget changes, the Recipient shall request an amendment of this agreement to update section 2 of Article 2 unless the USDOT has consented, in writing consistent with applicable requirements, to the change.
- c) If the actual eligible project costs are less than the "Total Eligible Project Cost" that is listed in section 2 of Article 2 in the Specific Terms and Conditions Articles 1-6, the Recipient may propose to the USDOT, in writing consistent with applicable requirements, specific additional activities that are within the scope of this award, as defined in section 1 of Article 7.
- d) If the actual eligible project costs are less than the "Total Eligible Project Cost" and the Recipient does not make a proposal in accordance with the guidance in Article 11 or the USDOT does not accept the Recipient's proposal, then:
 - 1. in a request accordance with section 11.4(b), the Recipient shall reduce the Federal Share by the difference between the "Total Eligible Project Cost" and the actual eligible project costs; and
 - 2. if that amendment reduces this award and the USDOT had reimbursed costs exceeding the revised award, the Recipient shall request to add additional project work that is within the scope of this project.

In this agreement, "Federal Share" means the sum of the "SMART Action Plan or Implementation Grant Amount" and the "Other Federal Funds" amounts that are listed in section 2 of Article 2 in the Specific Terms and Conditions Articles 1-6.

- a) The Recipient acknowledges unexpended amounts are required to be refunded, and constitute a debt to the Federal Government that the USDOT may collect under 2 CFR 200.346 and the Federal Claims Collection Standards (31 CFR parts 900-999)

- b) The Recipient shall ensure compliance with Federal regulations requiring conduct of a Federally approved audit of any expenditure of funds of \$750,000 or more in a year in Federal awards.

11.5 USDOT Acceptance of Changes

The USDOT may accept or reject amendments requested under this Article 11, and in doing so may elect to consider only the interests of the SMART grant program and the USDOT. The Recipient acknowledges that requesting an amendment under this Article 11 does not amend, modify, or supplement this agreement unless the USDOT accepts that amendment request and the parties modify this agreement per guidance provided in Article 21, Agreement Modifications.

ARTICLE 12 GENERAL REPORTING TERMS

12.1 Report Submission

The Recipient shall send all reports required by this agreement in accordance with the instructions provided in the SMART Reporting Requirements Checklist.

12.2 Paperwork Reduction Act Notice

Under 5 CFR 1320.6, the Recipient is not required to respond to a collection of information that does not display a currently valid control number issued by the Office of Management and Budget (the "OMB"). Collections of information conducted under this agreement are approved under OMB Control No. 2105-0520.

ARTICLE 13 PROGRESS AND FINANCIAL REPORTING

13.1 Quarterly Program Performance Reports

The recipient shall submit to USDOT Quarterly Project Progress Reports in the format and with the content described in Exhibit C of the Program Exhibits attachment.

Due dates for reporting periods are **3/31, 6/30, 9/30, or 12/31**, regardless of budget period start dates. Recipients shall submit quarterly reports no later than **30 days after** the end of the reporting period. Annual reports are due no later than **90 days after** the end of the reporting period.

13.2 Quarterly Financial Status

Recipient shall submit a Federal Financial Report using SF- 425 in accordance with specified due dates.

ARTICLE 14 PERFORMANCE REPORTING

14.1 Evaluation and Data Management Plans

The Recipient shall submit to the USDOT, no later than **90 days after** receiving the award, a report that provides an overview of how the project will be evaluated ('Evaluation Plan') and a report that describes how the data collected will be managed and stored ('Data management Plan') including:

- a) an overview of how the proof-of-concept or prototype will be evaluated and how the data collected will be managed and stored
- b) a description of the anticipated impact areas (i.e. goals) of the project if implemented at scale and the methods that will be used to estimate the anticipated benefits and costs associated with implementation
- c) robust performance metrics and measurable targets based on the project goals to inform whether the proof-of-concept or prototype meets expectations and whether full implementation would meet program goals, and
- d) the baseline data for each performance measure that is identified in the Performance Measure Table in Attachment A of Article 6, accurate as of the Baseline Measurement Date that is identified in Attachment A and a detailed description of the data sources, assumptions, variability, and estimated levels of precision for each performance measure that is identified in the Performance Measure Table in Attachment A.

Guidance on the preparation and submission of each of these reports is available on the SMART Grants website under 'Resources for all Grantees'.

14.2 Implementation Report

The Recipient shall submit to the USDOT, not later than **1 year after** receiving the grant award, a report that describes, consistent with section 25005(f) of IJA:

- a) the deployment and operational costs of the project, as compared to the benefits and savings from the project
- b) the means by which the project has met the original expectation, as projected in the SMART grant application, including data describing the means by which the project met the specific goals for the project
- c) lessons learned and recommendations for future deployment strategies to optimize transportation efficiency and multimodal system performance
- d) a description of the requirements for a successful at-scale deployment, an assessment of the feasibility of at-scale implementation, and an analysis of the success, challenges, and validity of the initial approach

- e) the performance measurement data for each performance measure that is identified in the Performance Measure Table in Attachment A of Article 6 in the Specific Terms and Conditions Articles 1-6.

*****Implementation Report. A final version of this report is due at the end of the Period of Performance.***

14.3 Performance Reporting Survival

The data collection and reporting requirements in this Article 14 survive three years post period of performance.

14.4 Program Evaluation

As a condition of grant award, the recipient may be required to participate in an evaluation undertaken by USDOT, or another agency or partner. The evaluation may take different forms such as an implementation assessment across Grant recipients, an impact and/or outcomes analysis of all or selected sites within or across grant recipients, or a benefit/cost analysis or assessment of return on investment. The Department may require applicants to collect data elements to aid the evaluation. As a part of the evaluation, as a condition of award, grant recipients must agree to: (1) make records available to the evaluation contractor or USDOT staff; (2) provide access to program records, and any other relevant documents to calculate costs and benefits; (3) in the case of an impact analysis, facilitate the access to relevant information as requested; and (4) follow evaluation procedures as specified by the evaluation contractor or USDOT staff.

ARTICLE 15 NONCOMPLIANCE AND REMEDIES

15.1 Noncompliance Determinations

- a) If the USDOT determines that the Recipient may have failed to comply with the United States Constitution, Federal law, or any of the Terms and Conditions of this agreement, the USDOT may notify the Recipient of a proposed determination of noncompliance. For the notice to be effective, it must be written and the USDOT must include an explanation of the nature of the noncompliance, describe a remedy, state whether that remedy is proposed or effective at an already determined date, and describe the process through and form in which the Recipient may respond to the notice.
- b) If the USDOT notifies the Recipient of a proposed determination of noncompliance, the Recipient may, no later than 7 calendar days after the notice, respond to that notice in the form and through the process described in that notice. In its response, the Recipient may:
 - 1. accept the remedy
 - 2. acknowledge the noncompliance, but propose an alternative remedy; or

3. dispute the noncompliance.

**To dispute the noncompliance, the Recipient must include in its response documentation or other information supporting the Recipient's compliance.

- c) The USDOT may make a final determination of noncompliance only:
 - 1. after considering the Recipient's response in accordance 15.1(b);
 - 2. if the Recipient fails to respond under in accordance with 15.1(b), after the time for that response has passed.
- d) To make a final determination of noncompliance, the USDOT must provide a notice to the Recipient that states the bases for that determination.

15.2 Remedies.

- a) If the USDOT makes a final determination of noncompliance under in accordance with 15.1(d), the USDOT may impose a remedy, including:
 - 1. additional conditions on the award
 - 2. any remedy permitted under 2 CFR 200.339–200.340, including withholding of payments, disallowance of previously reimbursed costs, requiring refunds from the Recipient to USDOT; suspension or termination of the award; or suspension and disbarment under 2 CFR part 180
 - 3. requiring refunds from the Recipient to USDOT; suspension or termination of the award; or suspension and disbarment under 2 CFR part 180; or
 - 4. any other remedy legally available.
- b) To impose a remedy, the USDOT must provide a written notice to the Recipient that describes the remedy, but the USDOT may make the remedy effective before the Recipient receives that notice.
- c) If the USDOT determines that it is in the public interest, the USDOT may impose a remedy, including all remedies described in section 15.2(a), before making a final determination of noncompliance under section 15.1(d). If it does so, then the notice provided under section 15.1(d) must also state whether the remedy imposed will continue, be rescinded, or modified.
- d) In imposing a remedy or making a public interest determination under section 15.2, USDOT may elect to consider the interests of only the USDOT
- e) The Recipient acknowledges that amounts that the USDOT requires the Recipient to refund to the USDOT due to a remedy under section 15.2 constitute a debt to the Federal Government that the USDOT may collect under 2 CFR 200.346 and the Standards for Administrative Collection of Claims Federal Claims Collection Standards (31 CFR Part 901).

15.3 Other Oversight Entities

Nothing in this Article 15 limits any party's authority to report activity under this agreement to the United States Department of Transportation Inspector General or other appropriate oversight entities.

ARTICLE 16 AGREEMENT TERMINATION

16.1 USDOT Termination

- a) The USDOT may terminate this agreement and all of its obligations under this agreement if any of the following occurs:
1. Recipient fails to meet any milestone by six months
 2. the Recipient fails to comply with the Terms and Conditions of this agreement, including a material failure to comply, even if it is beyond the reasonable control of the Recipient; or
 3. the USDOT determines that termination of this agreement is in the public interest.
 4. the Recipient fails to expend the funds within 2 years after the date on which the government executes the grant agreement, which is the date funds are provided for the project.
- b) In terminating this agreement under this section, the USDOT may elect to consider only the interests of the USDOT.
- c) This section 16.1 does not limit the USDOT's ability to terminate this agreement as a remedy under section 15.2.
- d) The Recipient may request that the USDOT terminate the agreement.

16.2 Closeout Termination

- a) This agreement terminates on Project Closeout.
- b) In this agreement, "Project Closeout" means the date that the USDOT notifies the Recipient that the award is closed out. Under 2 CFR 200.344, Project Closeout should occur no later than one year after the end of the Period of Performance.

16.3 Post-Termination Adjustments

The Recipient acknowledges that under 2 CFR 200.345–200.346, termination of the agreement does not extinguish the USDOT's authority to disallow costs, including costs that USDOT reimbursed before termination, and recover funds from the Recipient.

16.4 Non-Terminating Events

- e) The end of the Period of Performance does not terminate this agreement or the Recipient's obligations under this agreement.
- f) The liquidation of funds as specified in section 1 of Article 20 does not terminate this agreement or the Recipient's obligations under this agreement.

16.5 Other Remedies.

The termination authority under this Article 16 supplements and does not limit the USDOT's remedial authority under Article 15 or 2 CFR Part 200, including 2 CFR 200.339–200.340.

ARTICLE 17 MONITORING, FINANCIAL MANAGEMENT, CONTROLS, AND RECORDS

17.1 Recipient Monitoring and Record Retention

- a) The Recipient shall monitor activities under this award, including activities under subawards and contracts, to ensure:
 - 1. that those activities comply with this agreement
 - 2. that funds provided under this award are not expended on costs that are not allowable under this award or not allocable to this award.
- b) If the Recipient makes a subaward under this award, the Recipient shall monitor the activities of the subrecipient in compliance with 2 CFR 200.332(e).
- c) The Recipient shall retain records relevant to the award as required under 2 CFR 200.334.

17.2 Financial Records and Audits

- a) the Recipient shall keep all project accounts and records that fully disclose the amount and disposition by the Recipient of the award funds, the total cost of the Project, and the amount or nature of that portion of the cost of the Project supplied by other sources, and any other financial records related to the project.
- b) the Recipient shall keep accounts and records described in section 17.2(a) in accordance with a financial management system that meets the requirements of 2 CFR 200.301–200.307, 2 CFR Part 200 subpart F, will facilitate an effective audit in accordance with 31 U.S.C. 7501–7506
- c) the Recipient shall separately identify expenditures under the SMART program, a grants program in financial records required for audits under 31 U.S.C. 7501–7506. Specifically, the Recipient shall:

1. list expenditures under that program separately on the schedule of expenditures of Federal awards required under 2 CFR Part 200, subpart F, including "DOT SMART" in the program name; and
2. list expenditures under that program on a separate row under Part II, Item 1 ("Federal Awards Expended During Fiscal Period") of Form SF-SAC, including "DOT SMART" in column c ("Additional Award Identification").

17.3 Internal Controls.

The Recipient shall establish and maintain internal controls as required under 2 CFR 200.303.

17.4 USDOT Record Access

The USDOT may access Recipient records related to this award under 2 CFR 200.337.

ARTICLE 18 CONTRACTING AND SUBAWARDS

For domestic sourcing compliance purposes and to ensure proper procurement, recipients shall coordinate with the SMART Program office to identify if their project is considered an Infrastructure project. If USDOT determines that a project is a "project for infrastructure," the recipient will comply with Build America Buy America requirements. If USDOT determines that a project is not a "project for infrastructure," the recipient will comply with Buy American Act requirements. The Recipient may participate in planning activities before project identification, as long as it does not include the purchasing of physical materials or a commitment to do so.

18.1 Build America, Buy America.

This award term implements § 70914(a) of the Build America, Buy America Act, Pub. L. No. 117-58, div. G, tit. IX, subtitle A, 135 Stat. 429, 1294 (2021), and Office of Management and Budget (OMB) Memorandum M-24-02, "Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure."

For BABA compliance purposes and to ensure proper procurement, recipients shall coordinate with the SMART Program office to identify if their project is considered an Infrastructure project. If USDOT determines that a project is a "project for infrastructure," the recipient will comply with Build America Buy America requirements. If USDOT determines that a project is not a "project for infrastructure," the recipient will comply with Buy American Act requirements. The Recipient may participate in planning activities before project identification, as long as it does not include the purchasing of physical materials or a commitment to do so.

Requirement to Use Iron, Steel, Manufactured Products, and Construction Materials Produced in the United States.

The Recipient shall not use funds provided under this award for a project for infrastructure unless:

- a) all iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States
- b) all manufactured products used in the project are produced in the United States— this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product; and
- c) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

Inapplicability

The domestic content procurement preference in this award term only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

Waivers

When necessary, the Recipient may apply for, and the USDOT may grant, a waiver from the domestic content procurement preference in this award term.

A request to waive the application of the domestic content procurement preference must be in writing. The USDOT will provide instructions on the waiver process and on the format, contents, and supporting materials required for any waiver request. Waiver requests are subject to public comment periods of no less than 15 days and must be reviewed by the Office of Management and Budget (OMB) Made in America Office.

When the USDOT has made a determination that one of the following exceptions applies, the awarding official may waive the application of the domestic content procurement preference in any case in which the USDOT determines that:

- a) applying the domestic content procurement preference would be inconsistent with the public interest
- b) the types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality

- c) the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

There may be instances where an award qualifies, in whole or in part, for an existing waiver described at <https://www.transportation.gov/office-policy/transportation-policy/made-in-america>.

Definitions

“Construction materials” means articles, materials, or supplies that consist of only one of the items listed in paragraph (1) of this definition, except as provided in paragraph (2) of this definition. To the extent one of the items listed in paragraph (1) contains as inputs other items listed in paragraph (1), it is nonetheless a construction material:

- (i) Non-ferrous metals
- (ii) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
- (iii) Glass (including optic glass)
- (iv) Fiber optic cable (including drop cable)
- (v) Optical fiber
- (vi) Lumber
- (vii) Engineered wood
- (viii) Drywall

“Predominantly of iron or steel” means that the cost of the iron and steel content in the article, material, or supply exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.

“Infrastructure Project” means any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States regardless of whether infrastructure is the primary purpose of the project.

“Project” means the construction, alteration, maintenance, or repair of infrastructure in the United States.

- a) Construction materials used in the Project are subject to the domestic preference requirement at § 70914 of the Build America, Buy America Act, Pub. L. No. 117- 58, div. G, tit. IX, subtit. A, 135 Stat. 429, 1294 (2021), as implemented by OMB, USDOT, and OST. The Recipient acknowledges that this agreement is neither a waiver of § 70914(a) nor a finding under § 70914(b).
- b) Under 2 CFR 200.322, as appropriate and to the extent consistent with law, the Recipient should, to the greatest extent practicable under this award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United

States. The Recipient shall include the requirements of 2 CFR 200.322 in all subawards including all contracts and purchase orders for work or products under this award.

18.2 Buy American Act

The Recipient shall apply, comply with, and implement all provisions of the Buy American Act, 41 U.S.C. §§ 8301-8305.

For the purpose of Article 18 of this agreement, the Project is deemed a public work of the Federal Government under 41 U.S.C. § 8301.

Article 18 implements 41 U.S.C. §§ 8301-8305, the Buy American Act, by providing a preference for domestic construction material.

The Recipient shall not use foreign construction materials in performing this agreement, except that:

- a) the Recipient may use a commercially available off-the-shelf item under 41 U.S.C. § 1907 regardless of its components if the item is manufactured in the United States
- b) the Recipient may use information technology that is a commercial item
- c) the Recipient may use foreign construction materials that are listed at 48 CFR 25.104
- d) the Recipient may use foreign construction materials if the USDOT has authorized their use under subsection (d) of Article 18.

If the Recipient uses foreign construction material in violation of Article 18, the USDOT may disallow and deny reimbursement of costs incurred by the Recipient and take other remedial actions under Article 15 and 2 CFR 200.339.

- a) The USDOT may authorize the Recipient to use foreign construction material, if the USDOT determines that:
 - 1. applying the Buy American statute to the construction material would be impracticable or inconsistent with the public interest
 - 2. the construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality
 - 3. the cost of domestic construction material is unreasonable. To determine if a cost is unreasonable, the USDOT will follow processes described in 48 CFR 25.106.

The Recipient may request that the USDOT authorize the Recipient to use foreign construction materials. The Recipient shall provide adequate information for the USDOT to evaluate the request, including:

- a) a description of the foreign and domestic construction materials
- b) unit of measure
- c) quantity
- d) price, including all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued)
- e) time of delivery or availability
- f) location of the construction project
- g) name and address of the proposed supplier
- h) a detailed justification of the reason for use of foreign construction materials identifying the specific basis for an exception under subsection (d) of this term
- i) if the Recipient requests authorization under subsection (d)(3) of Article 18, a reasonable survey of the market and a full price comparison measuring the relative costs of the available domestic and foreign construction materials; and
- j) if the Recipient submits the request after contract award, an explanation why the Recipient could not have, before contract award:
 - 1. reasonably foreseen the need for the determination and
 - 2. requested the determination.

The Recipient acknowledges that:

- a) this agreement is not a Government procurement contract
- b) acquisitions of supplies, services, or construction materials by the Recipient under this agreement are not acquisitions by the Government
- c) the Free Trade Agreement exceptions to the Buy American Act as provided by 48 CFR Part 25, Subpart 25.4 are inapplicable to this agreement.

In Article 18, the following definitions apply:

"Commercially Available Off-The-Shelf (COTS) Item" means

- a) any item of supply (including construction material) that is:
 - 1. a commercial item as defined by 48 CFR § 2.101
 - 2. sold in substantial quantities in the commercial marketplace

3. offered to the Government, under an agreement, without modification, in the same form in which it is sold in the commercial marketplace; and
- b) does not include bulk cargo, as defined in 46 U.S.C. § 40102(4), such as agricultural products and petroleum products. "construction material" means an article, material, or supply brought to the construction site by the Recipient for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site.

"Cost Of Components" means

- b) For components purchased by the Recipient, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- c) For components manufactured by the Recipient, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic Construction Material" means

- a) for construction material that does not consist wholly or predominantly of iron or steel or a combination of both
 1. an unmanufactured construction material mined or produced in the United States; or
 2. a construction material manufactured in the United States, if:
 - i. the cost of its components mined, produced, or manufactured in the United States exceeds 60 percent of the cost of all its components, except that the percentage will be 65 percent for items delivered in calendar years 2024 through 2028 and 75 percent for items delivered in calendar year 2029 or later. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or
 - ii. the construction material is a COTS item manufactured in the United States
- b) for construction material that consists wholly or predominantly of iron or steel or a combination of both, a construction material manufactured in the United States if the cost

of foreign iron and steel constitutes less than 5 percent of the cost of all the components used in such construction material. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the construction material and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the construction material contains multiple components, the cost of all the materials used in such construction material is calculated in accordance with the definition of "cost of components" in this term.

"Foreign Construction Material" means a construction material other than a domestic construction material.

"predominantly of iron or steel or a combination of both" means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

"United States" means the 50 States, the District of Columbia, and outlying areas.

18.3 Small and Disadvantaged Business Requirements.

- a) If any funds under this award are administered by or through a State Department of Transportation, the Recipient shall expend those funds in compliance with the requirements at 49 CFR Part 26, including any amendments thereto.
- b) If any funds under this award are not administered by or through a State Department of Transportation, the Recipient shall expend those funds in compliance with the requirements at 2 CFR 200.321, including any amendments thereto.

18.4 Engineering and Design Services.

The Recipient shall award each contract or sub- contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping, or related services with respect to the project in the same manner that a contract for architectural and engineering services is negotiated under 2 CFR 200.320 or an equivalent qualifications-based requirement prescribed for or by the Recipient.

18.5 Foreign Market Restrictions.

The Recipient shall not allow funds provided under this award to be used to fund the use of any product or service of a foreign country during the period in which such foreign country is listed by

the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

18.6 Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.

The Recipient acknowledges that Section 889 of Pub. L. No. 115-232, 2 CFR 200.216 and 2 CFR 200.471 prohibit the Recipient and all subrecipients from procuring or obtaining certain telecommunications and video surveillance services or equipment under this award.

18.7 Recipient Responsibilities for Subawards.

If the Recipient makes a subaward under this award, the Recipient shall comply with the requirements on pass-through entities under 2 CFR Parts 200 and 1201, including 2 CFR 200.331–200.333.

ARTICLE 19 COSTS, PAYMENTS, AND UNEXPENDED FUNDS

19.1 Limitation of Federal Award Amount.

Under this award, the USDOT shall not provide funding greater than the “Funds Obligated” amount, as specified on the SMART Assistance Agreement. The Recipient acknowledges that USDOT is not liable for payments exceeding that amount, and the Recipient shall not request reimbursement of costs exceeding that amount.

19.2 Projects Costs

This award is subject to the cost principles at 2 CFR part 200 subpart E, including provisions on determining allocable costs and determining allowable costs.

19.3 Timing of Project Costs

- a) The Recipient shall not charge to this award costs that are incurred after the period of performance.
- b) The Recipient shall not charge to this award costs that were incurred before the effective date of award of this agreement.

19.4 Recipient Recovery of Federal Funds

The Recipient shall make all reasonable efforts, including initiating litigation, if necessary, to recover Federal funds if the USDOT determines, after consultation with the Recipient, that those funds have been spent fraudulently, wastefully, or in violation of Federal laws, or misused in any manner under this award. The Recipient shall not enter a settlement or other final position, in

court or otherwise, involving the recovery of funds under the award unless approved in advance in writing by the USDOT.

19.5 Unexpended Federal Funds

Any Federal funds that are awarded but not expended on allocable, allowable costs remain the property of the United States.

19.6 Timing of Payments to the Recipient

- a) When reimbursement is used, the Recipient shall not request reimbursement of a cost before the Recipient has entered an obligation for that cost.
- b) Pursuant to 2 CFR 200.305, advance payments to Recipient must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the Recipient in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the Recipient for direct program or project costs and the proportionate share of any allowable indirect costs. The Recipient must make timely payment to contractors in accordance with the contract provisions.

19.7 Payment Method

- a) the Recipient shall use the DELPHI e-Invoicing System to request reimbursement or advance payment under this award unless the USDOT agreement officer provides written approval for the Recipient to use a different request and payment method
- b) the USDOT may deny a payment request that is not submitted using the method identified in section 2 of Article 5 in the Specific Terms and Conditions Articles 1-6.

19.8 Information Supporting Expenditures

- a) the Recipient shall electronically submit the SF-270 (Outlay Report and Request for Advance or Reimbursement for Non-Construction Program) or the SF-271 (Outlay Report and Request for Advance or Reimbursement for Non-Construction Program) to identify the Federal share and the Recipient's share of costs, and shall submit supporting cost detail to clearly document all costs incurred. As supporting cost detail, the Recipient shall include a detailed breakout of all costs incurred, including direct labor, indirect costs, other direct costs, travel, etc.
- b) If the Recipient submits a request for reimbursement that the USDOT determines does not include or is not supported by sufficient detail, the USDOT may deny the request or withhold processing the request until the Recipient provides sufficient detail.

19.9 Reimbursement Frequency

The Recipient shall not request reimbursement more frequently than monthly.

ARTICLE 20 LIQUIDATION, ADJUSTMENTS, AND FUNDS AVAILABILITY

20.1 Liquidation of Recipient Obligations

- a) The Recipient shall liquidate all obligations of award funds under this agreement not later than 120 days after the end of the Period of Performance.
- b) Liquidation of obligations and adjustment of costs under this agreement follow the requirements of 2 CFR 200.344–200.346.

ARTICLE 21 AGREEMENT MODIFICATIONS

21.1 Bilateral Modifications.

The parties may amend, modify, or supplement this agreement by mutual agreement in writing signed by the USDOT and the Recipient. Either party may request to amend, modify, or supplement this agreement by written notice to the other party.

21.2 Unilateral Contact Modifications

The USDOT may update the contacts who are listed in section 4 of Article 4 in the Specific Terms and Conditions Articles 1-6 by written notice to all of the Recipient contacts.

21.3 USDOT Unilateral Modifications

- a) the USDOT may unilaterally modify this agreement to comply with Federal law, including the Program Statute
- b) to unilaterally modify this agreement, the USDOT must provide a notice to the Recipient that includes a description of the modification and state the date that the modification is effective.

21.4 Other Modifications.

The parties shall not amend, modify, or supplement this agreement except as permitted under Articles 21.1, 21.2, or 21.3. If an amendment, modification, or supplement is not permitted under Article 21.1, not permitted under Sections Article 21.2, and not permitted under Sections Article 21.3, it is void.

ARTICLE 22 Reserved

ARTICLE 23 Reserved

ARTICLE 24 ADMINISTRATIVE, AND NATIONAL POLICY REQUIREMENTS

24.1 Uniform Administrative Requirements for Federal Awards.

The Recipient shall comply with the obligations on non-Federal entities under 2 CFR Parts 200 and 1201.

24.2 Federal Law and Public Policy Requirements.

The Recipient shall ensure that Federal funding is expended in full accordance with the United States Constitution, Federal law, and statutory and public policy requirements: including but not limited to, those protecting free speech, religious liberty, public welfare, the environment, and prohibiting discrimination; and

- a) the Recipient will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in the enforcement of Federal immigration law.
- b) Pursuant to Executive Order 14173, Ending Illegal Discrimination And Restoring Merit-Based Opportunity, the Recipient agrees that its compliance in all respects with all applicable Federal anti-discrimination laws is material to the government's payment decisions for purposes of section 3729(b)(4) of title 31, United States Code.
- c) Pursuant to Executive Order 14173, Ending Illegal Discrimination And Restoring Merit-Based Opportunity, by entering into this agreement, the Recipient certifies that it does not operate any programs promoting diversity, equity, and inclusion (DEI) initiatives that violate any applicable Federal anti-discrimination laws.
- d) The failure of this agreement to expressly identify Federal law applicable to the Recipient or activities under this agreement does not make that law inapplicable.

24.3 Federal Freedom of Information Act

- a) the USDOT is subject to the Freedom of Information Act, 5 U.S.C. 552.
- b) the Recipient acknowledges that the Technical Application and materials submitted to the USDOT by the Recipient related to this agreement may become USDOT records subject to public release under 5 U.S.C. 552.

24.4 History of Performance

Under 2 C.F.R 200.206, any Federal awarding agency may consider the Recipient's performance under this agreement when evaluating the risks of making a future Federal financial assistance award to the Recipient.

24.5 Whistleblower Protection

- a) the Recipient acknowledges that it is a “grantee” within the scope of 41 U.S.C. 4712, which prohibits the Recipient from taking certain actions against an employee for certain disclosures of information that the employee reasonably believes are evidence of gross mismanagement of this award, gross waste of Federal funds, or a violation of Federal law related this this award.
- b) the Recipient shall inform its employees in writing of the rights and remedies provided under 41 U.S.C. 4712, in the predominant native language of the workforce.

24.6 External Award Terms and Obligations

- a) In addition to this document and the contents described in Article 29, this agreement includes the following additional terms as integral parts:
 1. Appendix A to 2 CFR Part 25: System for Award Management and Universal Identifier Requirements
 2. Appendix A to 2 CFR Part 170: Reporting Subawards and Executive Compensation
 3. 2 C.F.R 175: Award Term for Trafficking in Persons; and
 4. Appendix XII to 2 CFR Part 200: Award Term and Condition for Recipient Integrity and Performance Matters.
- b) The purpose of this section is to ensure that the Recipient has a plan to comply with Title VI and 49 CFR Part 21, including any amendments thereto.

The Recipient shall comply with:

1. 49 CFR Part 20: New Restrictions on Lobbying
2. 49 CFR Part 21: Nondiscrimination in Federally-Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964, including any amendments thereto.
3. 49 CFR Part 27: Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance; and
4. Subpart B of 49 CFR Part 32: Governmentwide Requirements for Drug-free Workplace (Financial Assistance).

24.7 Incorporated Certifications

The Recipient makes the statements in the following certifications, which are incorporated by reference:

1. Appendix A to 49 CFR Part 20 (Certification Regarding Lobbying).

ARTICLE 25 ASSIGNMENT

25.1 Assignment Prohibited

The Recipient shall not transfer to any other entity any discretion granted under this agreement, any right to satisfy a condition under this agreement, any remedy under this agreement, or any obligation imposed under this agreement.

ARTICLE 26 WAIVER

26.1 Waivers

- a) A waiver granted by USDOT under this agreement will not be effective unless it is in writing and signed by an authorized representative of USDOT
- b) A waiver granted by USDOT under this agreement on one occasion will not operate as a waiver on other occasions.
- c) If USDOT fails to require strict performance of a provision of this agreement, fails to exercise a remedy for a breach of this agreement, or fails to reject a payment during a breach of this agreement, that failure does not constitute a waiver of that provision or breach.

ARTICLE 27 ADDITIONAL TERMS AND CONDITIONS

27.1 Disclaimer of Federal Liability.

The USDOT shall not be responsible or liable for any damage to property or any injury to persons that may arise from, or be incident to, performance or compliance with this agreement.

Environmental Review

- a) In this section, "Environmental Review Entity" means:
 1. if the Project is located in a State that has assumed responsibilities for environmental review activities under 23 U.S.C. 326 or 23 U.S.C. 327 and the Project is within the scope of the assumed responsibilities, the State; and
 2. for all other cases, an operating agency within the Department of Transportation will be identified to conduct NEPA evaluations.
- b) Except as authorized under Article 27.3(c), the Recipient shall not begin final design; acquire real property, construction materials, or equipment; begin construction; or take other actions that represent an irretrievable commitment of resources for the Project unless and until:

1. the Environmental Review Entity complies with the National Environmental Policy Act, 42 U.S.C. 4321 to 4370m-12, and any other applicable environmental laws and regulations; and
 2. if the Environmental Review Entity is not the Recipient, the Environmental Review Entity provides the Recipient with written notice that the environmental review process is complete.
- c) If the Recipient is using procedures for early acquisition of real property under 23 CFR 710.501 or hardship and protective acquisitions of real property 23 CFR 710.503, the Recipient shall comply with 23 CFR 771.113(d)(1).
- d) The Recipient acknowledges that:
1. the Environmental Review Entity's actions under Article 27.3(a) depend on the Recipient conducting necessary environmental analyses and submitting necessary documents to the Environmental Review Entity; and
 2. applicable environmental statutes and regulation may require the Recipient to prepare and submit documents to other Federal, State, and local agencies.
- e) Consistent with 23 CFR 771.105(a), to the extent practicable and consistent with Federal law, the Recipient shall coordinate all environmental investigations, reviews, and consultations as a single process.
- f) The activities described in this agreement may inform environmental decision-making processes, but the parties do not intend this agreement to document the alternatives under consideration under those processes. If a build alternative is selected that does not align information in this agreement, then:
1. the parties may amend this agreement under Article 21.1 for consistency with the selected build alternative; or
 2. if the USDOT determines that the condition at Article 16.1(a)(5) is satisfied, the USDOT may terminate this agreement under Article 16.1(a)(5).
- g) The Recipient shall complete any mitigation activities described in the environmental document or documents for the Project, including the terms and conditions contained in the required permits and authorizations for the Project.
- h) The Recipient may not expend any of the funds provided in this Agreement or incur expenses under this Agreement on final design, construction, or other activities that represent an irretrievable commitment of resources unless and until it complies with the National Environmental Policy Act (42 U.S.C. § 4321 et seq.) ("NEPA"), Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) ("NHPA"), and any other applicable environmental laws and regulations, and DOT has provided the Recipient with a written notice that the environmental review process is complete. At that time, DOT may authorize the distribution and expenditure of funds. The Recipient may not obligate or

expend any funds (federal, state or private) for final design, construction, or other activities that represent an irretrievable commitment of resources for the Project, or commence any part of final design, construction, or other activities that represent an irretrievable commitment of resources for the Project or any component of the Project, without receiving such written confirmation from DOT. The Recipient may participate in planning activities, as long as they do not constitute an irretrievable commitment to a specific course of action. Depending on the outcome of the environmental review process, DOT may rescind this Agreement or may pursue any other permissible remedy under 2 CFR § 200.338-200.342.

27.2 Railroad Coordination

If the agreement includes one or more milestones identified as a "Railroad Coordination Agreement," then for each of those milestones, the Recipient shall enter a standard written railroad coordination agreement, consistent with 23 CFR 646.216(d), no later than the deadline date identified for that milestone, with the identified railroad for work and operation within that railroad's right-of-way.

27.3 Relocation and Real Property Acquisition

- a) the Recipient shall comply with the land acquisition policies in 49 CFR Part 24 subpart B and shall pay or reimburse property owners for necessary expenses as specified in that subpart.
- b) the Recipient shall provide a relocation assistance program offering the services described in 49 CFR Part 24 subpart C and shall provide reasonable relocation payments and assistance to displaced persons as required in 49 CFR Part 24 subparts D–E.
- c) the Recipient shall make available to displaced persons, within a reasonable period of time prior to displacement, comparable replacement dwellings in accordance with 49 CFR Part 24 subpart E.

27.4 Equipment Disposition

- a) In accordance with 2 CFR 200.313 and 1201.313, if the Recipient or a subrecipient acquires equipment under this award, then when that equipment is no longer needed for the Project that entity shall request disposition instructions from the awarding agency.
- b) In accordance with 2 CFR 200.443(d), the distribution of the proceeds from the disposition of equipment must be made in accordance with 2 CFR 200.313–200.316 and 2 CFR 1201.313.
- c) the Recipient shall ensure compliance with this Article for all tiers of subawards under this award.

ARTICLE 28 MANDATORY AWARD INFORMATION

28.1 Information Contained in a Federal Award

For 2 CFR 200.211

- a) the “Federal Award Date” is the date of this agreement, as defined under Article 30.2
- b) the Assistance Listings Number is 20.941 and the Assistance Listings Title is “Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program”
- c) this award is not for research and development.

ARTICLE 29 CONSTRUCTION AND DEFINITIONS

29.1 Attachments.

This agreement includes the following attachments as integral parts:

- Attachment A Performance Measurement Information (Article 6)
- Attachment B Changes from Application (Article 6)
- Attachment C Reserved
- Attachment D Reserved
- Attachment E Labor and Workforce
- Attachment F Reserved

29.2 Exhibits

The following exhibits, which are in the document titled “Exhibits to Grant Agreements Under the SMART Grant Program”, available at <https://www.transportation.gov/grants/SMART>, are part of this agreement:

- Exhibit A Applicable Federal Laws and Regulations
- Exhibit B Additional Standard Terms
- Exhibit C Quarterly Reports and Recertifications: Format and Content
- Exhibit D Certification for Contracts, Grants, Loans, And Cooperative Agreements
- Exhibit E FAA Regulations
- Exhibit F Communications Technology

- Exhibit G Equipping or Retrofitting Motor Vehicles
- Exhibit H Eligible Costs
- Exhibit I Data Collection Requirements

29.3 Construction

- a) If a provision in the exhibits or the attachments conflicts with a provision in articles 1–30, then the provision in articles 1–30 prevails. If a provision in the attachment(s) conflicts with a provision in the exhibits, then the provision in the attachments prevails.

29.4 Integration

This agreement constitutes the entire agreement of the parties relating to the SMART grant program and awards under that program and supersedes any previous agreements, oral or written, relating to the SMART grant program and awards under that program.

29.5 Definitions

In this agreement, the following definitions apply:

“Program Statute” means the Section 25005 of the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. 117–58, November 15, 2021; and statutory text under the heading “Strengthening mobility and revolutionizing transportation grant program” in title I of division J of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 (November 15, 2021) and all other provisions of that act that apply to amounts appropriated under that heading.

“Project” means the project proposed in the Grant Application, as modified by the negotiated provisions of this agreement, including “Specific Terms and Conditions Articles 1-6,” Article article 3 and Attachments A-E.

“SMART Grant” means an award of funds that were made available under the NOFO.

“Grant Application” means the application identified in Article 2.1 of the Specific Terms and Conditions Articles 1-6, including Standard Form 424 and all information and attachments submitted with that form through ValidEval.

ARTICLE 30 AGREEMENT EXECUTION AND EFFECTIVE DATE

30.1 Counterparts.

This agreement may be executed in counterparts, which constitute one document. The parties intend each countersigned original to have identical legal effect.

30.2 Effective Date

The agreement will become effective when all parties have signed it. The date of this agreement will be the date this agreement is signed by the last party to sign it. This instrument constitutes a SMART Grant when the USDOT's authorized representative signs it.

30.3 Termination

Should this Grant Agreement be terminated prior to the end date of the Period of Performance, USDOT reserves the right to require that the Recipient return to USDOT any of the funds reimbursed for expenses subsequently deemed ineligible.

U.S. DEPARTMENT OF TRANSPORTATION
EXHIBITS TO OST-R SMART GRANT AGREEMENTS

Version Date: May 09, 2025

EXHIBIT A APPLICABLE FEDERAL LAWS AND REGULATIONS

By entering into this agreement for a SMART Grant, the Recipient assures and certifies, with respect to this Grant, that it will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Project. Performance under this agreement shall be governed by and in compliance with the following requirements, as applicable, to the type of organization of the Recipient and any applicable sub-recipients. The applicable provisions to this agreement include, but are not limited to, the following:

1. General Federal Legislation

- Federal Fair Labor Standards Act - 29 U.S.C. §§ 201, et seq.
- Hatch Act - 5 U.S.C. §§ 1501, et seq.
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 – 42 U.S.C. §§ 4601, et seq.
- National Historic Preservation Act of 1966 - 54 U.S.C. § 306108
- Archeological and Historic Preservation Act of 1974 - 54 U.S.C. §§ 312501, et seq.
- Native American Graves Protection and Repatriation Act - 25 U.S.C. §§ 3001, et seq.
- Clean Air Act – 42 U.S.C. §§ 7401, et. seq.
- Clean Water Act - 33 U.S.C. §§ 1251, et seq.
- Endangered Species Act – 16 U.S.C. §§ 1531 et seq.
- Coastal Zone Management Act – 16 U.S.C. §§ 1451 et seq.
- Flood Disaster Protection Act of 1973 – 42 U.S.C. §§ 4001 et seq.
- Age Discrimination Act of 1975, as amended - 42 U.S.C. §§ 6101, et seq.
- American Indian Religious Freedom Act, 42 U.S.C. 1996
- Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. §§ 1101, et seq.
- The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended - 42 U.S.C. §§ 4541, et seq.
- Sections 523 and 527 of the Public Health Service Act of 1912, as amended, 42 U.S.C. §§ 290dd through 290dd-2.
- Architectural Barriers Act of 1968 - 42 U.S.C. §§ 4151, et seq.
- Power Plant and Industrial Fuel Use Act of 1978, P.L. 100-42 - Section 403 - 42 U.S.C. § 8373
- Contract Work Hours and Safety Standards Act - 40 U.S.C. §§ 3701, et seq.

- Copeland Anti-kickback Act, as amended - 18 U.S.C. § 874 and 40 U.S.C. § 3145
- National Environmental Policy Act of 1969 - 42 U.S.C. §§ 4321, et seq.
- Wild and Scenic Rivers Act – 16 U.S.C. §§ 1271, et seq.
- Federal Water Pollution Control Act, as amended – 33 U.S.C. 1251-1376.
- Single Audit Act of 1984 - 31 U.S.C. §§ 7501, et seq.
- Americans with Disabilities Act of 1990 - 42 U.S.C. § 12101, et seq.
- Title IX of the Education Amendments of 1972, as amended - 20 U.S.C. §§ 1681–1683 and §§ 1685–1687
- Section 504 of the Rehabilitation Act of 1973, as amended - 29 U.S.C. § 794
- Title VI of the Civil Rights Act of 1964 - 42 U.S.C. §§ 2000d, et seq.
- Title IX of the Federal Property and Administrative Services Act of 1949 - 40 U.S.C. §§ 1101–1104.
- Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions – 31 U.S.C. § 1352
- Freedom of Information Act - 5 U.S.C. § 552, as amended.
- Magnuson-Stevens Fishery Conservation and Management Act – 16 U.S.C. §§ 1801, et seq.
- Farmland Protection Policy Act of 1981 – 7 U.S.C. §§ 4201, et seq.
- Noise Control Act of 1972 – 42 U.S.C. §§ 4901, et seq.
- Fish and Wildlife Coordination Act of 1956 – 16 U.S.C. §§ 661, et seq.
- Section 9 of the Rivers and Harbors Act and the General Bridge Act of 1946 - 33 U.S.C. §§ 401 and 525.
- Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. § 303 and 23 U.S.C. § 138.
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) – 42 U.S.C. §§ 9601, et seq.
- Safe Drinking Water Act – 42 U.S.C. §§ 300f, et seq.
- The Wilderness Act – 16 U.S.C. §§ 1131, et seq.
- Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 – 42 U.S.C. 6901, et seq.
- Migratory Bird Treaty Act 16 U.S.C. §§ 703, et seq.
- The Federal Funding Transparency and Accountability Act of 2006, as amended (Pub. L. 109–282, as amended by section 6202 of Public Law 110–252).
- Cargo Preference Act of 1954 – 46 U.S.C. § 55305.
- Build America, Buy America Act – Pub. L. No. 117-58, div. G, tit. IX, subtitle A, 135 Stat. 429, 1298.
- Section 889 of the John D. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. 115-232
- Bringing in and harboring certain aliens – 8 U.S.C. 1324

- Aiding or assisting certain aliens to enter – 8 U.S.C. 1327

2. Executive Orders

- Executive Order 11990 – Protection of Wetlands
- Executive Order 12372 – Intergovernmental Review of Federal Programs.
- Executive Order 12549 – Debarment and Suspension
- Executive Order 14005 – Ensuring the Future is Made in All of America by All of America's Workers
- Executive Order 14149, Restoring Freedom of Speech and Ending Federal Censorship
- Executive Order 14154, Unleashing American Energy
- Executive Order 14151, Ending Radical and Wasteful Government DEI Programs and Preferencing
- Executive Order 14168 Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government
- Executive Order 14173, Ending Illegal Discrimination and Restoring Merit-Based Opportunity

3. General Federal Regulations

- Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards – 2 CFR Parts 200, 1201
- Non-procurement Suspension and Debarment – 2 CFR Parts 180, 1200
- Investigative and Enforcement Procedures – 14 CFR Part 13
- Procedures for predetermination of wage rates – 29 CFR Part 1
- Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States – 29 CFR Part 3
- Labor standards provisions applicable to contracts governing federally financed and assisted construction (also labor standards provision applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act) – 29 CFR Part 5
- Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements) – 41 CFR Parts 60, et seq.
- New Restrictions on Lobbying – 49 CFR Part 20
- Nondiscrimination in Federally Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 – 49 CFR Part 21, including any amendments thereto.
- Uniform relocation assistance and real property acquisition for Federal and Federally assisted programs – 49 CFR Part 24
- Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance – 49 CFR Part 25

- Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance – 49 CFR Part 27
- DOT's implementation of DOJ's ADA Title II regulations compliance procedures for all programs, services, and regulatory activities relating to transportation under 28 CFR Part 35
- Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation – 49 CFR Part 28
- Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors – 49 CFR Part 30
- Governmentwide Requirements for Drug-Free Workplace (Financial Assistance) – 49 CFR Part 32
- DOT's implementing ADA regulations for transit services and transit vehicles, including the DOT's standards for accessible transportation facilities in Part 37, Appendix A – 49 CFR Parts 37 and 38
- Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs – 49 CFR Part 26 (as applicable under section 18.3 of this agreement), including any amendments thereto.
- Specific assurances required to be included in the SMART Grant agreement by any of the above laws, regulations, or circulars are hereby incorporated by reference into this agreement.

EXHIBIT B ADDITIONAL STANDARD TERMS

TERM B.1 Title VI Assurance

(Implementing Title VI of the Civil Rights Act of 1964, as amended)

Assurance Concerning Nondiscrimination In Federally-Assisted Programs And Activities Receiving Or Benefiting From Federal Financial Assistance

(Implementing the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act, as amended)

49 CFR Parts 21, 25, 27, 37 and 38

DOT Order No. 1050.2A Standard Title VI/Non-Discrimination Assurances

By signing and submitting the Technical Application and by entering into this agreement under the SMART Grant Program, the Recipient HEREBY AGREES THAT, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through the Office of the Secretary (OST), it is subject to and will comply with the following, including any amendments thereto:

Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin)
- 49 CFR Part 21 (entitled Non-discrimination in Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of the Civil Rights Act Of 1964), including any amendments thereto.
- 28 CFR section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964)

The preceding statutory and regulatory cites hereinafter are referred to as the “Acts” and “Regulations,” respectively.

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

“No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity,” for which the Recipient receives Federal financial assistance from DOT.

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

SMART Grant recipients should demonstrate compliance with civil rights obligations and nondiscrimination laws, including Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act, and implementing regulations. This should include a current Title VI plan, completed Community Participation Plan, and a plan to address any legacy infrastructure or facilities that are not compliant with ADA standards. The Department’s and the applicable Operating Administrations’ Offices of Civil Rights may work with awarded grant recipients to ensure full compliance with Federal civil rights requirements.

Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally-assisted SMART Grant program:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23 (b) and 21.23 (e) of 49 CFR § 21 will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with the SMART Grant and, in adapted form, in all proposals for negotiated agreements regardless of funding source:
"The Recipient, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award".
3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal Financial Assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal Financial Assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
 - a) for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b) for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal Financial Assistance is extended to the program, except where the Federal Financial Assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:

- a) the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
 - b) the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
 10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.
 11. The Recipient shall retain all documents relevant to this Grant Agreement and the Grant Project for a period of three (3) years after completion of all projects undertaken pursuant to the Grant Agreement and receipt of final reimbursement from the U.S. Treasury, whichever is later. It shall furnish DOT, upon request, all documents and records pertaining to the determination of the amount of the Federal share or to any settlement, litigation, negotiation, or other efforts taken to recover such funds. All settlements or other final positions of the Recipient, in court or otherwise, involving the recovery of such Federal share shall be approved in advance by DOT.

By signing this ASSURANCE, the Recipient also agrees to comply (and require any sub-recipients, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing DOT/OST's access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by DOT/OST. You must keep records, reports, and submit the material for review upon request to DOT/OST, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

The Recipient gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the SMART Grant Program. This ASSURANCE is binding on the Recipient, other recipients, sub-recipients, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the SMART Grant Program.

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, (DOT/OST), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21, including any amendments thereto.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or DOT/OST to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or DOT/OST, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or DOT/OST may determine to be appropriate, including, but not limited to:
 - a) withholding payments to the contractor under the contract until the contractor complies; and/or
 - b) cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement

as the Recipient or DOT/OST may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B Clauses For Deeds Transferring United States Property

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Specific Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the Recipient will accept title to the lands and maintain the project constructed thereon in accordance with the Consolidated Appropriations Act, 2022 (Pub. L. 116-260, Dec. 27, 2020) the Regulations for the Administration of the SMART Grant Program, and the policies and procedures prescribed by the Maritime Administration (DOT/OST) of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, including any amendments thereto, pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the Recipient all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto Recipient and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the Recipient, its successors and assigns.

The Recipient, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that:

1. no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed, and

2. the Recipient will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, including any amendments thereto, Effectuation of Title VI of the Civil Rights Act of 1964, , and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C Clauses For Transfer Of Real Property Acquired Or Improved Under The Activity, Facility, Or Program

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the Recipient pursuant to the provisions of Specific Assurance 7(a):

1. The (Recipient, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that in the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (Recipient, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, Recipient will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*
3. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the Recipient will have the right to enter or re-enter the lands and facilities thereon, and the above-described lands and facilities will there upon revert to and vest in and become the absolute property of the Recipient and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX D Clauses For Construction/Use/Access To Real Property Acquired Under The Activity, Facility Or Program

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by Recipient pursuant to the provisions of Specific Assurance 7(b):

1. The (Recipient, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (Recipient, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
2. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, Recipient will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
3. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, Recipient will there upon revert to and vest in and become the absolute property of Recipient and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21, including any amendments thereto.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects)
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex)
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age)
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex)
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not)
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR Parts 37 and 38
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex)
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. § 1681 et seq).

TERM B.2 Certification Regarding Debarment, Suspension, And Other Responsibility Matters -- Primary Covered Transactions

2 CFR Parts 180 and 1200

These assurances and certifications are applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring DOT/OST approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

By signing and submitting the Technical Application and by entering into this agreement under the SMART grant program, the Recipient is providing the assurances and certifications for First Tier Participants and Lower Tier Participants in the SMART Grant, as set out below:

1. Instructions for Certification – First Tier Participants

(Applicable to all first-tier subawards regardless of potential value and require first tier-subrecipients and lower-tier subrecipients to similarly check SAM.gov; and, for all first-tier procurement contracts with a value of \$25,000 or more and all lower tiers of subcontracts under covered non-procurement transactions (2 CFR § 180.220).

- a) The prospective first tier participant is providing the certification set out below.
- b) The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c) The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d) The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e) The terms "covered transaction," "civil judgment," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a Recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a Recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers to any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f) The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g) The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h) A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration.
- i) Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j) Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

1. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment, including a civil settlement, rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior DOT/OST approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a) The prospective lower tier participant is providing the certification set out below.
- b) The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c) The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d) The terms "covered transaction," "civil settlement," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a Recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered

Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a Recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- e) The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f) The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g) A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration.
- h) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i) Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

TERM B.3 Requirements Regarding Delinquent Tax Liability Or A Felony Conviction Under Any Federal Law

As required by sections 744 and 745 of Title VII, Division E of the Consolidated Appropriations Act, 2023 (Pub. L. 116-260), and implemented through USDOT Order 4200.6, the funds provided under this award shall not be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that:

1. Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless a Federal agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or
2. Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless a Federal agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government.

The Recipient therefore agrees:

1. Definitions. For the purposes of this exhibit, the following definitions apply: "Covered Transaction" means a transaction that uses any funds under this award and that is a contract, memorandum of understanding, cooperative agreement, grant, loan, or loan guarantee.

"Execution of Grant Agreement" Signing of this Grant Agreement by DOT and the Recipient.

"Felony Conviction" means a conviction within the preceding 24 months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of

the United States Code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. 3559.

“Participant” means the Recipient, an entity who submits a proposal for a Covered Transaction, or an entity who enters into a Covered Transaction.

“Tax Delinquency” means an unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2. Mandatory Check in the System for Award Management. Before entering a Covered Transaction with another entity, a Participant shall check the System for Award Management (the “SAM”) at <http://www.sam.gov/> for an entry describing that entity.
3. Mandatory Certifications. Before entering a Covered Transaction with another entity, a Participant shall require that entity to:
 - a) Certify whether the entity has a Tax Delinquency; and
 - b) Certify whether the entity has a Felony Conviction.
4. Prohibition. If
 - a) the SAM entry for an entity indicates that the entity has a Tax Delinquency or a Federal Conviction
 - b) an entity provides an affirmative response to either certification in section 3; or
 - c) an entity’s certification under section 3 was inaccurate when made or became inaccurate after being made then a Participant shall not enter or continue a Covered Transaction with that entity unless the USDOT has determined in writing that suspension or debarment of that entity are not necessary to protect the interests of the Government.
5. Mandatory Notice to the USDOT
 - a) If the SAM entry for a Participant indicates that the Participant has a Tax Delinquency or a Felony Conviction, the Recipient shall notify the USDOT in writing of that entry.
 - b) If a Participant provides an affirmative response to either certification in section 1, the Recipient shall notify the USDOT in writing of that affirmative response.
 - c) If the Recipient knows that a Participant’s certification under section 1 was inaccurate when made or became inaccurate after being made, the Recipient shall notify the USDOT in writing of that inaccuracy.
6. Flow Down. For all Covered Transactions, including all tiers of subcontracts and subawards, the Recipient shall:
 - a) require the SAM check in section 2
 - b) require the certifications in section 3
 - c) include the prohibition in section 4; and

- d) require all Participants to notify the Recipient in writing of any information that would require the Recipient to notify the USDOT under section 5.

TERM B.4 Recipient Policy To Ban Text Messaging While Driving

Definitions.

The following definitions are intended to be consistent with the definitions in DOT Order 3902.10, Text Messaging While Driving (Dec. 30, 2009) and Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving (Oct. 1, 2009). For clarification purposes, they may expand upon the definitions in the executive order.

For the purpose of this Term B.3, "Motor Vehicles" means any vehicle, self-propelled or drawn by mechanical power, designed and operated principally for use on a local, State or Federal roadway, but does not include a military design motor vehicle or any other vehicle excluded under Federal Management Regulation 102-34-15.

For the purpose of this Term B.3, "Driving" means operating a motor vehicle on a roadway, including while temporarily stationary because of traffic congestion, a traffic signal, a stop sign, another traffic control device, or otherwise. It does not include being in your vehicle (with or without the motor running) in a location off the roadway where it is safe and legal to remain stationary.

For the purpose of this Term B.3, "Text messaging" means reading from or entering data into any handheld or other electronic device (including, but not limited to, cell phones, navigational tools, laptop computers, or other electronic devices), including for the purpose of Short Message Service (SMS) texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include the use of a cell phone or other electronic device for the limited purpose of entering a telephone number to make an outgoing call or answer an incoming call, unless this practice is prohibited by State or local law. The term also does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to remain stationary.

For the purpose of this Term B.3, the "Government" includes the United States Government and State, local, and tribal governments at all levels.

Workplace Safety. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving (Oct. 1, 2009) and DOT Order 3902.10, Text Messaging While Driving (Dec. 30, 2009), the Recipient, subrecipients, contractors, and subcontractors are encouraged to:

1. adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving—
 - a) Company-owned or -rented vehicles or Government-owned, leased or rented vehicles; or
 - b) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.
2. Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as—
 - a) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and
 - b) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.
 - c) Subawards and Contracts. To the extent permitted by law, the Recipient shall insert the substance of this exhibit, including this paragraph (c), in all subawards, contracts, and subcontracts under this award that exceed the micro-purchase threshold, other than contracts and subcontracts for the acquisition of commercially available off-the-shelf items.

EXHIBIT C QUARTERLY REPORTS AND RECERTIFICATIONS: FORMAT AND CONTENT

1. Purpose.

The purpose of the Quarterly Reports and Recertifications under this agreement for the SMART Grant Program are to ensure that the project scope, schedule, and budget will be maintained to the maximum extent possible.
2. Format and Content. The Recipient shall produce a quarterly cost, schedule, and status report that contains the sections enumerated in the following list. At the discretion of the USDOT, modifications or additions can be made to produce a quarterly reporting format that will most effectively serve both the Recipient and the USDOT. Some projects will have a more extensive quarterly status than others. For smaller projects, the USDOT may determine that the content of the quarterly reports will be streamlined, and project status meetings will be held on a less-frequent basis.
 - a) Project Overall Status. This section provides an overall status of the project's scope, schedule and budget. The Recipient shall note and explain any deviations from the scope of work, the schedule, or the budget that are described in this agreement.
 - b) Project Significant Activities and Issues. This section provides highlights of key activities, accomplishments, and issues occurring on the project during the previous quarter. Activities and deliverables to be reported on should include meetings, audits and other reviews, design packages submitted, advertisements, awards, construction submittals, construction completion milestones, submittals related to any applicable requirements, media or Congressional inquiries, value engineering/constructability reviews, and other items of significance. This

section should specifically address progress towards compliance and issues related to the National Environmental Policy Act (NEPA), the Build America Buy America Act.

- c) **Action Items/Outstanding Issues.** This section should draw attention to, and track the progress of, highly significant or sensitive issues requiring action and direction in order to resolve. The Recipient should include administrative items and outstanding issues that could have a significant or adverse effect on the project's scope, schedule, or budget. Status, responsible person(s), and due dates should be included for each action item/outstanding issue. Action items requiring action or direction should be included in the quarterly status meeting agenda. The action items/outstanding issues may be dropped from this section upon full implementation of the remedial action, and upon no further monitoring anticipated.
- d) **Project Scope Overview.** The purpose of this section is to provide a further update regarding the project scope. If the original scope contained in the grant agreement is still accurate, this section can simply state that the scope is unchanged.
- e) **Project Schedule.** An updated master program schedule reflecting the current status of the program activities should be included in this section. The quarterly reporting format currently requests this in the form of the ten major project milestones. It is imperative that the master program schedule be integrated, i.e., the individual contract milestones tied to each other, such that any delays occurring in one activity will be reflected throughout the entire program schedule, with a realistic completion date being reported. This section should also detail the current schedule status, delays and potential exposures, and recovery efforts. The following information should also be included:
 - Current overall project completion percentage vs. latest plan percentage.
 - Completion percentages vs. latest plan percentages for major activities such as right-of-way, major or critical design contracts, major or critical construction contracts, and significant force accounts or task orders. A schedule status description should also be included for each of these major or critical elements.
 - Any delays or potential exposures to milestone and final completion dates. The delays and exposures should be quantified, and overall schedule impacts assessed. The reasons for the delays and exposures should be explained, and initiatives being analyzed or implemented in order to recover the schedule should be detailed.
- f) **Project Cost.** An updated cost spreadsheet reflecting the current forecasted cost vs. the latest approved budget vs. the baseline budget should be included in this section. One way to track project cost is to show: (1) Baseline Budget, (2) Latest Approved Budget, (3)

Current Forecasted Cost Estimate, (4) Expenditures or Commitments to Date, and (5) Variance between Current Forecasted Cost and Latest Approved Budget. Line items should include all significant cost centers, such as prior costs, right-of-way, preliminary engineering, environmental mitigation, general engineering consultant, section design contracts, construction administration, utilities, construction packages, force accounts/task orders, wrap-up insurance, construction contingencies, management contingencies, and other contingencies. The line items can be broken-up in enough detail such that specific areas of cost change can be sufficiently tracked, and future improvements made to the overall cost estimating methodology. A Program Total line should be included at the bottom of the spreadsheet. Narratives, tables, and/or graphs should accompany the updated cost spreadsheet, basically detailing the current cost status, reasons for cost deviations, impacts of cost overruns, and efforts to mitigate cost overruns. The following information should be provided:

- Reasons for each line-item deviation from the approved budget, impacts resulting from the deviations, and initiatives being analyzed or implemented in order to recover any cost overruns.
 - Transfer of costs to and from contingency line items, and reasons supporting the transfers.
 - Speculative cost changes that potentially may develop in the future, a quantified dollar range for each potential cost change, and the current status of the speculative change. Also, a comparison analysis to the available contingency amounts should be included, showing that reasonable and sufficient amounts of contingency remain to keep the project within the latest approved budget.
 - Detailed cost breakdown of the general engineering consultant (GEC) services (if applicable), including such line items as contract amounts, task orders issued (amounts), balance remaining for tasks, and accrued (billable) costs.
 - Federal obligations and/or disbursements for the project, compared to planned obligations and disbursements.
- g. Certifications.
- a) A certification that the Recipient is in compliance with 2 CFR 200.303 (Internal Controls) and 2 CFR Part 200, Subpart F (Audit Requirements).
 - b) The certification required under 2 CFR 200.415(a).
3. Recipients are required to complete post-award reports per the terms and conditions of the award. The types of reports include financial, performance, and other types of required reports.
 4. End dates for reporting periods are 3/31, 6/30, 9/30, or 12/31, regardless of budget period start dates. Deadlines for quarterly and semi-annual reports are no later than 30 days after the end of the reporting period. Annual reports are due no later than 90 days

after the end of the reporting period. The Recipient shall provide all reporting deliverables detailed below:

Deliverables

a) Milestone Progress Performance Reports

Submit progress reports to monitor project progress and ensure accountability and financial transparency, as well as to document activities performed, anticipated activities, and any changes to schedule or anticipated issues.

Quarterly (or semi- annual if directed).

b) Federal Financial Report (FFR) (SF-425)

The Federal Financial Report (SF-425) is a financial reporting form used throughout the Federal Government Grant system. Recipients shall complete this form and attach it to each quarterly Milestone Progress Performance Reports.

The form is available at <https://www.grants.gov/forms/post-award-reporting-forms.html>.

c) Quarterly (or semi- annual if directed)

d) Evaluation Plan

The Recipient shall submit an evaluation plan and data management plan that provides an overview of how the project will be evaluated and how the data collected will be managed and stored. The Evaluation plan and Data

Management plan shall include the following three sections:

- An overview of how the proof-of-concept or prototype will be evaluated and how the data collected will be managed and stored.
- A description of the anticipated impact areas (i.e. goals) of the project if implemented at scale and the methods that will be used to estimate the anticipated benefits and costs associated with implementation.
- Robust performance metrics and measurable targets based on the project goals to inform whether the proof-of-concept or prototype meets expectations and whether full implementation would meet program goals.
- The baseline data for each performance measure that is identified in the Performance Measure Table in Attachment A and a detailed description of the data sources, assumptions, variability, and estimated levels of precision for each performance measure. Within 90 calendar days after execution of this Agreement.

e) Data Management Plan

f) Applicants are expected to account for data and performance reporting including:

- Default to open access when appropriate (exceptions include protecting personally identifiable information [PII], Indigenous data sovereignty, or confidential business information [CBI]).
- Protect PII, intellectual property rights, and CBI.
- Utilize, when possible, open licenses and protect USDOT's non-exclusive copyright to data and corresponding outputs.
- Make the source code or tools necessary to analyze the data available to the public, if relevant.
- Provide relevant metadata (in a DCAT-US file, and, optionally, a discipline-appropriate metadata standard file), and data documentation (README.txt files, data dictionaries, code books, supporting files, imputation tables, etc.); and,
- Where applicable, consider contributing data to voluntary resources such as NHTSA's AV TEST Initiative.
- Projects should implement data management best practices including, but not limited to, implementation of published data specifications and standards (formal and informal); increasing data discoverability and data sharing; and enabling interaction of systems, interoperability, and integration of data system

g) Implementation Report

- The Recipient shall submit an Implementation report that assesses the anticipated costs and benefits of the project and demonstrates the feasibility of at-scale implementation. The Implementation Report shall include the following five sections: Annual- Stage 1 grants require a Draft report due within 1 year of the grant award.
- Annual- **Stage 2 grants** will submit an annual Implementation Report for each of the three years of the grant. This report will replace the Quarterly Milestone Report for the fourth quarter of every year.
- A description of the anticipated deployment and operational costs of the project as compared to the benefits and savings from the project if implemented at scale.
- The means by which the project has met the original expectation, as projected in the grant application, including data describing the means by which the project met the specific goals.
- Lessons learned and recommendations for future deployment strategies to optimize transportation efficiency and multimodal system performance.
- For Stage 1 projects: A description of the requirements for a successful at-scale deployment and an assessment of the feasibility of at-scale implementation. For Stage 2 projects: An assessment of the at-scale

deployment thus far compared to the requirements for success, and continued feasibility of the deployment.

- For Stage 1 projects: An analysis of the success, challenges and validity of the initial approach, any changes or improvements they would make in Stage 2 if recommended for award and any challenges to continued maintenance and operations in stage 2. For Stage 2 projects: An analysis of the success, challenges and validity of the initial approach, any changes or improvements they would make going forward in future years of deployment or suggestions to others implementing a similar project.
 - The performance measurement data for each performance measure that is identified in the Performance Measure Table in Attachment A.
- h) Tangible Personal Property Report (SF-428)
The recipient must report on the status of personal property in which the Federal Government retains an interest. Interim property reports may be required at DOT discretion. A final personal property report is required at closeout. As applicable
- i) Real Property Status Report (SF-429)
The report is a multi-purpose form that DOT may require for general reporting about real property acquired or constructed under a federal award, as well as for recipients to make a request related to acquisition or improvement of real property or to request disposition instructions. If applicable, recipients shall submit this report in accordance with the terms provided in 2 CFR § 200.329, no less frequently than annually. As applicable
- j) Final Report
The Recipient shall submit (in a format to be provided by DOT) the Recipient's assessment of the Grant Project to DOT within the Closeout process of the grant agreement. Final report shall be submitted not later than 120 days after the end of the period of performance
- k) Additional Reporting may be required, as applicable.

Program Evaluation

As a condition of grant award, grant recipients may be required to participate in an evaluation undertaken by USDOT or another agency or partner. Evaluation may take different forms such as an implementation assessment across grant recipients, an impact and/or outcomes analysis of all the selected sites within or across grant recipients, or a benefit/cost analysis or assessment of return on investment. As a part of the evaluation, as a condition of award, grant recipients must agree to:

1. Make records available to the evaluation contractor or USDOT staff.
2. Provide access to program records, and any other relevant documents to calculate costs and benefits.
3. In case of an impact analysis, facilitate the access to relevant information as requested.

4. Follow evaluation procedures as specified by the evaluation contractor or USDOT staff, as applicable

Reporting of Matters Related to Recipient Integrity and Performance

If the total value of a selected applicant's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then the applicant during that period of time must maintain the currency of information reported to the SAM that is made available in the designated integrity and performance system (currently FAPIIS) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition.

This is a statutory requirement under section 872 of Public Law 110- 417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111- 212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available. As applicable

EXHIBIT D CERTIFICATION REGARDING INFLUENCING ACTIVITIES

Certification For Contracts, Grants, Loans, And Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Influencing Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

EXHIBIT E FAA REGULATIONS

Innovative aviation projects must comply with all FAA and other federal, state, and local regulations relevant to the technologies and usages thereof. For instance, in the case of innovative aviation projects involving small, unmanned aircraft systems (UAS), applicants are responsible for complying with regulations which may include, and are not limited to the following, as necessary to achieve desired outcomes:

- 14 CFR Part 91 General Operating and Flight Rules
- 14 CFR Part 107 small UAS rule; Small UAS
- UAS Operations over People rule; Operations Over People General Overview
- UAS Remote identification rule; UAS Remote Identification Overview

Proponents of innovative aviation projects are also responsible for using U.S. government tools and resources which may include, and are not limited to the following, as necessary to fulfill requirements to operate technologies and achieve desired outcomes:

- FAA DroneZone, used to register UAS
- FAA Low Altitude Authorization and Notification Capability (LAANC), used to obtain airspace authorization to fly in controlled airspace
- Part 107 Waiver Resources, used to enable more complex UAS operations

EXHIBIT F COMMUNICATIONS TECHNOLOGY

Projects that use *communications technologies* must either:

1. use Vehicle-to-Everything (V2X) services that utilize Cellular Vehicle-to-Everything (C-V2X) based technology designed to operate within the 30 MHz of spectrum (5.895 - 5.925 GHz) that are consistent with the rules established in waivers associated with Federal Communications Commission (FCC) ET Docket No. 19-138 and future Report and Orders effective at the time when the Department selects projects for funding under the FY22 SMART Grants Program; or
2. leverage other communications technologies that can support V2X services and operate in spectrum outside of the 5.895 -5.925 GHz range.

EXHIBIT G EQUIPPING OR RETROFITTING MOTOR VEHICLES

Projects that involve equipping or retrofitting motor vehicles with additional technologies are only eligible if the vehicles are publicly owned, leased, or used in a contracted service;

equipping privately owned and operated vehicles outside of a leased or contracted service is not an eligible activity. Projects involving motor vehicles must involve only vehicles that comply with all applicable Federal Motor Vehicle Safety Standards (FMVSSs) and Federal Motor Carrier Safety Regulations (FMCSRs), or vehicles that are exempt from the requirements in a manner that allows for the legal acquisition and operation of the vehicles in the proposed project.

EXHIBIT H ELIGIBLE COSTS

Broadly, eligible activity costs must comply with the cost principles set forth in 2 CFR Part 200, Subpart E (i.e., 2 CFR § 200.403 and § 200.405). USDOT reserves the right to make cost eligibility determinations on a case-by-case basis. Eligible development and construction activities for grant funding are the following:

- planning
- feasibility analyses
- revenue forecasting
- environmental review
- permitting
- preliminary engineering and design work
- systems development or information technology work
- acquisition of real property (including land and improvements to land relating to an eligible project)
- construction
- reconstruction
- rehabilitation
- replacement
- environmental mitigation
- construction contingencies
- acquisition of equipment, including vehicles.

The following are not eligible costs for SMART Grants Program funding:

- reimbursement of any pre-award costs or application preparation costs of the SMART grant application
- traffic or parking enforcement activity
- purchase or lease of a license plate reader.

Federal funds may not be used to support or oppose union organizing, whether directly or as an offset for other funds.

EXHIBIT I DATA COLLECTION REQUIREMENTS DATA MANAGEMENT

To fulfill the reporting requirements and in accordance with the USDOT Public Access Plan, award recipients must consider, budget for, and implement appropriate data management for

data and information outputs acquired or generated during the grant. Applicants are expected to account for data and performance reporting in their budget submission. Projects must:

- Defaulting to open access when appropriate (exceptions include protecting personally identifiable information [PII], Indigenous data sovereignty, or confidential business information [CBI])
- Protecting PII, intellectual property rights, and CBI
- Utilize, when possible, open licenses and protect USDOT's non-exclusive copyright to data and corresponding outputs
- Make the source code or tools necessary to analyze the data available to the public, if relevant
- Provide relevant metadata (in a DCAT-US file, and, optionally, a discipline-appropriate metadata standard file), and data documentation (README.txt files, data dictionaries, code books, supporting files, imputation tables, etc.)
- Where applicable, consider contributing data to voluntary resources such as NHTSA's AV TEST Initiative.

Projects should implement data management best practices including, but not limited to, implementation of published data specifications and standards (formal and informal); increasing data discoverability and data sharing; and enabling interaction of systems, interoperability, and integration of data system.



THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

April 24, 2025

To All Recipients of U.S. Department of Transportation Funding:

The U.S. Department of Transportation (Department or DOT) distributes substantial Federal financial assistance for thousands of projects, programs, and activities operated or initiated by diverse entities, including but not limited to State and local governments. The Department administers this Federal financial assistance to support the development and maintenance of the Nation's transportation infrastructure, pursuant to statutory authority and in accordance with binding contractual agreements in the form of Federal financial assistance agreements, usually grants, cooperative agreements, and loans. Accordingly, I write to clarify and reaffirm pertinent legal requirements, to outline the Department's expectations, and to provide a reminder of your responsibilities and the consequences of noncompliance with Federal law and the terms of your financial assistance agreements. It is the policy of the Department to award and to continue to provide Federal financial assistance only to those recipients who comply with their legal obligations.

As recipients of such DOT funds, you have entered into legally enforceable agreements with the United States Government and are obligated to comply fully with all applicable Federal laws and regulations. These laws and regulations include the United States Constitution, Federal statutes, applicable rules, and public policy requirements, including, among others, those protecting free speech and religious liberty and those prohibiting discrimination and enforcing controls on illegal immigration. As Secretary of Transportation, I am responsible for ensuring recipients of DOT financial assistance are aware of and comply with all applicable legal obligations.

The Equal Protection principles of the Constitution prohibit State and Federal governmental entities from discriminating on the basis of protected characteristics, including race. Indeed, as the Supreme Court declared in *Students for Fair Admission, Inc. v. Harvard (SFFA)*, 600 U.S. 181, 206 (2023), "[t]he clear and central purpose of the Fourteenth Amendment was to eliminate all official state sources of invidious racial discrimination in the States." The Court further noted that "[o]ne of the principal reasons race is treated as a forbidden classification is that it demeans the dignity and worth of a person to be judged by ancestry instead of by his or her own merit and essential qualities." *Id.* at 220. In ruling that race-based admissions programs at universities violated the Equal Protection Clause, the Court made clear that discrimination based on race is, has been, and will continue to be unlawful, except in rare circumstances. *Id.* at 220-21. Similarly, sex-based classifications violate the Equal Protection Clause absent "exceedingly persuasive" justification. *See United States v. Virginia*, 518 U.S. 515, 533 (1996).

These constitutional principles are reinforced by the Civil Rights Act of 1964, which prohibits discrimination based on protected characteristics in the Federal funding and employment contexts in Title VI (42 U.S.C. § 2000d *et seq.*) and Title VII (42 U.S.C. § 2000e-2), as well as the applicable non-discrimination clauses in the Federal Aid Highway Act of 1973 (23 U.S.C. §§ 140 and 324 *et seq.*), the Airport and Airway Improvement Act of 1982, (49 U.S.C. § 47123), and Title IX of the Education Amendments of 1972, as amended (20 U.S.C. § 1681 *et seq.*).

Based on binding Supreme Court precedent and these Federal laws, DOT is prohibited from discriminating based on race, color, national origin, sex, or religion in any of its programs or activities. Moreover, because DOT may not establish, induce, or endorse prohibited discrimination indirectly,¹ it must ensure that discrimination based on race, color, national origin, sex, or religion does not exist in the programs or activities it funds or financially assists.

These same principles apply to recipients of Federal financial assistance from DOT, as both a matter of Federal law and by virtue of contractual provisions governing receipt of DOT funding. Accordingly, DOT recipients are prohibited from engaging in discriminatory actions in their own policies, programs, and activities, including in administering contracts, and their employment practices.

Whether or not described in neutral terms, any policy, program, or activity that is premised on a prohibited classification, including discriminatory policies or practices designed to achieve so-called "diversity, equity, and inclusion," or "DEI," goals, presumptively violates Federal law. Recipients of DOT financial assistance must ensure that the personnel practices (including hiring, promotions, and terminations) within their organizations are merit-based and do not discriminate based on prohibited categories. Recipients are also precluded from allocating money received under DOT awards—such as through contracts or the provision of other benefits—based on suspect classifications. Any discriminatory actions in your policies, programs, and activities based on prohibited categories constitute a clear violation of Federal law and the terms of your grant agreements.

In addition, your legal obligations require cooperation generally with Federal authorities in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in the enforcement of Federal immigration law. DOT has noted reported instances where some recipients of Federal financial assistance have declined to cooperate with ICE investigations, have issued driver's licenses to individuals present in the United States in violation of Federal immigration law, or have otherwise acted in a manner that impedes Federal law enforcement. Such actions undermine Federal sovereignty in the enforcement of immigration law, compromise the safety and security of the transportation systems supported by DOT

¹ See *SFFA*, 600 U.S. at 230; *Norwood v. Harrison*, 413 U.S. 455, 465 (1973).

financial assistance, and prioritize illegal aliens over the safety and welfare of the American people whose Federal taxes fund DOT's financial assistance programs.

Under the Constitution, Federal law is "the supreme Law of the Land." U.S. Const. Art. VI. That means that where Federal and State legal requirements conflict, States and State entities must follow Federal law. Declining to cooperate with the enforcement of Federal immigration law or otherwise taking action intended to shield illegal aliens from ICE detection contravenes Federal law and may give rise to civil and criminal liability. See 8 U.S.C. § 1324 and 8 U.S.C. § 1373. Accordingly, DOT expects its recipients to comply with Federal law enforcement directives and to cooperate with Federal officials in the enforcement of Federal immigration law. The Department also expects its recipients to ensure that the Federal financial assistance they receive from DOT is provided only to subrecipients, businesses, or service providers that are U.S. Citizens or U.S. Nationals and Lawful Permanent Residents (LPRs) or legal entities allowed to do business in the U.S. and which do not employ illegal aliens.

This letter provides notice of the Department's existing interpretation of Federal law. The Department will vigorously enforce the law on equal terms as to all its recipients and intends to take appropriate measures to assess their compliance based on the interpretation of Federal law set forth in this letter. Adherence to your legal obligations is a prerequisite for receipt of DOT financial assistance. *Noncompliance with applicable Federal laws, or failure to cooperate generally with Federal authorities in the enforcement of Federal law, will jeopardize your continued receipt of Federal financial assistance from DOT and could lead to a loss of Federal funding from DOT.*

The Department retains authority, pursuant to its oversight responsibilities and the terms of your agreements, to initiate enforcement actions, such as comprehensive audits and possible recovery of funds expended in a manner contrary to the terms of the funding agreement. DOT may also terminate funding in response to substantiated breaches of the terms of the agreement, or if DOT determines that continued funding is no longer in the public interest. These steps, within DOT's discretion, are intended to ensure accountability and protect the integrity of Federal programs.

To assist grant recipients in meeting their legal obligations, DOT offers technical guidance and support through its program offices. Should you require clarification regarding your obligations, you are encouraged to contact your designated DOT representative promptly. Proactive engagement is strongly advised to prevent inadvertent noncompliance.

DOT remains committed to advancing a transportation system that serves the public interest efficiently and unleashes economic prosperity and a superior quality of life for American families. This mission depends upon your strict adherence to the legal framework governing our partnership, and I trust you will take all necessary steps to comply with Federal law and satisfy your legal obligations.

Sincerely,

A handwritten signature in black ink, appearing to read "S.P. Duffy". The signature is fluid and cursive, with the first name "Sean" and last name "Duffy" clearly legible.

Sean P. Duffy

REPORTING REQUIREMENTS AND DUE DATES

Version Date: May 09, 2025

1. Milestone Progress Performance Report (MPPR)

- Quarterly, no later than 30 days after the reporting period end date. (Reporting period end dates are 3/31, 6/30, 9/30, and 12/31).
- Link to complete the report:
https://forms.office.com/pages/responsepage.aspx?id=WyTNxPBEIUOhqjhI0Ij3i_WilbptwIVPiq7KQbn3D01UOVRLRjVKSzBLR1YwWjQ0MzMwUjRTN1UyUiQIQCN0PWcu
- While you might not have detailed milestones to include in your first Q-MPPR, it is recommended that you complete the report to the best of your ability. Additional details can be included in the future Q-MPPR's.

2. Federal Financial Reports (FFRs) – SF-425

- Quarterly, no later than 30 days after the reporting period end date. (Reporting period end dates are 3/31, 6/30, 9/30, and 12/31).
- Final, no later than 120 days from award expiration date.
- Submit to:
smartreports@dot.gov

3. Request for Reimbursement

- You shall not submit request for reimbursement invoices more frequently than monthly.
- Link to submit:
<https://einvoice.esc.gov/>
- Additional information:
Delphi access must be requested by the person who will be submitting the Invoices. Those new to Delphi and/or DOT, must notify your SMART Grant Manager, and provide the information in the exact format below:
PO NUMBER (your award number):
Company Name:
First and Last Name:
Email Address:
Agency: OST

If your organization has an existing Delphi account for other DOT awards, contact Delphi directly to add your new SMART award to your account. When asked, the agency is OST.

If there is the need to change the person who has access to Delphi or to add an additional user, notify your SMART Grant Manager with the above listed information.

Contact Delphi customer service at 1-866-641-3500, option 4, then option 3 if you have any issues or need additional assistance.

You must include the SF-270 for Non-construction or SF-271 for Construction with your reimbursement invoices to identify the Federal share and the recipient's share of costs, together with supporting cost detail to clearly document all costs incurred.

If a request for reimbursement does not include or is not supported by sufficient details, the USDOT may deny the request or withhold processing the request until you provide sufficient detail.

4. Evaluation Plan

- 90 days from the Period of Performance start date.
- Submit to:
smartreports@dot.gov
- Specific guidance for this plan will be made available on the SMART website. Links will be shared when available.
- If you are unable to submit the report by the deadline, you must notify the SMART Grant manager and request approval for an extension. You must identify the new date by which the Plan would be submitted.

5. Data Management Plan

- 90 days from the Period of Performance start date.
- Submit to the online portal @ <https://dmptool.org/>
- Specific guidance for this plan will be made available on the SMART website. Links will be shared when available.
- If you are unable to submit the report by the deadline, you must notify the SMART Grant manager and request approval for an extension. You must identify the new date by which the Plan would be submitted.

6. Implementation Report

- For Stage 1 projects: A draft version is due no later than 1 year from the Period of Performance start date.
- The FINAL report shall be submitted no later than 120 days from the Period of performance end date.
- Submit to: smartreports@dot.gov
- Specific guidance for this plan will be made available on the SMART website. Links will be shared when available.



Procuring and Evaluating Mobile Command Vehicle for Critical UAS

Missions Statewide in New Hampshire

SMART Grant Stage 1 Application

Project Narrative

Submitted for your review and consideration is the NHDOT Bureau of Aeronautics' project application seeking funding under the FY 2024 Strengthening Mobility and Revolutionizing Transportation (SMART) Stage 1 Planning and Prototyping Grants Program. This project proposes to highlight the innovative use of emerging technology to improve disaster recovery and document the status of transportation infrastructure during critical events, situations, and emergencies statewide in New Hampshire.

a. Overview/Project Description

Description of the Project

Under the SMART Stage 1 program, this project will acquire and upfit a prototype of one (1) Mobile Command Emergency Response Vehicle (MCERV) with appropriate equipment, software, Blue List unmanned aircraft systems (UAS), and basic furnishings and equipment appropriate for managing critical UAS missions for the State of New Hampshire's transportation systems from any remote location away from the NHDOT's office in Concord, New Hampshire. The project will evaluate the effectiveness of this system under a variety of simulated and real-world cases and provide recommendations for process adjustments and system improvements, thereby allowing the State of New Hampshire, local towns and communities, and other state governments to replicate the recommended system with ease.

Real-World Issues and Challenges

For decades, law enforcement and environmental response agencies have been using MCERVs to facilitate rapid response to urgent or emergency situations. Improvements to UAS technologies, coupled with greater emphasis on professional training and development of state DOT personnel has improved response capabilities to the point where rapid deployment of these services can mean the difference between minimal and extended delays in restoring service to damaged transportation facilities following emergency situations. This project will serve to minimize disruption, not only to transportation systems and facilities, but also public access to goods, services, medical facilities, schools, workplaces, etc. NHDOT will evaluate the effectiveness of the MCERV specific to critical UAS missions in accessing damaged transportation sites, effectively collecting data, and rapidly communicating findings to local, State, and Federal stakeholders responsible for planning, documenting, and making transportation system repairs.

Proposed Technologies to be Used by the Project

The combined efforts of UAS and the software that processes data collected are augmenting the tools available to transportation officials so that decisions can be made more quickly based on accurate, rapidly collected, and transmitted data. Real-time data sharing through satellite internet links is possible with the proposed MCERV even in remote areas of New Hampshire. Two-way audio and visual communications will help decision-makers ensure that sufficient data collection is being captured during UAS flights and direct the UAS Team accordingly. This satellite internet link will also provide more reliable communications in rural areas assuring that FAA Low Altitude

Authorizations and Notification Capability (LAANC) and/or Special Governmental Interest (SGI) waivers are obtainable while on location, thus not preventing the UAS mission from collecting the needed data in a timely manner. This UAS technology can also be used simultaneously to identify impacts to private properties and environmental resources providing additional opportunities to communicate damage to transportation systems and facilitate expedited environmental permitting processes.

Desired Outcomes for a Potential Stage 2

Should funding be made available for this project under the SMART Grant, the goal will be to use the lessons learned from Stage 1 case studies utilizing the prototype MCERV to develop design specifications for an in-service MCERV. Stage 2 grant funds, if awarded, will be used to (1) implement the recommended specifications to complete the original prototype MCERV to the new specifications, (2) acquire six similarly equipped MCERVs to pre-stage at each of the six NHDOT District Offices, and (3) provide training to current and future NHDOT personnel in these District Offices to obtain their FAR Part 107 certificates and operate the MCERVs and their associated resources appropriately. The original MCERV, once completed, would be staged at NHDOT's main office in Concord, New Hampshire, to be deployed as needed to support the District Offices' MCERVs, including but not limited to, addressing multiple sites within a district. On average, each District Office is responsible for transportation systems within an area of nearly 1,600 square miles. The addition of the NHDOT's main office MCERV, as well as those from neighboring District Offices, will help to expedite transportation data collection needs when significant transportation system damage occurs over large areas.

Address the Goals of the SMART Grants Program

This project's use of UAS advanced technology and applications (including an appropriately equipped MCERV) aligns with USDOT's and the SMART Grants Program priorities as well as ensures NHDOT fulfills its mission of providing safe, quality transportation infrastructure in the following ways:

- *Safety and Reliability* – This project will help to reduce serious and fatal injuries on roadways of New Hampshire by monitoring/rerouting traffic flows in hazardous areas.
- *Climate Change and Sustainability* – This project will be used to identify alternatives for emergent situations that might otherwise impact air and water quality.
- *Equity, Access, and Justice40 Initiative* – This project ensures that data collected is immediately available so that both isolated and more populated areas of the state are reconnected to the state's transportation system quickly.
- *Workforce Development, Job Quality, and Wealth Creation* –NHDOT personnel will learn new skillsets that foster professional growth, as well as help NHDOT attract and retain quality professionals.
- *Partnerships* – This project will collaborate with stakeholder communities to demonstrate the utility of the MCERV package to return damaged transportation infrastructure to useful condition for residents, businesses, and other economic and safety needs.
- *Integration* - This project leverages the use of innovative aviation technologies to aid NHDOT decision-makers and emergency agency counterparts with quality data from which expedient transportation infrastructure decisions, improvements, and documentation can be established.

b. Project Location

The project will provide statewide coverage to each of New Hampshire's six (6) transportation districts. The 2020 Census reports that there are 1,377,529 residents throughout the 246 communities in the State of New Hampshire, which is a 4.6% increase over the 2010 Census. This includes 24 disadvantaged communities based on the Climate and Economic Justice Screening Tool (CEJST) and 14 urban areas designated by the 2020 Census. For the duration of the Planning & Prototyping grant period, the MCERV will not be assigned to cover a specific district or community. It will be located at, and dispatched from, NHDOT's headquarters in Concord as warranted or needed.

c. Community Impact

This project anticipates providing service to all New Hampshire communities, including those that are disadvantaged, with (1) rapidly deployable UAS data collection services, (2) real-time data sharing with all government officials and stakeholders, (3) facilitated, real-time direction from local, state, and federal transportation decisionmakers, (4) identification of collateral impacts not easily seen from the ground or anticipated by decisionmakers, and (5) timely restoration of transportation systems vital to local communities. No potentially negative community impacts are foreseen as a result of this project.

d. Technical Merit Overview

Identification and Understanding of Problem to Be Solved

NHDOT's current response time for addressing emergency repairs to its transportation systems is an impressive mix of coordination, prompt decision-making with limited data, and a can-do attitude by both District and contractor personnel. While every effort is made to identify adequate resources to return transportation systems to normal, prompt decisions must still be made with limited data using a data collection process that can be a slow and potentially dangerous. NHDOT currently deploys its UAS-certified personnel to damaged transportation sites, but they are limited to collecting data on-site with the UAS and must return to NHDOT's main office in Concord, New Hampshire, to process acquired data. Sharing data in real-time, including live streaming, can be challenging to near impossible due to the remoteness of the transportation sites and lack of internet connectivity in more rural areas of New Hampshire. Current resource limitations indicate that returning the transportation system back to usefulness is only slightly better than traditional survey, communication, decision-making, and repair efforts that NHDOT has relied on for decades.

This project serves to address the aforementioned resource limitations and learn from those shortfalls to identify and implement future improvements. The MCERV will be equipped with the appropriate computer hardware and software to quickly process collected data on site. Satellite internet connectivity resolves issues associated with real-time data sharing, flight and waiver authorizations, and decision-making delays with government officials and stakeholders. Additionally, the MCERV provides for a safe and secure environment from which NHDOT's remote pilots can properly operate and manage equipment (UAS platforms, computers, data storage devices, etc.) while being able to remain in close proximity to the damaged site.

Appropriateness of Proposed Solution

UAS technologies have been integrated into numerous industries since the mid-2000s. The United States Congress, Federal Aviation Administration, and Federal Communications Commission have advanced laws and regulations regarding the integration of UAS into the National Airspace System including remote pilot licensing, airspace regulation, aircraft registrations, and enforcement efforts. New processes are being evaluated by the FAA that would allow UAS to be flown beyond visual line of sight (BVLOS), over people and moving vehicles, and other useful advantages for users of UAS data. The current state of UAS technology is sufficient in most cases to obtain useful benefits for the traveling public.

This project proposes to combine a number of UAS resources into one MCERV for rapid deployment as needed. After evaluating actual and/or simulated case studies and making recommendations for necessary improvements, along with identifying potential options to meet area-specific needs, the intent is for each of the six (6) NHDOT District Offices to acquire and utilize a fully equipped MCERV; ultimately, the project's specification recommendations would become the scalable standard that any organization can quickly implement and utilize for their UAS program.

The need to respond to out-of-service transportation systems faster and more cost-effectively is heard from all sectors across the nation. Utilizing status quo methods only reinforces these claims. This project addresses both the time and cost resources with improvements that are within reach of NHDOT. Other solutions that are outside of NHDOT's control might include 5G internet connectivity statewide and advanced knowledge of which transportation infrastructure will require repairs for any specific event.

This planning and prototyping project starts with one (1) minimally equipped MCERV. Should Stage 2 implementation grant funding become available, the intent is to provide a similar MCERV system to each of the six (6) NHDOT District Offices for use within their district and/or assist impacted Districts when they are not otherwise affected. The original MCERV would be completed to the new standards and continue to be used and maintained for its useful life to supplement and provide additional UAS resources where they are needed most in the state, and potentially across state lines when needed. NHDOT identified the need for six (6) District Offices decades ago as an equitable distribution and centralization of needed state transportation personnel and resources throughout the state. Some District Offices cover a larger land area than others, largely due to population and transportation infrastructure distributions.

Expected Benefits

This project's use of Blue List UAS advanced technology and applications (appropriately equipped MCERV) aligns with USDOT's and SMART Grants Program' priorities to reduce serious and fatal injuries on roadways, identifies alternatives for situations that might otherwise impact air and water quality, ensures that the data is immediately available so that both isolated and more populated areas of the state are reconnected to the state's transportation system quickly, and by ensuring more NHDOT personnel learn new skillsets that help them professionally, and ensures the NHDOT fulfills its mission of providing safe, quality transportation infrastructure to all of New Hampshire's transportation users.

Measurable performance indicators identified for evaluation and enhancement of this project include: (1) the amount of time to provide requested usable UAS data to government officials and stakeholders; (2) the ability to provide real-time remote visibility of the site to decision-makers and to make adjustments to data-collection parameters while the UAS is in flight; and (3) cost comparisons to traditional transportation system repairs where material quantity calculations were less accurate. Case study evaluations will provide recommendations for making performance improvements and/or other resource adjustments for additional improvements to the time and cost issues associated with transportation system repairs and documentation.

NHDOT’s MCERV project aims to demonstrate how transportation infrastructure return-to-service circumstances and critical transportation events documentation can be completed quickly and efficiently saving both time and money while improving stakeholder collaborations. A unique benefit of UAS is its aerial perspective. Stakeholders and decision-makers can see the “bigger picture” because they can identify the extent of the transportation problem and assess temporary rerouting of traffic or other means by which to limit or eliminate traffic tie-ups. Other benefits realized include the ability to minimize air-quality impacts from idling vehicles and/or provide another means of transportation access to stranded residents and visitors.

e. Project Readiness Overview

Feasibility of Workplan

In recent years, supply-chain issues would have made this project difficult given the 18-month grant requirement for project completion. The State of New Hampshire’s Contracts and Procurement office has statewide contracts for vehicle and equipment acquisitions that should expedite the procurement process so that precious time will not be lost during procurement. There are no known or anticipated legal, permitting, waivers, special permissions, or regulations that would prohibit or delay implementation of this project. Additionally, delivery times for equipment and services will allow sufficient time to conduct case studies, coordinate stakeholder outreach, and prepare a written report documenting the planning and prototyping phase. Portions of the written report can be prepared concurrently with stakeholder outreach and equipment/service procurement saving time and ensuring the 18-month grant requirement can be met. A fee proposal for work to be completed by NHDOT personnel is included in this grant application. SMART grant funding will be used to implement training for NHDOT employees with a variety of experience in the use of the UAS technologies, software, and use of the MCERV. This training will continue on an annual basis to assure proficiency and will also be the venue for these individuals to work together and share lessons learned to constantly improve the program as an inclusive group. As the program grows it will likely create new jobs utilizing this emerging technology. Below is an estimated project schedule to be refined upon funding notification.

	PROJECT DURATION (MONTHS)																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Article 1 - Grant Administration																			
Article 2 - Develop Specs & Procure Deliverables																			
Article 3 - Develop, Implement & Evaluate Case Studies																			
Article 4 - Reporting			R			R			R			R			R				
Article 5 - Outreach Efforts	M		M						M			M							
Article 6 - Expenses/Equipment Costs																			

 Period of Work Efforts
 R Report Submission
 M Meeting Held

Community Engagement and Partnerships

This project proposes to include community stakeholders at critical points throughout the project including: (1) kick-off meeting to understand what this project proposes to accomplish; (2) after drafting vehicle and equipment specifications to ensure that the procured vehicle/equipment will meet expectations; (3) following case study evaluations to discuss lessons learned and note key areas for improvements; and (4) upon preparing the final report and deliverables. In this way, NHDOT aims to conduct the project in an inclusive, continuous, and accessible manner with community stakeholder representation from public (local, State, Federal government) and private (residents, business owners) groups.

A recent weather-related event in Alton, New Hampshire, triggered the concept for this project to be pursued. The town sustained heavy flooding and was limited to a single point of access to the town due to several miles of damaged state roads making them impassable and causing damage to private properties and sensitive environmental resources. NHDOT deployed multiple response methods including use of UAS data collection methods. The UAS mission sites were reached by generic state passenger vehicles that were not equipped to deal with the UAS resource needs or stakeholder needs for real-time data processing for on-the-spot decisions.

Another recent situation involved the solar eclipse event in the Spring of 2024. Higher than normal traffic volume was predicted and a UAS mission was requested to stage the UAS Team in a strategic location to monitor the movement of traffic. Due to the eclipse's path through rural New Hampshire, the location of the mission had limited cellular service which was compounded by the cellular network being overwhelmed with the additional cellphone usage. This lack of connectivity prevented the UAS Team from being able to share traffic conditions with emergency management officials and other decision-makers.

Leadership and Qualifications

The project team was developed to harness the expertise found within the diversity of NHDOT. The Aeronautics Administrator, Tricia L. Schoeneck Lambert, will lead this team by providing overall project vision and guidance as well as provide quality control on all deliverables. Her expertise in project management and administration is coupled with more than 25 years of experience with NHDOT. The project team consists primarily of personnel from the NHDOT/Bureau of Aeronautics, which houses NHDOT's UAS Team. The UAS team is comprised of Jason R. Leavitt as the lead UAS operations and development subject matter expert joined by Brian R. Easler as the UAS operations and data systems subject matter expert. The team's grant administration lead is Danielle R. Plant Hutchinson who will be responsible for all grant tracking, reporting, and payment requests. The team's project manager is Carol L. Niewola, PE, CM. While at NHDOT, and in her previous positions as airport manager and airport engineer/planner, she has been the successful project lead and client manager for multiple simultaneous projects involving subconsultants, clients, stakeholders, and government agency officials.

General oversight and continuity of leadership is provided by NHDOT Commissioner, Deputy Commissioner, and the Director of Aeronautics, Rail & Transit. Other Bureaus within NHDOT will play key roles as the project progresses including personnel from the Bureau of Mechanical Services, Bureau of Highway Maintenance, Bureau of Bridge Maintenance, and District Offices.

Experienced and qualified individuals from these Bureaus will be providing valuable insight about past experiences, costs, and ideas for improvements going forward.

NHDOT leadership is committed to shepherding this project through Stage 1 and hopefully, pending funding availability, through Stage 2 of the SMART Grants Program by actively participating in the development, review, and presentation of project documentation. NHDOT staff resources are committed to thoroughly vetting this project as they will be the prime users of the MCERV and its associated equipment, coming to rely on it to ensure timely completion of their UAS workload. This project's MCERV will become part of the fleet of NHDOT owned and maintained vehicles. Computer hardware and software will be supported by the New Hampshire Department of Information Technology, with funding support included in the NHDOT Bureau of Aeronautics' operational budget.

Additional Consideration: Benefit to Disadvantaged Communities

Completion of this project will help ensure that both isolated and more populated areas of the state are reconnected to transportation systems quickly following natural disasters and emergency situations.



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Appendix 1 - Resumes

Tricia L. Schoeneck Lambert	
Title	Aeronautics Administrator
Project Role	Team Lead and Quality Control
Education	B.S. in Aviation Management & Flight Technology from Florida Institute of Technology, 1993
Relevant Employment	2005-Present: Administrator, NHDOT Bureau of Aeronautics 2000-2005: Senior Aviation Planner, NHDOT Bureau of Aeronautics 1999-2000: Aviation Planner, NHDOT Bureau of Aeronautics 1998-1999: Airport Planner, DY Consultants, Valley Stream, NY 1994-1998: Operations Manager, DM Airport Developers – Morristown Municipal Airport, NJ 1993-1994: Administration Support, Lehigh Valley International Airport, Allentown, PA
Areas of Expertise	Strategic development of short- and long-term vision goals for aviation programs in New Hampshire; aviation program oversight and personnel mentoring; development of operational and capital budgets; legislative feedback on aviation issues; and growing the aviation education outreach program.
Licenses, Awards	FAA Commercial Pilot Certificate, Instrument, Multi-engine

Carol L. Niewola, PE, CM	
Title	Senior Aviation Planner
Project Role	Project Manager
Education	B.S. in Civil Engineering from Michigan State University, 1989
Relevant Employment	2005-Present: Senior Aviation Planner, NHDOT Bureau of Aeronautics 1998-Present: Owner, Airport Estimates, an independent fee estimating business, ME & NH 2003-2005: Project Manager – Airport Planning & Land, Gale Associates, Inc., Bedford, NH 1998-2001: Airport Manager, Auburn-Lewiston Municipal Airport, ME 1992-1998: Senior Airport Planner/Senior Project Manager, Dufresne-Henry, Inc., Portland, ME 1991-1992: Airport Engineer, Hoyle, Tanner & Associates, Inc., Manchester, NH 1989-1991: Airport Engineer/Traffic Engineer, T.Y. Lin International, Inc., Falmouth, ME

Carol L. Niewola, PE, CM

Areas of Expertise	Development of short- and long-term capital project plans for airport sponsors; management of the FAA’s State Block Grant Program in NH; project manager of multiple airport planning and development projects; project contract and budget management; aviation program oversight and personnel mentoring; legislative feedback on aviation issues; and grant management.
Licenses, Awards	FAA Private Pilot Certificate FAA TRUST Certificate Professional Engineering License, ME #7850 Certified Member of AAAE 2023 NASAO Presidents Award

Jason R. Leavitt

Title	UAS Planner
Project Role	UAS Operations and Development Lead
Education	Part-time Police Academy Certification from NH Police Standards and Training, 2015 A.S. in Civil Engineering from Vermont Technical College, 1992
Relevant Employment	2021-Present: UAS Planner, NHDOT Bureau of Aeronautics 2021-Present: Patrolman, Town of Alton/BRSOG UAS Program Manager, NH 2015-2021: Patrolman, Town of Barnstead, NH 1996-Present: On-Call Fire Fighter, Barnstead Fire-Rescue, NH 1992-2021: Contract Administrator, NHDOT Bureau of Construction
Areas of Expertise	Development of short- and long-term goals for NHDOT’s UAS program; UAS program oversight and personnel training; aircraft emergency responses; airport safety inspection program; legislative feedback on UAS issues; airport manager for Alton Bay Ice Runway; and growing the UAS program.
Licenses, Awards	FAA Private Pilot Certificate FAA Remote Pilot Certificate Engineer-in Training, Joint Board of Licensure and Certification, 1995 QAT from NETTCP (#138) HMAPI from NETTCP (#703) Field Testing Technician – Grade I from ACI (#00956089)

Brian R. Easler

Title	UAS Specialist
Project Role	Operations and Data Systems Specialist
Education	Merrimack Valley High School, 1987
Relevant Employment	2023-Present: UAS Specialist NHDOT Bureau of Aeronautics 2021-2023: Engineering Technician, NHDOT Bureau of Highway Design

Brian R. Easler	
	2018-2021: Engineering Technician, NHDOT Bureau of Right of Way 1994-2018: Engineering Technician, NHDOT Bureau of Highway Design
Areas of Expertise	Implementation of short- and long-term goals for NHDOT's UAS program; UAS program personnel training; aircraft emergency responses; airport safety inspection program; growing the UAS program; and UAS data processing and evaluation using various computer software programs.
Licenses, Awards	FAA Remote Pilot Certificate

Danielle R. Plant Hutchinson	
Title	Aeronautics Program Supervisor
Project Role	Grant Administrator
Education	B.S. in Business Administration from Hesser College, 2009 A.S. in Paralegal Studies from Hesser College, 2009 A.S. in Accounting from NHCTC, 2006
Relevant Employment	2017-Present: Aeronautics Program Supervisor, NHDOT Bureau of Aeronautics 2011-2017: Program Specialist I, NHDOT Bureau of Finance & Contracts 2010-2011: Audit Technician, NHDOT Bureau of Aeronautics
Areas of Expertise	Management and oversight of all federal and state aviation grant funds; aviation contract management; program oversight and personnel mentoring; management of operational and capital budgets; managing and oversight of the aircraft and commercial aviation operators' registration programs; and growing the aviation education outreach program.
Licenses, Awards	FAA TRUST Certificate



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Appendix 2 –Summary Budget Narrative**

An estimated project budget was created for all assumed tasks necessary to complete this planning and prototyping project that includes personnel labor costs, fringe benefits, travel, equipment, supplies, and contractual and indirect costs (de minimis rate). This project budget conservatively included two (2) in-person trips for two (2) project team members to meet with USDOT Research and Technology Office personnel in Washington, DC, to review project progress and obtain guidance or feedback at kick-off and draft final or final report project phases. Data and performance reporting requirements have been included in this project budget as well. NHDOT anticipates that only SMART Grants Program funds will be used to complete this project.

The NHDOT indirect rate of 10% (de minimis rate) was approved for federal fiscal year 2024 by the Federal Highway Administration and has been used for this grant application. A copy of this approval is available upon request.

Below is a summary of the major project tasks and a summary of work hours and costs associated with each task.

Total SMART Grants Program Stage 1 requested amount is \$459,284.

Table 1: Summary of Project Budget

	TOTAL NHDOT HOURS	TOTAL NHDOT RAW LABOR COST	FRINGE BENEFITS 54.49%	TOTAL NHDOT LABOR COST	Expenses	INDIRECT COSTS 10%	TOTAL PROJECT COSTS
Article 1 - Grant Administration	172	\$5,088	\$2,771	\$7,857	\$0	\$786	\$8,643
Article 2 - Develop Specifications & Procure Deliverables	376	\$14,881	\$8,108	\$22,989	\$0	\$2,299	\$25,288
Article 3 - Develop, Implement and Evaluate Case Studies	534	\$21,254	\$11,581	\$32,836	\$0	\$3,284	\$36,119
Article 4 - Reporting	492	\$20,706	\$11,283	\$31,989	\$2,627	\$3,452	\$38,077
Article 5 - Outreach Efforts	72	\$3,298	\$1,797	\$5,095	\$0	\$510	\$5,605
Article 6 - Expenses/Equipment Costs	0	\$0	\$0	\$0	\$314,138	\$31,414	\$345,552
PROJECT TOTALS	1,646	\$65,225	\$35,541	\$100,766	\$316,765	\$41,753	\$459,284

SF 424A requires an estimate of the funding expenditures by fiscal year for the duration of the project. An assumption was made that the grant agreement would be in place by October 1, 2024 (Federal Fiscal Year 2025), so the first fiscal year is estimated to include all of Article 6 and approximately 80% of the remaining articles as follows in Table 2.

Table 2: Estimated Federal Fiscal Year Expenditures

	TOTAL NHDOT LABOR COST	Expenses	INDIRECT COSTS 10%	TOTAL PROJECT COSTS
First Fiscal Year	\$80,613	\$316,765	\$39,685	\$437,063
Second Fiscal Year	\$20,153	\$0	\$2,068	\$22,221
PROJECT TOTALS	\$100,766	\$316,765	\$41,753	\$459,284

Table 3 is a summary of NHDOT personnel work hours in support of this project.

Table 3: Summary of Work Hours

	ESTIMATED HOURS BY LABOR CLASSIFICATION							TOTAL NHDOT HOURS
	Aeronautics Administrator \$57.14 /hr	Senior Aviation Planner \$43.65 /hr	UAS Planner \$41.76 /hr	UAS Specialist \$38.09 /hr	Aeronautics Program Spvr \$38.09 /hr	Aeronautics Program Asst \$24.09 /hr	Admin. Support \$21.21 /hr	
Article 1 - Grant Administration	2	18	0	0	46	80	28	172
Article 2 - Develop Specifications & Procure Deliverables	0	13	144	192	24	3	0	376
Article 3 - Develop, Implement and Evaluate Case Studies	0	8	240	288	0	0	0	534
Article 4 - Reporting	5	318	148	0	0	0	25	492
Article 5 - Outreach Efforts	16	24	32	0	0	0	0	72
Article 6 - Expenses/Equipment Costs	0	0	0	0	0	0	0	0
PROJECT TOTALS	23	375	562	480	70	83	53	1,646

Table 4 summarizes the subtasks for each article in this project and serves as a proxy for a scope of work. A formal scope of work will be developed upon notification of funding to provide details of work efforts and deliverables more fully.

Table 4 – Summary of Project Sub-Tasks

Article 1 - Grant Administration	
	Coordinate grant agreement execution including G&C process
	Set up grant tracking documents
	Prepare labor invoices and collect equipment invoices (~9@)
	Prepare grant payment requests (~9@)
	Prepare grant closeout package
Article 2 - Develop Specifications & Procure Deliverables	
	Prepare specifications for mobile command vehicle and furnishings
	Prepare specifications for computer hardware
	Prepare specifications for computer software
	Prepare specifications for two UAS & related accessory components
	Coordinate solicitations with NHDAS and NHDolT
	Review and inspect deliverables
	Coordinate deliverables with NHDOT/Mechanical Services & NHDolT
Article 3 - Develop, Implement and Evaluate Case Studies	
	Set up and execute urban location daytime case
	Set up and execute urban location nighttime case
	Set up and execute rural location daytime case
	Set up and execute rural location nighttime case
	Set up and execute poor weather case
	Set up and execute one additional case as determined by stakeholders/partners

Article 4 - Reporting	
	Quarterly project progress reports to USDOT (~6@)
	Attend project kick-off meeting in Washington, DC
	Prepare draft introduction chapter & graphics
	Prepare draft existing conditions chapter & graphics
	Prepare draft research efforts chapter (including case studies) & graphics
	Prepare draft recommendations chapter & graphics
	Prepare draft executive summary & graphics
	Prepare revised introduction chapter & graphics
	Prepare revised existing conditions chapter & graphics
	Prepare revised research efforts chapter (including case studies) & graphics
	Prepare revised recommendations chapter & graphics
	Prepare revised executive summary & graphics
	Prepare draft final report & graphics
	Attend draft final report review meeting in Washington, DC
	Prepare and submit final report & graphics
Article 5 - Outreach Efforts	
	Kick-off meeting
	Stakeholder/Partner Meeting #1 - draft specifications
	Stakeholder/Partner Meeting #2 - case studies lessons learned
	Stakeholder/Partner Meeting #3 - final report presentation
Article 6 - Expenses/Equipment Costs	
	4x4 Cargo van (high top)
	Interior set up Wiring Interior lighting - In House
	Computer / Monitor
	Starlink (internet) - equipment / install
	1 year subscription to Starlink
	Emlid Reach RS2+ Survey Kit
	Exterior warning lighting
	Vehicle lettering
	Signage external to the unit / cones - roadway
	Pop-up Tent
	1 year maintenance on command unit
	First aid kit
	Fire extinguisher
	Aviation radio / install
	NHDOT radio/police band / install
	Inverter 2000w / install
	Hand held radios (4)
	USA-made UAS w/ zoom & thermal
	USA-made UAS w/ LiDAR & visual camera
	UAS processing software - Perpetual
	Waders / floatation vests
	Reflective coats
	Head lamps
	Hard hats



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Appendix 3 –Letters of Commitment

No letters of commitment are included in this application.



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Appendix 4 –Project Location File

The .kml file that accompanies this project narrative is included in the Valid Eval application submission. The project location is representative of the entire State of New Hampshire with no specific sites identified within the state.