Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program

Strengthening Mobility and Revolutionizing Transportation

Fiscal Year 2024 Stage 1 Planning and Prototyping Grants by State

Alaska

Recipient	Project Name	Award Amount	Project Type	Project Summary
State of Alaska Department of Transportation and Public Facilities	Avalanche Mitigation Alert Detection (AMAD)	$1,128,799	Sensors	This project will use Remote Avalanche Control Systems (RACS) and Advanced Forecasting Technology (AFT) to address significant avalanche risks on the Seward Highway corridor, one of Alaska's highest-trafficked NHS routes.

California

Recipient	Project Name	Award Amount	Project Type	Project Summary
Metropolitan Transportation Commission	Data Platform for Connected and Shared Mobility (CSM) Infrastructure	$1,543,299	Transit Innovation	This project will develop a cutting-edge map-based mobility data platform using Open Street Maps (OSM) to integrate critical systems throughout the San Francisco Bay Area and address operational inefficiencies relating to transportation improvement implementation.
Caltrans (California Department of Transportation)	Skate Deployment and Electric Bus Operations Optimization	$2,000,000	Transit Innovation	This project will use Skate (an open-source bus operations software) to address operational challenges in managing battery electric buses and improve overall transit service reliability across multiple transit agencies in California.
San Francisco Municipal Transportation Agency	The Smart & Integrated Management and Fleet Charging (SIM-FC) Project	$2,000,000	Transit Innovation	The Smart & Integrated Management and Fleet Charging (SIM-FC) project will use state-of-the-art platforms such as Software-as-a-Service (SaaS) combined with customer-side

				Internet of Things (IoT) devices, sensors, and advanced machine learning algorithms to address the inefficiencies from a fragmented, outdated, and manual bus yard management system that is susceptible to mistakes and delays.

Florida

Recipient	Project Name	Award Amount	Project Type	Project Summary
Pinellas Suncoast Transit Authority	Automating the Verification Process for Eligibility Benefits	$1,000,000	Transit Innovation	The project will use APIs to connect PSTA's reduced fare enrollment process to Login.gov to address the challenges prospective veteran and senior transit riders face to apply for free and reduced fares in Pinellas County, FL.

Hawaii

Recipient	Project Name	Award Amount	Project Type	Project Summary
Hawaii Department of Transportation	AI Sensing-Empowered SMART Intersection Safety Improvements for Vulnerable Groups	$1,290,000	Connected Vehicles	The objective of this project is to develop smart infrastructure and AI-driven video analytics sensing systems around intersections to detect and predict vehicle, pedestrian, bicyclist position, speed, and trajectory for vehicle-pedestrian-bicycle collision avoidances based on real-time V2X communication, accurate positioning functions, and large amount of data transmissions.

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Illinois

Recipient	Project Name	Award Amount	Project Type	Project Summary
Chicago Department of Transportation	Chicago Accessible Intersection Navigation Application	$1,490,000	Smart Traffic Signals	This project will use traffic signal telemetry data through a smartphone application to improve accessibility for visually impaired pedestrians in the City of Chicago.

Indiana

Recipient	Project Name	Award Amount	Project Type	Project Summary
Indiana Department of Transportation	Smarter and Safer Workzone Through Multimodal Intrusion Detection	$1,980,988	Workzone safety	This project will use Workzone Data Exchange (WZDx), roadside sensors, and Digital Twin (DT) technology to address the problem of workzone intrusion and enhance safety for drivers and workers in Indiana's highways and urban areas.
Indiana Department of Transportation	Building Local Capacity for Aerial Surveys	$2,000,000	UAS	This project will use small, unmanned aircraft systems (sUAS), sensors, data sharing and collaboration software to build local capacity for developing and delivering a National Defense Authorization Act (NDAA) complaint aerial survey program.

Maryland

Recipient	Project Name	Award Amount	Project Type	Project Summary
Baltimore City Department of Transportation	Smart Traffic Signal Systems to Mitigate Bridge Collapse Impact in Baltimore City	$1,976,456	Smart Traffic Signals	This project will use smart traffic signal systems to address mobility, safety, and logistics issues caused by the Francis Scott Key Bridge collapse in Baltimore City.

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Minnesota

Recipient	Project Name	Award Amount	Project Type	Project Summary
Red Lake Band of Chippewa Indians	Red Lake Nation E-Bike Smart Grid & Demonstration	$595,866	Smart Grid	This project will use smart grid software and renewable-energy powered e-bike charging stations to address transportation insecurity issues, physical and mental health concerns, and an inherent belief in environmental protection for Tribal members of the Red Lake Nation, and to replicate benefits derived from the project for other Tribal communities and rural areas.
City of Moorhead	Far-Moor SMART Traffic Signal System	$1,989,000	Smart Traffic Signals	The Far-Moor SMART Traffic Signal System will use a fully integrated advanced traffic management system (ATMS), advanced traffic signal performance measures (ATSPMs), traffic redistribution and routing, and transit signal priority (TSP), to enhance transportation safety, improve transit-time reliability, and improve equity through systemwide resiliency.

North Carolina

Recipient	Project Name	Award Amount	Project Type	Project Summary
North Carolina Department of Transportation	Remote Emergency Support Program for Operational Needs & Delivery (RESPOND)	$1,100,000	UAS	The Project will use innovative aviation technology (uncrewed aircraft systems) to create a drone disaster response and delivery network to address surface transportation and access challenges following natural

				disaster events in Lumberton, North Carolina.

New Hampshire

Recipient	Project Name	Award Amount	Project Type	Project Summary
City of Manchester	City of Manchester Smart Traffic Signal Corridors Project	$2,000,000	Smart Traffic Signals	This project will install advanced traffic signal equipment, optimize corridor timing, improve vehicle, pedestrian, and bicycle detection, integrate connected vehicle technology, and improve the management of traffic signals through use of automated traffic signal performance measures (ATSPMs) to reduce delay and emissions while improving safety and communications in a disadvantaged neighborhood.
New Hampshire Department of Transportation	Procuring & Evaluating Mobile Command Vehicles for Critical UAS Missions Statewide in New Hampshire	$459,284	UAS	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.

New Mexico

Recipient	Project Name	Award Amount	Project Type	Project Summary
Bernalillo County	I-40 TradePort Corridor Intelligent Data Platform	$1,939,762	Sensors	The I40DTw project, through Stage 1 planning and prototyping, will develop the intelligent data platform that will underlie a fully functional digital twin implemented in Stage 2 to address transportation challenges impacting safety,

				efficiency, productivity, and environmental sustainability of the I-40 Corridor in New Mexico and Arizona.

Nevada

Recipient	Project Name	Award Amount	Project Type	Project Summary
Nevada Department of Transportation	Enhancing Corridor Communication Roadmap	$1,920,660	Sensors	This project will use automation/artificial intelligence, digitalization, connectivity, data standardization, and systems engineering to develop the requirements of a data exchange that can ultimately be used by the I-80 and I-35 coalitions.

New York

Recipient	Project Name	Award Amount	Project Type	Project Summary
The Port Authority of New York and New Jersey	C-V2X for Queuing and Merging Safety and Efficiency on Bridge Approach Corridors: A GW Bridge Pilot	$1,999,999	Connected Vehicles	This project will use C-V2X technology to address a stretch of problematic roadway with daily vehicular collisions that leads to hours of traffic congestion and concentrated vehicular emissions at the Trans-Manhattan Expressway section of the George Washington Bridge in New York City.
New York City Department of Transportation	Adaptive Transit Signal Priority (TSP) Demonstration	$2,000,000	Transit Innovation	This project will use adaptive Transit Signal Priority (TSP) technology to address bus performance to increase reliability and traffic signal inefficiencies

				on major corridors of the Bronx.
County of Dutchess	Autonomous High-Definition Aircraft Video Tracking & Data Collection System	$1,931,850	Sensors	This project will use artificial intelligence, computer vision, robotics, high-definition cameras, and autonomous recording systems to address critical challenges in documenting and monitoring aircraft operations at the Hudson Valley Regional Airport, located in Dutchess County, NY, as well as several private and commercial airports nationwide.
City of Utica	Utica SMART Traffic Signals	$1,809,957	Smart Traffic Signals	This project will use smart traffic signals to address pedestrian safety, emergency response times, and climate impact of excessive traffic congestion in a heavily traveled corridor within the disadvantaged City of Utica, NY.

Oklahoma

Recipient	Project Name	Award Amount	Project Type	Project Summary
Cherokee Nation	Cherokee AirCARE SMART Grant	$1,460,805	UAS	This project will use Unmanned Aircraft Systems (UAS) technology to deliver medical supplies and pharmaceuticals to support Community Health Nurses that are providing care in rural areas to patients who face transportation barriers and cannot travel to a clinic.
Choctaw Nation of Oklahoma	Intelligent Aerospace System Networks with Secure Unattended Hubs	$1,918,409	UAS	This Stage 1 project will use Secure Unattended Hubs, advanced Uncrewed Aviation Systems (UAS), and intelligent ground robotics to address safety and resiliency, and build supply chain reliability in the Choctaw Nation of Oklahoma's healthcare logistics system.

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Pennsylvania

Recipient	Project Name	Award Amount	Project Type	Project Summary
Southeastern Pennsylvania Transportation Authority	Improving SEPTA'S Accessibility using GTFS-Pathways	$634,294	Transit Innovation	This project will use GTFS-Pathways to improve accessibility and navigability of SEPTA transit by enabling turn-by-turn routing for riders within Metro stations in Philadelphia and Upper Darby, Pennsylvania.
Pennsylvania Department of Transportation	Freight Signal Priority Project	$1,327,358	Connected Vehicles	This project will use freight signal priority implementation to address critical air quality issues and freight related congestion in several areas in central Pennsylvania.

Rhode Island

Recipient	Project Name	Award Amount	Project Type	Project Summary
City of East Providence	The East Providence Traffic Circulation Improvements Project	$549,770	Smart Traffic Signals	The Project will use intelligent sensor-based technology and SMART technology traffic signals to better manage congestion that directly impacts the traditional City Center's downtown which includes the City's high traffic density and pedestrian-scale Taunton Avenue, where City Hall, small local retail and service businesses, schools and

				neighboring residential neighborhoods are located.

South Dakota

Recipient	Project Name	Award Amount	Project Type	Project Summary
South Dakota Department of Transportation	South Dakota Statewide Advanced Traffic Management System	$1,995,931	Smart Traffic Signals	This project will use advanced traffic management system technology to integrate disparate intelligent transportation systems throughout South Dakota.

Tennessee

Recipient	Project Name	Award Amount	Project Type	Project Summary
Tennessee Department of Transportation	Tennessee Truck Parking Availability System	$1,986,000	Sensors	This project will use truck parking availability system (TPAS) technology to address the truck parking shortage in Smith County.
Nashville Metropolitan Transit Authority	Fixed-Line Transit 2.0: Real-Time Optimization of High-Frequency Transit Service	$1,982,235	Transit Innovation	This project will use Computer Aided Dispatch/Automated Vehicle Location systems, headway-conditional Transit Signal Priority, traffic-adaptive signals, machine vision, and Artificial Intelligence/Machine Learning to address unreliable transit service, especially unstable bus headways, that cause long and unpredictable customer wait times at transit stops in the Murfreesboro Pike

				corridor in Southeast Nashville/Davidson County, Tennessee.

Texas

Recipient	Project Name	Award Amount	Project Type	Project Summary
Waco Metropolitan Planning Organization	Smart Technologies for Businesses, Students, and Transit: Equitable Access in Mobility Systems	$1,440,405	Smart Traffic Signals	This project will use AI Edge sensors and the MobiMaestro algorithm to improve pedestrian, bike and transit usage, VRU safety, and human scale access to businesses in Waco downtown.
City of Galveston	Galveston Rapid Evacuation and Transportation System (GREATS)	$1,999,970	Smart Traffic Signals	The project will deploy AI-adaptive smart traffic signal technology and intelligent, sensor-based transportation infrastructure to improve emergency evacuation operations and optimize surge traffic flow across the City of Galveston during severe weather and visitor events.
City of El Paso	El Paso Downtown International Port ITS Design & Regional Integration Project	$2,000,000	Sensors	The Project includes designing intelligent transportation systems (ITS) for two international ports of entry and integrating existing ITS via Dynamic Traffic Assignment (DTA) operational simulation modeling.

Virginia

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Recipient	Project Name	Award Amount	Project Type	Project Summary
City of Alexandria	SmartScan: Alexandria's AI-Driven Roadway Infrastructure Monitoring	$900,000	Sensors	This project will use AI-powered camera technology to collect unbiased real-time condition information about our infrastructure.

Washington

Recipient	Project Name	Award Amount	Project Type	Project Summary
Intercity Transit	AI-Powered Smart Sensors & Integrated Data Management Dashboard	$2,000,000	Sensors	This project will use/install smart sensors to identify where conflicts occur, the nature of those conflicts and the severity to better manage the traffic signals around the Lacey Transit Center and the adjacent South Puget Sound Community College campus to reduce conflicts and improve transit reliability and performance, as well as implement an integrated data management dashboard.