Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program

Are you looking to deploy smart city or other emerging transportation technology?

The SMART grant program from USDOT aims to provide grants to eligible entities 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.

Grant information released September 2022! Anticipated 60-day application window.

USDOT has $100,000,000 available per year for five years and will be distributed with 40% going to urban communities with a population greater than 400,000, 30% going to urban communities with a population less than 400,000, and 30% going to rural communities.

There are 2 stages of the grant – Stage 1 (Planning) and Stage 2 (Deployment). Stage 1 projects may be awarded up to $2 million and Stage 2 projects may be awarded up to $15 million. Projects must be awarded a Stage 1 grant before they are eligible for a Stage 2 grant.

Who is Eligible?

Any State, political subdivision of a State, Tribal government, public transit agency or authority, public toll authority, metropolitan planning organization or group of eligible entities may submit an application.

Which Projects are Eligible?

A SMART grant may be used to carry out a project that includes Coordinated Automation, Connected Vehicles, Intelligent, Sensor-Based Infrastructure, Systems Integration, Commerce Delivery and Logistics, Leveraging Use of Innovative Aviation Technology, Smart Grid, and/or Smart Technology Traffic Signals.

Category	Examples
Coordinated Automation	The use of automated transportation and autonomous vehicles, while working to minimize the impact on the accessibility of any other user group or mode of travel.
Connected Vehicles	Vehicles that send and receive information regarding vehicle movements in the network and use vehicle-to-vehicle and vehicle-to-everything communications to provide advanced and reliable connectivity.
Intelligent, Sensor-Based Infrastructure	The deployment and use of a collective intelligent infrastructure that allows sensors to collect and report real-time data to inform everyday transportation-related operations and performance.
Systems Integration	The integration of intelligent transportation systems with other existing systems and other advanced transportation technologies.
Commerce Delivery and Logistics	Innovative data and technological solutions supporting efficient goods movement, such as connected vehicle probe data, road weather data, or global positioning data to improve on-time pickup and delivery, improved travel time reliability, reduced fuel consumption and emissions, and reduced labor and vehicle maintenance costs.
Leveraging Use of Innovative Aviation Technology	Leveraging the use of innovative aviation technologies, such as unmanned aircraft systems, to support transportation safety and efficiencies, including traffic monitoring and infrastructure inspection.

Category	Examples
Smart Grid	Development of a programmable and efficient energy transmission and distribution system to support the adoption or expansion of energy capture, electric vehicle deployment, or freight or commercial fleet fuel efficiency.
Smart Technology Traffic Signals	Improving the active management and functioning of traffic signals, including through: • the use of automated traffic signal performance measures; • implementing strategies, activities, and projects that support active management of traffic signal operations, including through optimization of corridor timing, improved vehicle, pedestrian, and bicycle detection at traffic signals, or the use of connected vehicle technologies; • replacing outdated traffic signals; or • for an eligible entity serving a population of less than 500,000, paying the costs of temporary staffing hours dedicated to updating traffic signal technology.

Which Expenses are Eligible?

A SMART grant may be used for:

Development phase activities, including—
- planning;
- feasibility analyses;
- revenue forecasting;
- environmental review;
- permitting;
- preliminary engineering and design work;
- systems development or information technology work; and
- acquisition of real property.

Construction phase activities, including—
- construction;
- reconstruction;
- rehabilitation;
- replacement;
- environmental mitigation;
- construction contingencies; and
- acquisition of equipment, including vehicles.

A SMART grant cannot be used:

- to reimburse any preaward costs or application preparation costs of the SMART grant application;
- for any traffic or parking enforcement activity; or
- to purchase or lease a license plate reader.

Additional Requirements:
- While there is no local match requirement for the grant, the ability to bring funds and innovative partnerships to the table would be beneficial.
- The focus of the grant is on "emerging technologies", which are more mature than research projects, but not widely deployed. USDOT is not focused on traffic signal upgrades, so although they are eligible, they will likely not be competitive unless integrated into a larger project.
- Projects should seek to solve an existing problem and not be a solution looking for a problem.
- The project should be sure to include public engagement in the planning process.

Submitting an Application for the SMART Grant Program

Prior to developing an application for the SMART grant program, potential applicants in Pennsylvania are asked to contact the PennDOT Office of Transformational Technology in order to refine the project concept and coordinate efforts around the State. If you plan on submitting a project for the SMART grant program, please reach out to Mark Kopko (markopko@pa.gov).