Getting Ready for the Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program

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SMART Grant Program website: https://www.transportation.gov/grants/SMART

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Strengthening Mobility and Revolutionizing Transportation
- New grant program to fund demonstration projects focused on advanced smart city or community technologies and systems
- Provides $100M annually from FY22-26 to eligible projects in States, political subdivisions of a State, Tribal governments, transit agencies, toll authorities, MPOs, and groups of eligible recipients
- Created by BIL

Program Details

DOT anticipates SMART grants will be two stages. Stage I: Planning & Prototyping and Stage II: Implementation

DOT anticipates awarding 30 - 50 Stage I grants from the FY22 NOFO

The NOFO is expected to be released in September

- In order to qualify for Stage 2 grants, you will need to be a Stage 1 grantee
- **Start with the Problem:** Want to see problem-rooted thinking - not technology-driven

SMART Grants Program Overview
- Established by the Bipartisan Infrastructure Law 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."
- Will fund projects that are focused on using technology interventions to **solve real-world challenges** facing communities today
- Funds **purpose-driven innovation** and discourages investment in technologies that do not provide a clear improvement over the status quo
- Is a **demonstration program**. It is not designed to support fundamental research, and the technologies demonstrated should be sufficiently mature
- Focuses on **building data and technology capacity and experience** for state, local and tribal governments

- Connects to other priorities of climate, resilience, and equity
- Not a research program, but also not a program that deploys well-established, proven technologies
    - Want to lift up projects and technologies of demonstrated technologies that are the brink of widespread implementation

Eligible Entities
Eligible entities include:
1. A State
2. A political subdivision of a State
3. A Tribal government
4. A public transit agency or authority

5. A public toll authority
6. A metropolitan planning organization
7. A group of 2 or more eligible entities described above

Eligible Projects

DOT has highlighted eight technology areas of focus. Considerations across all eight technology areas:

- Applicants should focus on one or two technology areas. They should not attempt to cover all areas in their proposals
- Applicants will be required to comply with applicable laws and regulations, including but not limited to Buy America, Americans with Disabilities Act, and the Federal Motor Vehicle Safety Standards.
- Applicants should:
    - Address identified policy barriers
    - Clearly address data requirements
    - Consider workforce capacity building

Eight Technology Areas

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." ● Not restricting projects to any specific level of automation ● Looking for projects that use vehicles in public fleet applications
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." ● Heart of bringing data into the transportation environment to integrate climate, equity, and resilience goals
Commerce Delivery and Logistics	"Innovation 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." ● Could cover all aspects of the freight system, including long-haul to last-mile ● Examples: Truck reservation systems, digitization of curb management

Innovative Aviation	"Leveraging the use of innovative aviation technologies, such as unmanned aircraft systems, to support transportation safety and efficiencies, including traffic monitoring and infrastructure inspection."
Smart Grid	"Development of 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." ● Example: Vehicle to grid technologies
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."

Getting Ready to Apply for a SMART Grant

Eligible Activities
- Planning
- Feasibility analysis
- Revenue forecasting
- Environmental review
- Permitting
- Preliminary engineering and design work
- Systems development of information
- Technology work
- Acquisition of real property
- Construction
- Reconstruction
- Rehabilitation
- Replacement
- Environmental mitigation
- Construction contingencies
- Acquisition of equipment, including vehicles
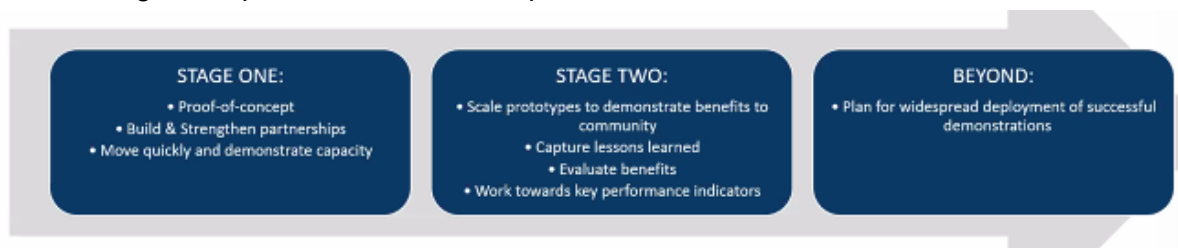
Prohibited Uses
A SMART grant shall not be used for the following:
- To reimburse any pre-award costs or application preparation costs of the SMART grant application
- For any traffic or parking reinforcement activity
- To purchase or lease a license plate reader

Anticipated Program Structure
The anticipated structure is a 2-stage program:

- Stage 1: Planning and Prototyping Grant: Up to $2 million over 18 months
- Stage 2: Implementation Grant: Up to $15 million over 36 months

STAGE ONE:	STAGE TWO:	BEYOND:
• Proof-of-concept • Build & Strengthen partnerships • Move quickly and demonstrate capacity	• Scale prototypes to demonstrate benefits to community • Capture lessons learned • Evaluate benefits • Work towards key performance indicators	• Plan for widespread deployment of successful demonstrations

- Estimated second NOFO in 2023 will include:
  - New Stage 1 applicants
  - Stage 1 grantees to receive Stage 2 implementation grants

Getting Ready: Grant Resources
- DOT Navigator: https://www.transportation.gov/dot-navigator
- Grants.gov Grants Learning Center: https://www.grants.gov/web/grants/learn-grants.html
- Rural Applicant Toolkit for Competitive Funding Programs at USDOT: https://www.transportation.gov/rural/grants/toolkit

Getting Ready: Unique Entity Identifiers
- All applicants will need to obtain a Unique Entity Identifier (UEI) through GSA to apply for grant opportunities in grants.gov
- On April 4, the federal government stopped using Dun & Bradstreet's proprietary Data Universal Numbering System (DUNS) to identify contractors and grantees and began exclusively using the UEI
- The process of obtaining a UEI can take up to a month, so applicants are encouraged to apply for the UEI now. If you previously had a DUNS number that you used at SAM.gov, your UEI has already been created and is available to view in SAM.gov
- For more information, see https://sam.gov/

Getting Ready: Questions to Think About

Question + Answer

Are EV charging projects that utilize smart grid components eligible?
- Possibly - the eligible costs and uses will be further clarified in the NOFO

How are SMART grants different from "normal" grants?
- SMART grants are focused on layering technologies onto existing systems or facilitate system integration to address community goals
- Two stage program structure creates opportunities for iteration and team building, where projects can improve over time

Are ports considered eligible applicants?
- Yes; port authorities are considered as political subdivisions

Are there primary project areas that DOT will be considering in the FY2022 NOFO?
- Since this is the first year of the program, DOT is taking a broader view and is looking forward to see the breadth of potential technologies available.
- Again, DOT is emphasizing a problem-based approach

Will rural communities be competitive applicants?
- Yes; the statute has geography-specific requirements:
  - 40% of funds are for large communities, 30% for mid-sized communities, 30% for rural and regional partnerships
- The ROUTES Toolkit is a great resource for rural applicants to navigate DOT grants

Are group applications with public-private partnerships eligible?
- The lead applicant must be a public entity
- Expect applicants to have cross-sector partnerships, with nonprofits, academia, private partners, etc

Is there a matching grant requirement?
- No

Will there be another opportunity to apply for Stage 1 grants?
- Anticipate that there will be an annual NOFO for Stage 1 and Stage 2 applicants throughout the 5-year program period (except for the opening NOFO)

Can I apply directly to Stage 2 grants?
- No; we believe that additional investment in planning activities - like community engagement - can only strengthen the process

How mature should the technologies be?

- Not looking for technologies in the fundamental research stage, but also not already widespread
- Ideal projects are emerging technologies that could be accelerated into a widespread use

Is there a limit on the number of applications that an individual applicant can submit?
- No