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ITS AMERICA

INTELLIGENT TRANSPORTATION SYSTEMS DEPLOYMENT PROGRAM

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ITS America Intelligent Transportation Systems Deployment Program

Introduction

Intelligent transportation systems will improve transportation safety and mobility while reducing congestion, reducing transportation-related emissions, reducing transportation disparities, and improving public health.

The Department of Transportation Intelligent Transportation Systems Deployment Program is modeled after the Advanced Transportation and Congestion Management Deployment Program. The Intelligent Transportation Systems Deployment Program would have three focus areas: (1) Connected Automated Vehicle Technology Deployment, (2) Climate Technology Deployment, (3) Equity Technology Deployment.

It would provide competitive grants for the large-scale installation and operation of intelligent transportation technologies that lead to a safer, greener, smarter, and more equitable transportation system.

Policy Recommendations

Eligible Activities

Grant recipients may use funds under this program to upgrade and deploy advanced transportation and safety technologies that meet national cybersecurity standards for the following purposes, including—
1. Connected Automated Vehicle Technology Deployment
    1.1. Installation of vehicle-to-infrastructure (V2I), vehicle-to-vehicle (V2V), and vehicle-to-pedestrian (V2P), known collectively as vehicle-to-everything (V2X) infrastructure to improve highway safety and efficiency;
    1.2. Installation and integration of V2X communications systems into new and existing transportation infrastructure, including data infrastructure and analysis, as well as traffic control systems;
    1.3. Upgrading and replacing ITS equipment to sustain functionality;
    1.4. Incorporation of emergency vehicle preemption (EVP) and transit signal priority (TSP) technologies;
    1.5. Installation of V2X capable digital toll collection systems;
    1.6. Dynamic lane management systems;
    1.7. Advanced transportation management technologies;
    1.8. Video analytics;
    1.9. Near miss detection/analysis systems; and
    1.10. Cross-walk detection/advanced safety systems.
    1.11. Infrastructure necessary to safely enable, deploy and manage autonomous vehicles and fleets;
    1.12. Installation of dedicated autonomous electric vehicle charging facilities, including storage technologies to buffer instantaneous load demand on the grid, and

technologies to allow connection and charging to occur without human intervention; and

    1.13. Autonomous freight delivery logistics systems.

    1.14. Transportation system performance data collection, analysis, and dissemination/education;

    1.15. Advanced mobility and access technologies, such as dynamic ridesharing and rider information systems; and

    1.16. Curbside (including parking) management systems incorporating electronic pricing and payment.

    1.17. Funding for the ongoing digitization of both fixed and dynamic physical elements of the nation's roadway infrastructure and multimodal transportation systems, including collaborative government-industry planning, systems engineering, standards development and harmonization, systems deployment, and lifecycle systems management functions within an actively administered national framework and strategy for transportation digital infrastructure.

2. Climate Technology Deployment

    2.1. Integration of intelligent transportation systems with the Smart Grid and other energy distribution and charging systems;

    2.2. Comprehensive congestion pricing strategies;

    2.3. ETC systems and associated technology (electronic/open payment systems, mobility account/wallet, accumulator passes);

    2.4. Transit (bus/e-bus and/or bus facility retrofits/expansions, electric ferries, bike/e-bikes) and TDM (micromobility, carpooling) programs;

    2.5. Electronic Toll Collection;

    2.6. EV buses and ferries;

    2.7. Microtransit and micromobility pilots for mode shifts and first/last mile transit access;

    2.8. Curb management systems;

    2.9. Advanced bicycling systems (bicycle signals and advanced storage systems);

    2.10. Transportation system performance data collection, analysis, and dissemination/education;

    2.11. Establish Commercial E-cargo bike delivery program; and

    2.12. EV charging stations.

3. Equity Technology Deployment

    3.1. On-demand transit technologies;

    3.2. Autonomous shuttles;

    3.3. Mobility on Demand and Mobility as a Service;

    3.4. Bikeshare and scooter share technologies;

    3.5. Expansion of bikeshare systems, micromobility (bike and e-scooter) services;

    3.6. Adaptive bikeshare;

    3.7. Advanced public transportation systems;

    3.8. Automated bus lane enforcement technologies;

    3.9. Transit signal prioritization specifically enhancing equity technology applications;

    3.10. Dynamic Transit Routing;

3.11. Rider/client empowerment through technology like a mobility wallet;

3.12. Advanced traveler information systems;

3.13. Vehicle Occupancy Detection;

3.14. Vulnerable road user safety systems;

3.15. EV charging stations in low-income communities and communities of color multi-unit dwellings; and

3.16. Transportation system performance data collection, analysis, and dissemination/education.

3.17. Funds may be used for a Helping Obtain Prosperity for Everyone (HOPE) initiative currently administrated by the Federal Transit Administration to study the feasibility of Mobility on Demand and Mobility as a Service to improve first mile/last mile access to public transit services or facilities in areas of persistent poverty and economic distress.

Eligible Applicants

3. State or local government or political subdivision thereof.
4. Tribal government.
5. Transit agency.
6. Metropolitan planning organization (MPO) representing a population of more than 200,000.
7. Multijurisdictional group made up of the above eligible applicants, with a signed agreement to implement the initiative across jurisdictional boundaries.
8. A group or consortia of research institutions or academic institutions.
9. Sponsored by Public Agency Partnership with the private sector or profit/NGO/CBO entities, including multimodal and multijurisdictional entities, research institutions, organizations representing transportation and technology leaders, or other transportation stakeholders is encouraged.

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