

IHEEP REGION 5 CONFERENCE



UNITED STATES GOVERNMENT INNOVATION GRANTS

STIC

State Transportation Innovation
Councils

\$100,000

80/20 MATCH

AID

Accelerated Innovation Deployment
Demonstration

\$1 MILLION

TIDP

(Technology and Innovation Deployment Program)

3 initiatives

- AID
- STIC
- ACCELERATED
IMPLEMENTATION

ALL ARE PART OF EDC

TIDP enables filling the critical need to turn research products into proven technologies and demonstrated practices.

After technologies have gone through testing and evaluation processes and are successfully deployed, the TIDP assists the accelerated implementation and adoption as standard practices by State DOTs and other stakeholders.

Improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability.

Significantly accelerate the adoption of innovative technologies by the surface transportation community.

EDC (Every Day Counts)



- In 2009, the Federal Highway Administration (FHWA) launched **Every Day Counts (EDC)** in cooperation with the American Association of State and Highway and Transportation Officials (AASHTO) to speed up the delivery of highway projects and to address the challenges presented by limited budgets. EDC is a state-based model to identify and rapidly deploy proven but underutilized innovations to shorten the project delivery process, enhance roadway safety, reduce congestion and improve environmental sustainability.

How it Works

- Through the EDC model, FHWA works with state and local transportation agencies and industry stakeholders to identify a new collection of innovations to champion every two years. Innovations are selected collaboratively by stakeholders, taking into consideration market readiness, impacts, benefits and ease of adoption of the innovation.
- Throughout the two-year deployment cycle, specifications, best practices, lessons learned and relevant data are shared among stakeholders through case studies, webinars and demonstration projects. The result is rapid technology transfer and accelerated deployment of innovation across the nation.

A.I.D.

The AID program is one aspect of the multi-faceted [Technology and Innovation Deployment Program \(TIDP\)](#) approach providing funding and other resources to offset the risk of trying an innovation.



Projects eligible for funding shall include proven innovative practices or technologies such as those included in the [EDC initiative](#). Innovative technologies and practices are:

- innovative project delivery methods that improve work zone safety for motorists or workers and the quality of the facility;
- innovative technologies, manufacturing processes, financing, or contracting methods that improve the quality of, extend the service life of, or decrease the long-term costs of maintaining highways and bridges;
- technologies and practices that accelerate project delivery while complying with other applicable Federal laws (including regulations) and not causing any significant adverse environmental impact; or
- technologies and practices that reduce congestion related to highway construction.

Part of Montana AID funding



This is about one third of the paper from one district office!!!!
At \$2 per piece of paper, it really starts adding up

AID Examples

- **Montana Department of Transportation, \$816,000**
Project: Systems Engineering Analysis for a Statewide Traffic Signal System Evaluation
Innovation: Traffic Signal System Evaluation
- **Oregon Department of Transportation, \$277,152**
Project: Expediting on-scene investigation/reconstruction mapping activities along Interstate 5 (I-5) corridor
Innovation: Robotic Total Measuring Stations for Traffic Incident Management (TIM)
- **Utah Department of Transportation, \$626,229**
Project: e-Construction to improve business practices
Innovation: e-Construction
- **Washington State Department of Transportation, \$1,000,000**
Project: Light-Emitting Diode (LED) Adaptive Roadway Lighting on Interstate 5
Innovation: LED Adaptive Roadway Lighting System

STIC



- Each State operates its innovation deployment committee or group based on its unique business needs and approaches to meeting those needs.
- Innovation deployment programs as the driving force nationally, the need for every State to have an innovation deployment committee or similar group is essential to ensure that the innovation deployment remains a State-based initiative.

STIC Incentive Program

Examples:

- Idaho 2015 - Hosting a demonstration workshop on Geosynthetic Reinforced Soil – Integrated Bridge System bridge construction for statewide participation by local agencies
\$84,500
- Idaho 2016 - Hosting a 2-day workshop to advance 3D Modeling and Automated Machine Guidance \$ 97,888
- Montana 2015 - Development and execution of a Design Workflow Study & 3D Model Centric Implementation Plan to transition from a 2D paper plan workflow to 3D model workflow
\$ 80,000
- Montana 2016 – Enhancements to Engineering Project System, handling more than 400 projects.
- North Dakota - Implementation of e-Construction through the expanded use of mobile devices for field personnel \$ 100,000
- South Dakota - Development of a Highway ROW Inventory Asset Database (Phase 2) \$ 100,000
- Washington - Advance the use of a radar system that uses data from elk radio collars to activate flashing beacons as a safety measure to warn motorists of the elks' presence \$ 100,000
- Wyoming - Expand the deployment of technology associated with the Road Condition Reporting mobile app \$ 100,000

Favorable Match

Favorable Match is not a grant, it accommodates innovative practices that are not industry proven to be used on current agency projects.

Innovative work tied to a federal aid project can get an additional 5% match...not just for the innovative part, but for the whole project. That is compared to the normal 87% match in federal funds!

Small pay items leverage big payoff

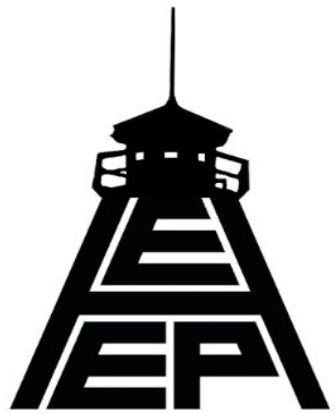
EXAMPLES:

Montana:

- Harrison Ave S. – urban project – innovation: 3/8” plant mix to accelerate construction with no chip seal required.
- Madison Street Bridge – innovation: accelerate project with design build, 5 years cut off final construction.

Other innovations:

- Water / oil separators on storm drains to improve environmental compliance
- Innovative traffic control to reduce construction contract time
- Pile load dynamic testing to improve pile design and reduce construction time
- Use of UAV technology to calculate & validate earthwork quantities for contractor payment



LAST BUT NOT LEAST

IHEEP 2016 HELENA, MT

SEPTEMBER 11TH – SEPTEMBER 15TH

