Every Day Counts Initiatives 2012

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The Federal Highway Administration (FHWA) has rolled out a second wave of innovations for its Every Day Counts (EDC) initiative.

In the next two years, FHWA will promote the following 13 innovations to state, local and regional transportation agencies, as well as to the design and construction industries.

Programmatic Agreements II

Programmatic agreement is a concept of establishing a streamlined approach for handling routine environmental requirements. Programmatic Agreements II builds upon the initial programmatic approaches initiative of EDC by applying some of the recently developed agreements to new states or expanding them to include regions.

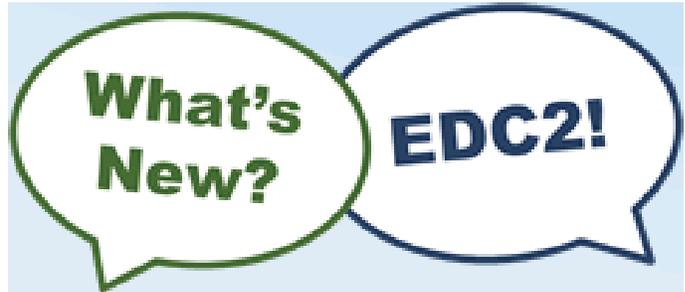## Locally Administered Federal-Aid Projects

To aid Local Public Agencies (LPAs) through the complexities of the Federal-aid Highway Program's requirements and processes, a three-pronged strategy has been developed to assist these local agencies. These three strategies include: Certification/qualification-type programs, Indefinite-Delivery/Indefinite Quantity (IDIQ) Consultant Contracts, and Stakeholder Committees. Implementation of these strategies can reduce the amount of oversight the states need to provide and make local agencies more capable to follow federal regulations and guidelines.

3D Modeling for Construction Means and Methods

3D modeling technology has been widely used by contractor on non-highway projects, and the potential for highway applications is just now being realized. An overall benefit of the technology is an increase in productivity and efficiency of construction operations.

Intelligent Compaction

Intelligent Compaction (IC) delivers a modern approach to compaction with the use of special vibratory rollers equipped with accelerometers, an integrated measurement system, a map based Global Positioning System (GPS), an onboard display and a computer reporting system. By integrating all components, the use of IC rollers can accelerate project delivery as well as improve quality.

Accelerated Bridge Construction

Accelerated Bridge Construction (ABC) technologies allow transportation agencies to replace bridges faster by only delaying traffic during construction for hours rather than months or years. ABC is also safer since construction workers are not working above active traffic for days on end with traditional approaches.

Three particular ABC technologies being promoted under EDC are Prefabricated Bridge Elements and Systems (PBES), Slide-In Bridge Construction, and Geosynthetic Reinforced Soil—Integrated Bridge System (GRS-IBS).

Example of accelerated bridge technology

Design Build

An alternative method to the conventional

design-bid-build (DBB), called Design Build (DB) allows the process to be accelerated dramatically. In the DB process, a State DOT identifies what it wants constructed, accepts bids and selects a contractor to assume the risk and responsibility for both the design and construction phases. With DB, agencies generally have the option of selecting a contractor based on a best-value basis; allowing DOTs to consider other factors beyond lowest price.

Construction Manager/General Contractor

Another method used to accelerate project delivery is the Construction Manager/General Contractor (CMGC) process. In this process, the project owner hires a contractor to provide feedback during the design phase, before the start of construction.

Alternative Technical Concepts

An Alternative Technical Concept (ATC) is a suggested change by the contractor to the contracting agency's basic configuration design, scope, or construction criteria. The proposed concept provides a solution that is equal to or better than the requirements in the Request for Proposal document.

High Friction Surfaces

High friction surface (HFS) treatment is an emerging technology that dramatically and immediately reduces crashes and the related injuries and fatalities. With friction values far exceeding conventional pavement friction, high-quality aggregate is applied to existing or potential high-crash areas to help motorists maintain better control in dry and wet driving conditions.

Intersection and Interchange Geometrics

Several innovative alternative geometric intersection and interchange designs are now available which reduce crossover or conflict points, or move the conflict points away from a main intersection; allowing for safer, more continuous travel for motorists, pedestrians and bicyclists.

Geospatial Data Collaboration

A Geographic Information System (GIS) is a tool that builds maps. Currently, most GISs and web-mapping applications at federal, state, and local agencies are housed internally. Building on current organizational and technical capabilities, this initiative will use innovative cloud-based GIS services to improve data sharing both within transportation and among project delivery stakeholders.

Implementing Quality Environmental Documentation

This initiative seeks to implement existing recommendations and recent experience to improve the quality and, at the same time, reduce the size of National Environmental Policy Act (NEPA) documents. The initiative improves the quality of NEPA documents by making them more effective in disclosing the information used as a basis for making project decisions to the public and participating agencies. By improving NEPA Documents, project proponents will accelerate project delivery and achieve better environmental outcomes.

First Responder Training

This initiative offers the first national, multi-disciplinary traffic incident management (TIM) process and training program. The unique training training for first responders promotes a shared understanding of the requirements for safe, quick clearance at traffic incident scenes; prompt, reliable and open communications; and motorist and responder safeguards.

For more information visit the Federal Highway Administration Every Day Counts Website http://www.fhwa.dot.gov/everydaycounts/

Source: Federal Highway Administration, Every Day Counts, http://www.fhwa.dot.gov/everydaycounts/