Innovation Exchange Webinars 2019

**Target audience:** Local Government, FLMAs, Tribes and Counties.

**Conversations Launching Change**

### February

**Project Bundling**

February 7-1:00 pm– 2:30 pm EST

It’s no secret that our infrastructure needs attention. But how can you do that on a shoestring budget? As the number of highways and bridges needing attention continues to climb, structures posted for reduced loads adversely affect by travel, freight movement, and emergency response times. By using project bundling to award a single contract for several similar preservation, rehabilitation, or replacement projects, agencies can streamline design and construction, cut costs, and decrease project backlogs.

**Safety Data Mining**

February 21-1:00 pm– 2:30 pm EST

Data mining is the process of finding anomalies, patterns and correlations within large data sets to predict outcomes. Using a broad range of techniques to minimize safety risks, cut costs, and more. Data Mining to Improve roadway safety has been creating new opportunities to explore and investigate new sources of data for the purpose of improving safety planning.

### March

**Advanced Geotechnical Methods in Exploration (A-Game)**

March 7 – 12:30 pm– 2:00 pm EST  *(Note, different time)*

A-Game is about mitigating risks to project schedule, budget, and improving reliability by optimizing geotechnical site characterization using proven, effective exploration methods and practices. To find out how your agency can use the A-GaME to get an upper hand, sign up to participate in the upcoming webinar and learn how to use a toolbox of underutilized subsurface exploration tools.

**GRS-IBS: Ivars Road Bridge (Alaska)/ Lahaina Bypass (Hawaii)**

March 21– 1:00 pm– 2:30 pm EST

Despite many new bridges and replacement projects, American bridge infrastructure is aging and seriously deficient. Virtually every state in the nation is faced with the task of replacing unsafe bridges that have outlived their design life. The Federal Highway Administration finds the Geosynthetic Reinforced Soil Integrated Bridge System is becoming an economical and ease-of-construction alternative to some traditional bridge systems. The Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS) is a fairly new and innovative bridge design and come and join in on the next webinar featuring Ivar Road Bridge (Alaska) and Lahaina Bypass Bridge (Hawaii)
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### April

**National Park Service Pavement Preservation: Repair Road Edge Stabilization**

**April 4 – 1:00 pm – 2:30 pm EST**

Dedicating funding by investing into pavement preservation for over 10 years, has moved the National Park Service (NPS) ahead of the game.

It takes a team of technology savvy workers who can develop innovative ways to maintain roads. The National Park Service has proven results that shows how they have extended the overall pavement life and increased condition ratings. Understanding the tools needed to preserve pavement such as ultra-thin lift, micro surfacing, slurry seals, and chip seals has the NPS leading the charge. Do you use and apply these tools?

**Weather Responsive Management Strategies: Roadway Brine Usage**

**April 18 – 1:00 pm – 2:30 pm EST**

Each year, many of our roadway transportation users are impacted by icy roads. Methods to help ensure safe travel on the roadway system before and after winter storm events include anti-icing with spraying brine and de-icing with plowing, use of sand to improve traction, and use of salt and chemical compounds.

### May

**Internally Cured Concrete**

**May 16 – 1:00 pm – 2:30 pm EST**

Presenters will share how new practices to internally cure concrete can: (1) Improve performance (2) Reduce autogenous shrinkage (3) Reduce transport properties and (4) Make concrete less susceptible to thermal cracking, and more.

**Virtual Public Involvement**

**May 30 – 1:00 pm – 2:30 pm EST**

Ain’t no mountain high enough, Ain’t no valley low enough to keep this information from you... You can now engage your customers from the comfort of your own chair. Robust public engagement during transportation planning and project development can accelerate project delivery by identifying issues early. Virtual public involvement techniques, such as telephone town halls, online meetings, and social media, offer convenient, efficient, and low-cost methods for informing the public, encouraging participation, and receiving input.
Use of Crowdsourcing to Advance Operations

June 13 – 1:00 pm– 2:30 pm EST

Crowdsourcing turns transportation system users into real-time sensors on system performance, providing low-cost, high-quality data on traffic operations, conditions, and patterns. Current data sources in traffic operations often come from fixed sensors that monitor traffic conditions at fixed locations. The use of crowdsourced data turns transportation system users with smartphones and other mobile data sources into traffic sensors that significantly increase the data volume and geographic coverage. Agencies using crowdsourced data can provide earlier incident notification for quicker responses and integration into traveler information and ATM systems to optimize travel.

Unmanned Aerial Systems (UAS)

June 27 – 1:00 pm– 2:30 pm EST

Unmanned aerial systems can benefit nearly all aspects of highway transportation – from inspection to construction to operations – by collecting high-quality data automatically or remotely. These relatively low-cost devices allow agencies to expedite the data collection needed for the better decision making while reducing the adverse impacts of temporary work zones on worker and travelers.

Safe Transportation for Every Pedestrian (STEP)

July 11 – 1:00 pm– 2:30 pm EST

FHWA Every Day Counts-round 5 (EDC-5) initiative is promoting a new type of “STEP” with countermeasures to keep pedestrians safe at uncontrolled crossing locations.

Collaborative Hydraulics: Advancing to the Next Generation of Engineering (CHANGE)

July 25 – 1:00 pm– 2:30 pm EST

It is now time to toss away the process of one-dimensional (1D) modeling and learn a new process called (2D) modeling. Users of (2D) modeling can create better representations of the interaction between transportation assets, also, riverine and costal environments. Advance graphic features will surely improve environmental, regulatory, and engineering impediments to multiple project deliveries.