



**ADVANCING INNOVATION IN
ARIZONA**
JUNE 13, 2017 ASHE MEETING

Karla Petty, FHWA
Arizona Division Administrator
ACTI, Co-Chair

INNOVATION – DEFINITION

1: the introduction of something new

2: a new idea, method, or device



- ✓ Save Lives
- ✓ Save Money
- ✓ Save Time
- ✓ Improve Mobility / Connectivity
- ✓ Resource Responsible

CULTURE OF INNOVATION

State Transportation Innovation Council



Arizona's STIC – ACTI and
Co-Chairs,
Dallas Hammit and Karla Petty



EXCHANGES FACILITATED BY ACTI

- 2014 Innovation Exchange Presentations held at ADOT Auditorium (6 exchanges held)
- 2015 we took the Exchanges on the Road and held two –
 - Streamlining Project Development and Delivery – Prescott
 - Technology Improving Operations – League of Cities and Towns – Tucson
- 2016 Innovation Exchange Day focused on the future of transportation
- 2017 – a second Innovation Exchange Day is being planned for November 9, 2017
- In addition, numerous staff presentations at various venues



RESOURCES AVAILABLE

- **FHWA Center for Accelerating Innovation**
 - Innovator – Bimonthly Newsletter
 - EDC NEWS – Weekly Newsletter
- **Every Day Counts**
- **Accelerating Innovation Deployment Grants**
- **Increased Federal Share for Project-level Innovation**



EVERY DAY COUNTS - ROUNDS 1 - 4

- Changing conditions and demand for more efficient project delivery
- Technology deployment and transfer are core FHWA roles
- Provide a mechanism for rapid deployment of proven innovation
- Create a sense of urgency



Every Day Counts

Better, Faster, Smarter

EDC-1 (2011-2012)



[Adaptive Signal Control Technology](#)



[Flexibilities in Right-of-Way](#)



[Programmatic Agreements](#)



[Clarifying Scope of Prelim Design](#)



[Flexibilities in Utility](#)



[Safety Edge™](#)



[CM/GC](#)



[GRS-IBS](#)



[Use of In-Lieu Fee & Mitigation](#)



[Design-Build](#)



[Planning and Environmental Linkages](#)



[Warm Mix Asphalt](#)



[Enhanced Technical Assistance
Environmental Impact Statements](#)



[Prefabricated Bridge Elements and
Systems](#)

Every Day Counts

Better, Faster, Smarter

EDC-2 (2013-2014)



[3D Engineered Models for Construction](#)



[Geospatial Data Collaboration](#)



[Programmatic Agreements](#)



[Accelerated Bridge Construction \(ABC\)](#)



[High Friction Surface Treatments](#)



[Intersection & Interchange Geo.](#)



[CM/GC](#)



[GRS-IBS](#)



[Locally Administered Federal-Aid Projects](#)



[Design-Build](#)



[Implementing Quality Environmental Doc](#)



[National Traffic Incident Management Responder Training \(SHRP2 L12\)](#)



[Alternative Technical Concepts \(ATC\)](#)



[Intelligent Compaction](#)

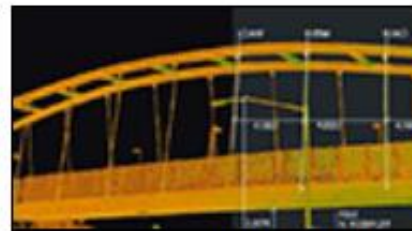
Every Day Counts

Better, Faster, Smarter

EDC-3 (2015-2016)



EDC-3 Overview Video



3D Engineered Models



Data-Driven Safety Analysis



e-Construction



eNEPA and IQED



Geosynthetic Reinforced Soil-Integrated Bridge System



Railroad Coordination



Regional Models of Cooperation



Road Diets



Smarter Work Zones



Stakeholder Partnering



Ultra-High Performance Concrete Connections

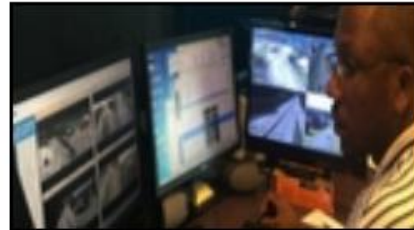
Every Day Counts

Better, Faster, Smarter

EDC-4
(2017-2018)



EDC Overview Video



ATSPMs



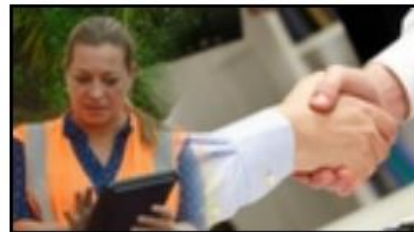
Collaborative
Hydraulics (CHANGE)



Community
Connections



Data-Driven Safety
Analysis



e-Construction and
Partnering



Integrating NEPA and
Permitting



Pavement
Preservation (When,
Where, How)



Road Weather
Management –
Weather-Savvy Roads



Safe Transportation for
Every Pedestrian



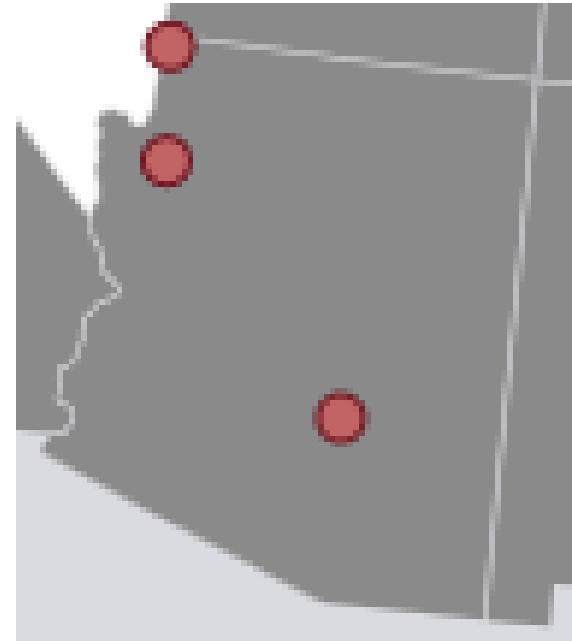
Ultra-High
Performance Concrete
Connections



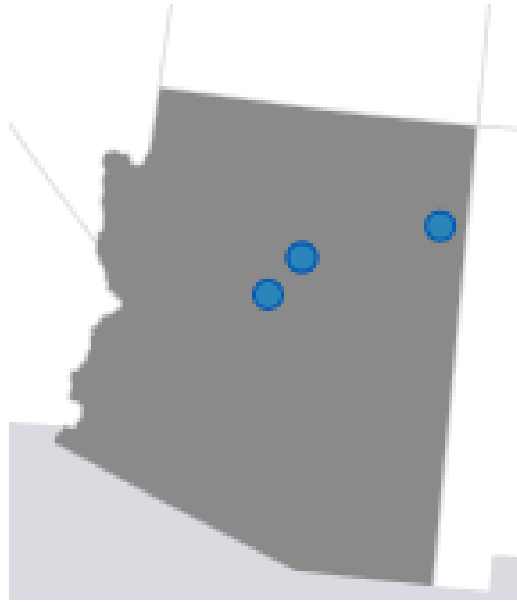
Using Data to Improve
Traffic Incident
Management

ACCELERATING INNOVATION DEPLOYMENT GRANTS - ARIZONA

- ADOT - US 60 – Light-Emitting Diode lighting system in the Queen Creek Tunnel
- ADOT- I-15 Virgin River Bridges – Structural Health Monitoring
- Mohave Co & ADOT -- Oatman Highway Crossing at Sacramento Wash in Topock, AZ Prefabricated Bridge Elements and Systems
- Future??? Data Portal ???



INCREASED FEDERAL-SHARE FOR PROJECT-LEVEL INNOVATION - ARIZONA



- SR-264 Burnside to Fish Wash
 - e-Construction
- US-260 Thousand Trails to I-17
 - CM/GC, Intelligent Compaction
- SR-92 San Pedro River Bridge
 - e-Construction
- FUTURE ??? – String less paving???



QUESTION TO PONDER....

“And if...”

(*BLANK*)

“...we will *ACCELERATE*
innovation”

*Where are your opportunities to accelerate
innovation?*

With Whom? How? When?





WWW.AZDOT.GOV/ACTI

ARIZONA COUNCIL FOR TRANSPORTATION INNOVATION

Questions?