Redefining Our Way Forward

2017 Wisconsin Tribal Transportation Conference
November 6, 2017
Provides national leadership and direction to advance innovative practices into the Local, Tribal and Federal Land Management Agencies.

Oversees multiple programs associated with the local-aid elements.

Responsible for the LTAP/TTAP network in support of mission.

Continues to provide innovation services to the Office of Federal Lands.
Today’s Discussion

- Every Day Counts Initiatives
- Resources
- Funding Opportunities
- Tribal Technical Assistance Program

Transforming Transportation through Innovation
Build a Better Mousetrap
2017 Winner: First Place

Gunnison County Public Works, Colorado
THE GUARDRAIL RECLAIMER

- Regain guardrail functionality
- Better drainage
- Faster and more efficient maintenance
- Safer than by hand tools
- Cost: $650
Spot Light Moment

What Innovations Have You Implemented?
University & Grants Program for Post Secondary Education

The Dwight David Eisenhower Transportation Fellowship Program awards 150-200 grants to students pursuing degrees in transportation-related disciplines.

Eisenhower Tribal Colleges and Universities Fellowship
Applications are accepted by select Tribal Colleges and Universities.
This web site provides a series of grades 6-12 curriculum units that will introduce students to careers, skills, and concepts one would need to succeed in the transportation industry. All lesson plans housed on the site were developed by teachers for teachers with input from their industry partners and are free for everyone to use.

- Flight 101
- CDL Exploration
- Exploring Transportation Maintenance
- What Is Transportation?
- Introduction to GPS - GIS
- Transportation and Emergencies for Middle School
- To Pave or to Pour: That is the Question!
- Roles and Functions of Six Cutting Edge Transportation Careers
- http://transportationcareers.org/about/
Exploring Transportation Maintenance

Students will explore construction and maintenance within the transportation industry. They will use geospatial technologies to make predictions about how seasonal weather events can affect construction practices. The entire module is made up of 25 lessons that can also be taught independent of each other.


U.S. Highway Bridge Project - Repair or Replace?

Students will be expected to work collaboratively as a member of a research team to determine if a bridge built in 1903 should be repaired or replaced. Since there is historical significance and growing public debate about the issue, students will look at the environmental, cultural, social/political and design related issues in making their decision.

Grade Level(s): 11-12, Subject(s): Math, Math-Algebra, Science, Science-Physics, English, SocialStudies, CTE, Pathway: Transportation Systems/Infrastructure Planning, Management and Regulation, Lessons: Revision Date: February 9, 2012
# U. S. Highway Bridge Project – Repair or Replace?

## Table of Contents

**Acknowledgements**
- Developers: Michael Acre and Christopher Olds
  - DCMO BOCES, Harrold Campus, NY
  - AcreM@dcmoboces.com
- Reviewed and Comments/Materials provided by Kathy Gray, Missouri Southern State University, Joplin, MO.

**Overview of Module**
- Module Focus
- TDL Cluster Knowledge and Skills and Performance Elements Addressed
- National Learning Standards Addressed
- Objectives
- Measurement Criteria
- Teacher Notes
- Time Required to Complete Module
- Support Materials and Resources Necessary for Completion of Module
- Teacher Guidelines

**Lessons in Module**
- Lesson 1: Introduction to Highway Bridge Project – Presenting the Issue with Handouts 1, 2 and 3
- Lesson 2: Profile Roles and Research
- Lesson 3: Organizing Data and Preparing for Presentation
- Lesson 4: Transportation Planning Committee Group Presentations and Debate/Discussion/Decision
- Lesson 5: Personal Reflection with Handout 4

**Assessment**
- Final Evaluation
- Scoring Guidelines & Evaluation Sheet

**Appendix**
- Glossary
- Resources Used in Research
Online Training On Your Time

TC3 offers 120 web-based training (WBT) courses with additional courses planned as needs are identified. These WBTs were developed to support training weaknesses and gaps identified in the TC3 matrices. TC3 training accounts for 80% of national-level training needed by the technical workforce.

As of 2015, TC3 now offers courses on an AASHTO LMS platform. The new platform houses updated courses and a user-friendly interface to complete courses on your time and at your leisure. To view our current course listing, click here. You can also browse all courses through the AASHTO bookstore. For additional information and clarification, view the TC3 glossary terms. To learn how to register for an AASHTO account and to enroll in training, view our How to Register guide.

To become a self-sustaining organization and increase training offerings to the technical workforce across the country, TC3 has implemented a tiered fee structure. Contributing DOTs can take courses free of charge, and non-participating DOTs and private sector users will be charged a fee per course.

Have a course you would like to see developed, or want to request a course for development? Complete the form below.
Free This Month!

CDL General Knowledge (3 hours)
Non-Member Price: $0.00
Member Price: $0.00
Subscription Price: $0.00

Cold In-Place Recycling (CIR) (4 PDHs)
Non-Member Price: $0.00
Member Price: $0.00
Subscription Price: $0.00

Construction Inspection of Structures Series: Rehabilitation and Maintenance of Structures (5 PDHs)
Non-Member Price: $0.00
Member Price: $0.00
Subscription Price: $0.00

Earthwork Series: Excavation (3 PDHs)
Non-Member Price: $0.00
Member Price: $0.00
Subscription Price: $0.00

Guardrail Series: Installation and Inspection of New Guardrails (2.5 PDHs)
Non-Member Price: $0.00
Member Price: $0.00
Subscription Price: $0.00
INNOVATION EXCHANGE
Conversations Launching Change

Discussions targeted to Local Agencies, Tribes and Federal Land Management Agencies programs

Collaborative Hydraulics Advancing to the next Generation of Engineering (CHANGE)
   November 8, 2017,  12:30 pm - 2:00 pm EST

E-construction/Partnering
   November 29, 2017,  12:30 pm - 2:00 pm EST

Ultra-High Performance Concrete
   December 6, 2017,  12:30 pm - 2:00 pm EST

Data-Driven Safety Analysis
   December 13, 2017,  12:30 pm - 2:00 pm EST
So, what incentives are available to help me INNOVATE?
AID GRANT provides funding as an incentive for eligible entities to accelerate implementation and adoption of PROVEN highway transportation innovations.
The **AID Demonstration program** provides funding as an incentive to accelerate the use of innovation in highway transportation projects.

**Assiniboine and Sioux Tribes**  
*Continuously Operating Reference Stations*

**Gwichyaa Zhee Gwich’in Tribe**  
*Geosynthetic Reinforced Soil-Integrated Bridge System*

**Confederated Salish and Kootenai Tribes**  
*Folded Steel Plate Girder Bridge*

**Ohkay Owingeh Tribe**  
*Geosynthetic Reinforced Soil-Integrated Bridge System*

**Acoma Pueblo**  
*Construction Manager / General Contractor*
Authority

Fixing America’s Surface Transportation (FAST) Act
23 U.S.C. 503

Technology and Innovation Deployment Program (TIPD)

Section 6002

$10,000,000

FY2016 to FY2020

$50 Million Program Total

INCENTIVE

Up to $1M per year for cost of innovation

MATCH

80 / 20
Funding for agencies to use innovations to deliver projects faster, better, and smarter.
U. S. C. Title 23

Eligibility

Any phase of a **highway transportation project** between planning and project delivery

Criteria

Must pilot and demonstrate **proven innovative practices or technologies**

- New to applicant (not industry)
- **Significant** improvement from applicant’s conventional practice
- Applicant intends to adopt as standard practice
- Project authorized w/in 12 months of award
- Accepts FHWA oversight
Center for Local Aid Support

$44,047,029
Total AID Demonstration grant funds awarded

62
Awards

February 2014
Program begins under MAP-21

September 2016
Program continues under FAST Act

June 2016
Program stops accepting applications

## AID Grant Tribal Recipients

<table>
<thead>
<tr>
<th>Award Recipient</th>
<th>Project</th>
<th>Innovation</th>
<th>Award Amount</th>
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<tr>
<td>Assiniboine Sioux Tribes</td>
<td>Rocky Mountain Tribal CORS Project</td>
<td>Geospatial Data Collaboration</td>
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<td>Confederated Salish and Kootenai Tribes</td>
<td>North Valley Creek Bridge</td>
<td>Accelerated Bridge Construction</td>
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<td>Ohkay Owingeh Tribe</td>
<td>White Swan Bridge</td>
<td>Geosynthetic Reinforced Soil-Integrated Bridge System</td>
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<tr>
<td>Pueblo of Acoma</td>
<td>Construction Manager/General Contractor (CM/GC) Project</td>
<td>Construction Manager/General Contractor</td>
<td>$563,000</td>
</tr>
</tbody>
</table>
What did we ask the team to do?

- Complete construction of all projects by June 2017
- Commit to a budget of $6.9 M
- Hire locally from Cibola County
- Innovate to meet these goals
- Work as a team to deliver

Deliver a 7-10 year program in 18 months
Tribal Technical Assistance Program
Office of the Administrator

Office of Innovative Program Delivery
Tony Furst, Chief Innovation Officer

- Center for Accelerating Innovation
- Center for Innovative Finance Support
- Center for Transportation Workforce Development
- Center for Local Aid Support

Office of Federal Lands Highway
Timothy Hess, Associate Administrator

- Eastern Federal Lands
- Central Federal Lands
- Western Federal Lands
- Tribal Transportation Program
Former TTAP Structure

Alaska

Northwest

Western

Mountain West

Northern Plains

Southern Plains

Eastern
NATIONAL TTAP CENTER PILOT

virtual Tribal Centers of Excellence

- Asset & Data Management
- Project Delivery
- Safety
- Operations & Maintenance
- Planning & Program Management

Tribal Roads Scholars Certification Program

MAP-21
ANNUAL TOTAL HOURS OF TRAINING

Face to Face and current distance learning combined.

Current Annual Training

Projected Annual Training
Expertise to implement a national highway training and technical assistance program to increase tribal workforce capacity,

Ability to work within the targeted tribal audiences,

Capabilities to respond and address regional highway issues,

A performance record illustrating the ability to ensure coordination and cost effective delivery of the training and technical assistance,

Services and support provided equitably throughout the 12 BIA regions,

A minimum of 75 hours of training each month in each region,

• Up to 30% of training delivered in a distance learning format,

Full-time Subject Matter Experts dedicated to training and technical assistance,

Develop a National Road Scholars Certification for Tribes
Regional Training Access:

Face to Face Training  28 hrs. per month
Distance Learning      24 hrs. per month

Minimum training hrs. per year  568

Technical Support:
Available throughout the year as requested.
National Road Scholars Certification

Level 1 Certification

- RS-1 Basics of a Good Road
- RS-2 Signing, Pavement Markings & MUTCD
- RS-3 Stormwater Fundamentals and Inspection
- RS-4 Roadway Drainage
- RS-5 Asphalt Pavement Maintenance Practices
- RS-6 Gravel Road Maintenance Practices
- RS-7 Flagger Training
- RS-8 Maintenance Math & Plan Reading
- RS-9 Equipment Preventative Maintenance and Daily Inspection
- RS-10 Introduction to Basic Heavy Equipment Operation and Safety (Motor Graders, Backhoe, Forklift, Haul Truck and Roller)

Level 2 Certification

- RS-11 Workplace Safety Training
- RS-12 Road Stabilization and Dust Abatement Practices
- RS-13 Work Zone Traffic Control
- RS-14 Roadway Safety Fundamentals 1
- RS-15 Roadway Safety Fundamentals 2
- RS-16 Emergency Response Operations
- RS-17 Bridge Inspection, Maintenance and Repair
- RS-18 Winter Road Maintenance
- RS-19 Paving Materials
TRANSITION

Current TTAP Centers suspend operations - 9/30/17

All communications regarding TTAP services, resources and requests to CLAS@dot.gov

CLAS will coordinate requests with FHWA and LTAP resources.

National TTAP Center up and operational 90 days after award – January 2018.

Roads Scholar Program up and operational 180 days after award – March 2018.

COMMUNICATIONS PLAN

FHWA will engage with tribal governments as requested at regional and national meetings for the purpose of exchanging information and receiving input.

FHWA will continue to work with the TTPCC throughout the pilot sharing performance and outcome metrics. Victoria Peters will attend all meetings.

Direct communications with CLAS staff at any time – phone, email – this info posted on website.

Nov 2017 Webinar Introducing the New TTAP Center
Jan 2018 Webinar Sharing TTAP Training Plan for 2018
Jun 2018 Virtual Listening Session to Discuss Pilot
Nov 2018 Virtual Listening Session to Discuss Pilot & Share 2019 Training Plan
Mar 2019 Virtual Listening Session to Discuss Pilot
Jun 2019 Informational Webinar on Future TTAP Plans
Nov 2019 Pilot Ends
Nov 2019 Webinar Sharing Final Results of Two-Year Pilot
Tribal Technical Assistance Program (TTAP)

TTAP RESTRUCTURING

Legislation

In 1982, Congress recognized that providing access to surface transportation technology, technical assistance and training to the local public agencies (LPAs) was necessary and created the Rural Technical Assistance Program (RTAP). RTAP began in October 1982 with ten centers as a pilot program. The Intermodal Surface Transportation Efficiency Act (ISTEA) legislation in 1991 renamed this program the Local Technical Assistance Program (LTAP) and created the Tribal Transportation Assistance Program (TTAP). The TTAP was designed to provide technical assistance to tribal governments. This technical assistance was geared toward building capability within the federally recognized tribes (currently 508) to manage their highway assets. ISTEA legislation included the requirement to operate federally funded technical assistance centers. Legislation authorizing the TTAP is found at 23 U.S.C. 504(b).

History

Four TTAP centers were initially established in Colorado, Michigan, Montana, and Washington in 1982. In 1985, four additional centers.
Thank You!