



FEDERAL LANDS HIGHWAY  
Federal Highway Administration



People, Partners, Projects



Pee Dee National Wildlife Refuge  
North Carolina

Front Cover:  
New River Gorge National River  
West Virginia

The Federal Highway Administration Federal Lands Highway Program was established to promote effective, efficient, and reliable administration for a coordinated improvement program of roads and bridges on public lands; to protect and enhance our Nation's natural resources; and to provide needed transportation access for Native Americans. We serve as an advocate for Federal agencies and Tribal governments regarding federal and tribal transportation issues, and strengthen relationships among state and local transportation partners.

The Office of Federal Lands Highway (FLH) is relied upon to solve problems and manage projects that are wide-ranging in environment, geography and complexity, through engineering solutions that are context sensitive. We are often confronted by unique engineering problems, difficult terrain, challenging work restrictions, and uncompromising deadlines.

Whether it is building highly visible and political urban projects, constructing roads that are national landmarks, or providing critical access on low-volume transportation facilities, FLH is at the forefront of consistently delivering distinct, sound, and award-winning engineering projects.

*Special thanks to the Federal Lands employees responsible for taking the majority of the wonderful photographs contained within these pages.*



Construction & Structural Engineers  
Conducting Bridge Inspection

Arlington Memorial Bridge  
Washington, DC/Virginia



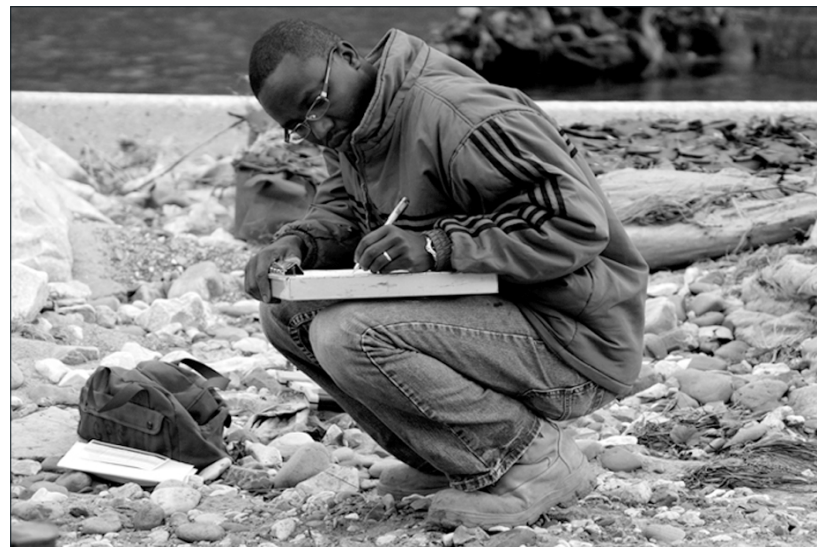
Highway Safety Engineer  
Measuring Pavement Edge Slope

Taylor River Road  
Gunnison National Forest  
Colorado



Pavement Engineer  
Measuring Asphalt Pavement Rut Depth

Flight 93 National Memorial Ring Road  
Pennsylvania



Geotechnical Engineer  
Logging Soil Data From Subsurface Exploration

Buffalo National River  
Arkansas

Our engineering and technical expertise includes:

- Construction Supervision and Inspection
- Consultant and Construction Contract Acquisition
- Contract Administration
- Design Visualization
- Environmental Compliance
- Funds Management
- Geotechnical Design
- Highway and Bridge Design
- Hydraulics and Hydrology
- Intelligent Transportation Systems
- Materials Sampling & Testing
- Plans, Specifications and Estimates
- Project Management
- Program Administration
- Road and Bridge Inventory and Inspection
- Safety
- Survey and Mapping
- Technical Assistance
- Technology Deployment
- Traffic
- Transportation Asset Management
- Transportation Planning

we work  
where you play



At some project sites we get help from the locals!

Kake, Kupreanof Island  
Alaska

Establishing Survey Point

Grand Canyon National Park  
Arizona



Pavement Preservation Program Site Meeting

Sleeping Bear Dunes National Lakeshore  
Michigan

Our most valued asset is our people; they are the key component to our continued success. We encourage our employees to build diverse skill sets and technical expertise to remain in step with the increasing diversity of the Federal Lands Highway Program and our partner's needs.

Resources are shared throughout the Federal Lands Divisions, as needed, to assure successful delivery of projects and programs.

Outreach to other transportation and resource agencies in the U.S. and abroad fosters the exchange of ideas and the growth of technical expertise.



Highway Design/Hydraulics Project Site Visit

Sequoia and Kings Canyon National Park  
California

A key strength lies in our ability to assemble experienced teams that deliver innovative and timely solutions. Along with the active assistance of our Federal, state and local partners, we look for opportunities to be creative in advancing programs and projects.

Partner missions and values are reflected in our project approach making use of many new and existing initiatives and technologies.

We deploy all transportation industry standards and initiatives and utilize innovative contracting methods aimed at shortening project delivery, enhancing safety, reducing congestion, and improving environmental outcomes.



Civil Engineering students  
in the field with Federal  
Lands instructors

Virginia

Federal Lands offers opportunities to develop FHWA professionals, graduate engineers, and civil engineering students to gain practical experience, build expertise and technical credibility in a variety of discipline training and rotational assignments.

We partner with the National Highway Institute to provide trained instructors in various core discipline training.

Federal Lands administers a fully accredited college course on the development of highway design and construction projects through a combination of classroom and hands-on field instruction.



Professional Development Program Engineers

North Cascades National Park  
Washington

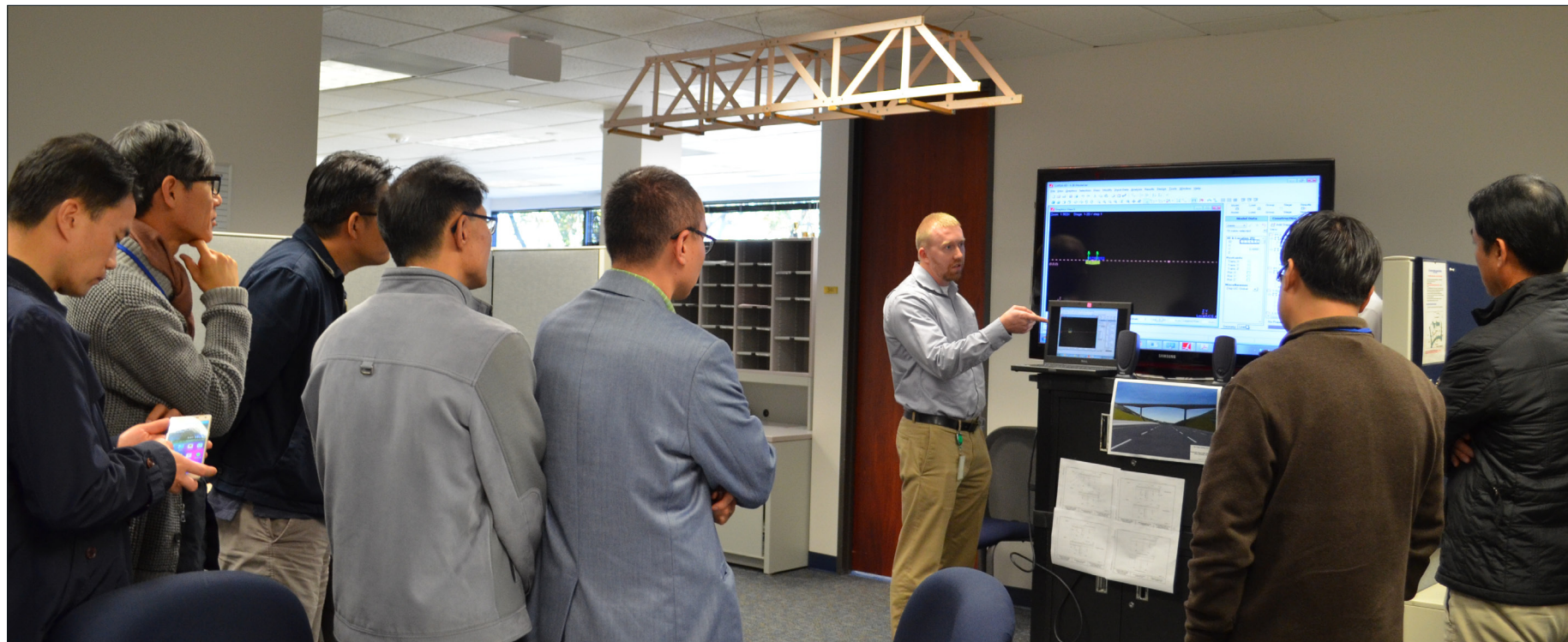




Federal Lands Geotechnical Engineers conduct Unstable Slope Asset Management Program Training with various Federal partners in attendance.

Great Smoky Mountains National Park  
Tennessee

Through our direct involvement in all aspects of planning, project development and delivery, we are an instrumental demonstration arm of the FHWA helping to ensure and promote that innovation and technology will perform in the manner expected. At the request of our partners, we offer individualized technical assistance, demonstrations and training to advocate for innovation and technology improvements.



Federal Lands hosted a delegation of engineering officials representing transportation agencies from South Korea to benchmark Federal Lands Project Delivery. An FLH bridge engineer explains concrete segmental box design considerations.

Virginia

With our status as a Federal partner we provide program and project delivery authority for oversight, NEPA compliance and procurement.

Federal Lands applies innovative solutions that meet both the missions of FHWA and our partner agencies. Implementing these innovative solutions affords FHWA the opportunity to learn firsthand how well technologies perform once applied.

diverse Partners  
with diverse needs



Workshop training sessions on pavement assessment and gravel road inspection.

FHWA Tribal Transportation Program 2016 Southwest Region Workshop Oklahoma



GRS-IBS Bridge under Saddle Road provides military operation access.

Pohakuloa Training Area Hawaii



Transportation Asset Management Field Work: Federal Lands, National Park Service, U.S. Fish & Wildlife Service, Bureau of Land Management, Forest Service, U.S. Army Corps of Engineers and the Bureau of Indian Affairs staff collaborate on development of common road condition data collection methodology.

New Mexico

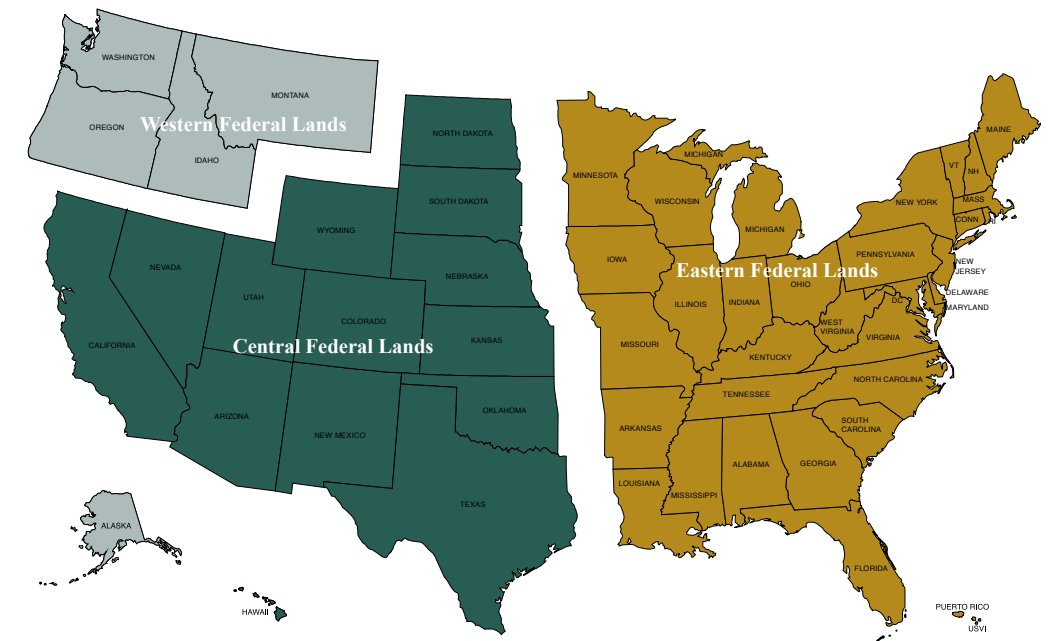


Florida State Route 85 and Eglin Air Force Base Special Forces Way - West McWhorter Avenue Interchange

Florida

Our definition of partner is diverse, ranging from state and territorial governments, traditional Federal Agency partners with strong resource protection missions, to our Tribal partners, focused on building self sufficiency and providing basic access to community services and improved quality of life for their people.

Each Federal Lands office provides training, technology deployment, engineering services, and products to an increasing array of partners and customers often with vastly different missions, priorities and approaches.







Cattle Point Road Realignment Project

Washington



Federal Lands Access Program enables two rural counties to match funds to construct a helipad for emergency response access in a remote area of the Forest.

Nantahala National Forest  
North Carolina



Boardroads and ATV Trails constructed by local Tribes using Tribal Program Funds offer best solutions for transportation across the tundra.

Tuntutuliak  
Alaska



Norfolk Southern double-stacked train travels unobstructed through Heartland Corridor.

Virginia



Our greatest responsibility is for the stewardship and oversight of Federal funds whether a project is delivered by us directly or by our partners.

The skill and strength necessary for facilitating cooperation among multiple stakeholders has taken our work in many directions, serving the greater transportation community in the management of complex public private partnership projects.

Federal Lands has succeeded in building strong relationships with the railroad industry via Norfolk Southern and CSX Corporations, through the successful completion of the Heartland Corridor Clearance Project, Crescent Corridor Intermodal Freight Program and Regional Intermodal Facilities, and the National Gateway Corridor Clearance Improvement Program.

We administer the Tribal Program jointly with Bureau of Indian Affairs or directly with the Tribes while also providing technical assistance and training.

flexible solutions  
suiting unique needs



Reconstruction & Rehabilitation, Widening for Shared Use, Full Depth Reclamation, Rockfall Mitigation

Whitney Portal Road  
Alabama Hills Recreation Area  
California



Design/Build, Top Down Construction, Pre-cast Elements

Foothills Parkway, Bridge 2  
Great Smoky Mountains National Park  
Tennessee



Pavement Preservation  
Visitor Center Parking & Access Roads

Harpers Ferry National Historical Park  
West Virginia

Federal public roads protect and enhance natural and cultural resources, sustain economic development in rural areas, and support recreational travel, tourism, resource management and electric power generation.



Pier Reconstruction, Habitat Creation for Protected Species & Water Quality Improvement

Trinidad Pier  
Trinidad Bay  
California



Bridge Construction & Roadway Improvements

Red Rock Scenic Drive  
Red Rock Canyon National Conservation Area  
Nevada

Mechanically Stabilized Earth Walls, Multi-Use Improvements,  
Wetland Restoration, Safety Edge

Marin Headlands  
Golden Gate National Recreation Area  
California



Our projects present us with unique engineering challenges in fragile and protected environments where our commitment to pilot innovation can sometimes make the difference.



Roadway & Safety Improvements

Logan Pass to Siyeh Bend  
Glacier National Park  
Montana

sensitivity to the context  
of the land



Slide Repair, Value Engineering, Innovative Contracting

Newfound Gap Road  
Great Smoky Mountains National Park  
Tennessee

Restoration & Rehabilitation

Tarryall Creek Road  
Pike National Forest  
Colorado



Many of our projects have received honors and recognition for excellence in design, construction, project management, aesthetics, historic preservation and environmental sensitivity.



Multi-Use Trails

Grand Teton National Park  
Wyoming



Urban Streetscape Improvements, Rehabilitation, ADA compliance

Constitution Avenue  
National Mall  
Washington, DC

Geosynthetic Reinforced Soils, Construction Manager/General Contractor Project Delivery Method, Historic Stone Wall Restoration to Safety Standard

Ice Rock and Alligator Back  
Blue Ridge Parkway  
North Carolina



Full Reconstruction & Realignment, Design & Safety Improvements, Wetland Mitigation, Erosion Control

Sevenmile-Gooseberry Road  
Fishlake National Forest  
Utah



Historic Structure Replicated  
With Modern Materials

Isa Lake Bridge  
Yellowstone National Park  
Wyoming



Road Diet

Steinwehr Avenue  
Borough of Gettysburg  
Pennsylvania

uniquely qualified  
and up for a challenge

Road Inventory Program Data Collection Vehicle  
With 3D Camera Mount  
"The Pathrunner"

Mount Rainer National Park  
Washington



The Federal Lands Road Inventory Program manages a nationwide program that provides roadway inventory and condition analysis for the National Park Service, U.S. Fish & Wildlife Service, and other Federal Land Management Agencies (FLMAs). With the use of state-of-the-art data collection equipment, paved and unpaved road conditions, drainage and geometrics are captured.

The Federal Lands Bridge Inspection Program is responsible for the safety inspection and structural rating of approximately 2,700 structures owned by various FLMAs in accordance with National Bridge Inspection Standards.



Concrete Core Drilling Yields Samples For Testing And  
Evaluation To Verify Bridge Inspection Findings

John Coffee Memorial Bridge  
Natchez Trace Parkway  
Tennessee

Bridge Inspection Program  
Under Bridge Inspection Vehicle  
"The Snooper"

Gardner River Bridge  
Yellowstone National Park  
Wyoming



The program includes risk-based condition assessments for safety and structural adequacy, evaluations for serviceability and functional obsolescence, and calculation of safe load capacities. Program goals are accomplished through a data-driven performance management approach as outlined under transportation legislation, and by utilizing Under Bridge Inspection Vehicle equipment, rigging and climbing inspection techniques, and underwater inspections. The program also includes emergency inspections, overload permit evaluations, deck studies, and non-destructive evaluation.

Collected data is used to define, support, and program improvement projects and aid in the development of pavement, bridge and asset management systems.



Ultrasonic Testing of Truss Pin

Ellis Island Bridge  
New York-New Jersey



Railroad Bridge Inspection

Puget Sound and Pacific Railroad  
Washington



Accident Related Emergency Inspection

Fort Pulaski Bridge  
Georgia



Under Bridge Inspection

East Canal Park Trolley & Pedestrian Bridge  
Lowell National Historical Park  
Massachusetts

The Federal Lands Office of Bridges and Structures is responsible for providing oversight of the 19 Federal agencies that own bridges open to the public. Federal law requires each of these agencies to conduct bridge inspections on a 2 year cycle. The oversight is conducted through an FHWA risk-based, data driven approach, and assesses an agency's National Bridge Inspection Program level of compliance with 23 metrics defined in 5 categories: Bridge Inspection Organization; Qualifications of Personnel; Inspection Frequency; Inspection Procedures; and Inventory.

As a result of these assessments, all 19 Federal agency bridge inspection programs have shown significant improvement. The assessments not only provide guidance to Federal bridge owners on achieving and maintaining compliance, but also help to ensure the safety and serviceability of federally-owned bridges.

The Bridge Inspection Program has been expanded to include railroad bridge and tunnel inspections as mandated by Federal law. The program is also engaged in the re-evaluation of load ratings for bridges on the Minuteman transportation network of the U.S. Air Force Global Strike Command across the nation.



When Kilauea Volcano erupted in 2014, the lava flow began advancing towards the community of Pahoa. Geophysical techniques and testing were used in advance of the emergency construction, to identify lava tubes and hot spots that mitigated risk of delay or injury and supported construction necessary to maintain evacuation routes.

Hawaii Volcanoes National Park  
Hawaii

All roads are vulnerable to the powerful forces of nature. Whether it is hurricane, tornado, or volcanic eruption, Federal Lands works with Federal, state and local partners to coordinate funding, and assist in the design and construction restoration efforts to ensure public safety and restore critical access. We administer the Emergency Relief for Federally Owned Roads (ERFO) Program to fund the repair or reconstruction of federally owned roads following a natural disaster, and also assist the Federal Emergency Management Agency (FEMA) as part of multidisciplinary teams deployed to assist with damage assessment and to provide construction and contract administration.



Catastrophic flooding in Colorado's Front Range in 2013 affected many state and county roads accessing national parks and forests. Federal Lands deployed assessment and survey teams to assist the National Guard and Colorado DOT, and also provided engineering and technical support for repairs.

Larimar County Road 43  
Colorado





Destroyed by Tropical Storm Irene in 2011, the Hastings Trail pedestrian and snowmobile suspension bridge over the Wild River is significant because of its relationship to the major corridor trail systems of the north east. The new bridge, maintains the beauty of the view downriver and supports winter tourism activities, linking the economies of New Hampshire, Maine and Quebec, Canada.

Hastings Trail Bridge  
White Mountain National Forest  
New Hampshire



Superstorm Sandy in 2012, ravaged five National Parks on the East Coast: including the Statue of Liberty National Monument.

Liberty Island was the site of particular devastation with damage to the main passenger pier and the work/emergency pier, the Federal Lands team imparted its engineering, environmental compliance, and project management expertise to meet the July 4th goal of reopening the Island to visitors.

Statue of Liberty National Monument  
New York

Building accessible and scenic roads that ensure the many national treasures  
within our Federal Lands can be enjoyed by all.

Joshua Tree National Park  
California

For more information,  
please visit our website.  
[fh.fhwa.dot.gov](http://fh.fhwa.dot.gov)



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

Let us put our expertise to work for you