



Environmental Excellence Awards



U.S. Department of Transportation
Federal Highway Administration

Contents

Introduction.....1

2024 Judges.....2

2024 Award Winners4

Caltrans Fish Passage Program 5

Pennsylvania Avenue SE Multimodal Project 6

Colorado Department of Transportation Air Quality Monitoring and Public Alert System 7

North Carolina Department of Transportation Flood Inundation Mapping for Transportation
Resiliency and Climate Adaptation..... 8

Relocating a Rare Crayfish: Jefferson County Crayfish 9

I-5 Rose Quarter Improvement Project..... 10

Second Street (US 60) Corridor Transportation Investment Generating Economic Recovery
Grant (TIGER) Project 11

Gilcrease Expressway Corridor Post Review and Construction Coordination..... 12

Successful Fish Passage Improvement Through Innovative Weir Construction on Bartlett Brook 13

Georgia Bats in Transportation Structures Program Approach 14

Wildlife Vehicle Collision Reduction and Habitat Connectivity Transportation Pooled Fund Project 15

Tires to Trails: A Full Circle Project..... 16

Driving Transportation Sustainability: Decarbonization, Resilience, and Land Stewardship in the
Virginia Department of Transportation 17

Nassau Expressway (NY 878) Operational and Resiliency Improvements 18



INTRODUCTION

Since 1995, the Environmental Excellence Awards have recognized leaders across the country who make outstanding contributions to environmental stewardship and partnerships above and beyond traditional transportation project outcomes. The winning projects and programs exemplify FHWA's strategic goals of safety, economic strength and global competitiveness, equity, climate and sustainability, transformation, and organizational excellence. The 2024 awards were coordinated with FHWA's Offices of Human Environment, Natural Environment, and Project Development and Environmental Review to reflect the notion that "environment" means a connection to both human and environmental systems.

Chosen from many high caliber and impressive entries, this year's 14 award winners reflect the tremendous diversity of our Nation with recipients from 13 states and the District of Columbia. Together, the awardees demonstrate how innovation, collaboration, and a dedication to environmental stewardship can help meet our Nation's growing transportation needs.

Thank you and congratulations to our 2024 awardees!

The FHWA Environmental Excellence Awards Team
Anne Rowe, David Cohen, Bronwen Keiner, Mary Kay Murray

2024 Judges

Elizabeth Breiseth

Federal Transit Administration



Elizabeth Breiseth is a Secretary of Interior-qualified Architectural Historian with 18 years of federal and private sector experience. Elizabeth is an Environmental Protection Specialist in the Federal Transit Administration's

(FTA) Office of Environmental Policy and Programs and serves as the agency's Federal Preservation Officer. As the Federal Preservation Officer, she provides policy direction and technical assistance to FTA's ten regional offices regarding Section 106 of the National Historic Preservation Act. Elizabeth also served as an Environmental Protection Specialist in the FTA Region 5 office where she was responsible for overseeing and providing technical assistance for the region's portfolio of environmental reviews. Prior to joining FTA in 2017, Elizabeth worked in the Hazard Mitigation Division at the Federal Emergency Management Agency (FEMA) Region 5 handling environmental reviews and grants. She served as the Hazard Mitigation Officer for Minnesota and Michigan and was the mitigation division's Environmental Protection Specialist. Elizabeth's private sector experience is in cultural resource management, leading Section 106 consultations efforts for a variety of project types throughout the country. Elizabeth holds a Bachelor of Arts degree from McGill University in Montreal and a Master of Arts degree from George Washington University in Washington, D.C.



Amy Rynell

Active Transportation Alliance

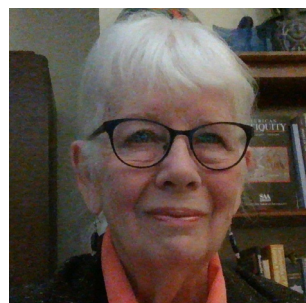
Amy Rynell is Executive Director of the Active Transportation Alliance, a non-profit organization whose vision is

a thriving Chicago region abundant with walking, bicycling, and public transit options to create healthy, sustainable, and equitable communities. Amy is co-chair of the new Clean & Equitable Transportation Campaign of the Illinois Clean Jobs coalition, working to increase mobility options that reduce greenhouse gases (GHGs) from transportation, including investing in sustainable transportation together with vehicle electrification to provide residents more affordable, clean options to get around and generate the critical GHG emissions reductions our communities need. She recently served as a co-chair of the Plan of Action for Regional Transit Steering Committee commissioned by the Illinois legislature to bring forth recommendations on the transit system we want, how to fund it, and how to implement it. Amy was recently named a notable leader in sustainability by Crains Chicago Business. Amy holds a Master of Arts in social service administration from the University of Chicago, and Bachelor of Arts from University of Notre Dame. She loves getting around by foot, bicycle, bus, and transit.

Stephanie Stoermer

Federal Highway Administration

Stephanie Stoermer is a Senior Environmental Program Specialist/Archaeologist with the Federal Highway



Administration (FHWA) Resource Center in Lakewood, CO. She graduated from Baylor University and holds a Bachelor of Arts in Anthropology and a Master of Science in Environmental Studies. Prior to joining

FHWA in 1999, Stephanie was employed by the Texas Historical Commission and the Texas Department of Transportation as an archaeologist and environmental planner. She served as the FHWA California Division Environmental Coordinator before coming to the Resource Center in 2006. As the cultural resources and tribal relations subject matter lead for the Resource Center Environment and Air Quality Team, Stephanie provides

expert technical assistance and training for FHWA field offices, State DOTs, Tribes, and other stakeholders across the nation. Her areas of expertise include Section 106, Section 4(f), and related historic preservation laws, federal Indian law and policy, cultural sensitivity, and consideration of Tribal traditional ecological and cultural values in transportation project planning and delivery. Stephanie is also the author “In Their Own Light: A Case Study in Effective Tribal Consultation” a Resource Center publication which demonstrates the benefits of proactive and sustained tribal engagement.

Audrey Wennink

Metropolitan Planning Council

Audrey Wennink is a Senior Director at the Metropolitan Planning Council (MPC), a nonprofit policy and advocacy organization in the Chicago region. She leads MPC’s transportation policy efforts and coordinates transportation initiatives with other facets of planning including affordable housing, land use, and the environment. She leads transportation research and advocacy efforts including improving the sustainability and equity of the transportation system, pursuing sustainable funding for transportation in Illinois, integration of performance-based planning methods into transportation practice, and advancing equitable transit-oriented development. Prior to MPC, Audrey was a transportation planning and policy consultant for 12 years with national expertise in transit, traffic safety, freight, and performance-based planning. A Chicago resident for more than 25 years, Audrey is an advisory board member of the Greater Chicago chapter of WTS, a professional organization to advance women in the transportation industry. She also serves as member of the national advisory board of Young Professionals in Transportation. Additionally, she is a member of Lambda Alpha International, an honorary



society focusing on land economics and planning issues. Audrey also serves on the Chicago Metropolitan Agency for Planning’s transportation committee. She holds a Bachelor of Arts in English and Spanish from Colby College and a Master’s in Urban Planning and Policy from the University of Illinois at Chicago. She is a fellow of the University of Chicago’s Harris School’s Civic Leadership Academy.

Dale Youngkin

National Marine Fisheries Service

Dale Youngkin has served as the National Marine Fisheries Service (NMFS) Transportation Liaison to the Federal Highway Administration since 2018. Transportation liaisons help facilitate the environmental and permitting



review process for transportation projects by providing technical assistance and coordinating the response of resource and regulatory agencies to State DOTs. Liaisons help to improve communication

and coordination among State DOTs and resource and regulatory agencies, facilitate environmental protection while streamlining review processes, and increase access to environmental and regulatory expertise for State DOTs. NMFS’s Transportation Liaison position is housed within the Office of Protected Resources, so Dale focuses on transportation issues that may affect NMFS marine trust resources. Dale has worked at NMFS headquarters since 2015, and has worked implementing the Marine Mammal Protection Act in the Permits and Conservation Division issuing incidental take authorizations under the Act, and as an infrastructure/FAST-41 coordinator and Permitting Dashboard Administrator for NMFS as well as the National FHWA liaison. Prior to working at NMFS, Dale worked for five years as an Environmental Protection Specialist at FTA with the U.S. DOT. Dale holds bachelor’s and master’s degrees in marine science and biology.

2024 Award Winners





Salsipuedes Creek is one of the largest full-span bridge undercrossings that has been developed and implemented for the primary purpose of fish and wildlife connectivity. Post project monitoring verified successful migration of steelhead trout, mountain lion, bear, fox, and deer. **Credit: Photo Courtesy of Caltrans**

Caltrans Fish Passage Program

Awarded in the category of Accelerating Project Delivery

In cooperation with multiple agencies and external partners, the California Department of Transportation (Caltrans) worked to develop statewide Fish Passage Advisory Committees (FishPAC), the multi-agency Fish Passage Engineering Working Group, and the Fish Passage State Highway Operation and Protection Program, which collaborate to identify priority transportation barriers to threatened and endangered fish and develop remediation project efficiencies. More than 200 FishPAC members and the 40-member Working Group collaborate on biological research, structure design, project delivery, and funding to expedite projects. Caltrans and partners have streamlined the previous analog road and stream barrier assessment process and are able to quickly share data by using sophisticated geospatial software and field data collection hardware, which reduced person-hours for this process by approximately 80 percent. Caltrans also created a suite of predesigned (65 percent) Accelerated Bridge Construction bridges to reduce time and labor for

fish and wildlife connectivity remediation. Additionally, Caltrans is collaborating with resource partners to pursue programmatic permitting efficiencies to reduce permitting timelines and expedite fish passage remediation, opening up aquatic access to important habitats for threatened and endangered species.

Agencies Awarded

- Caltrans
- California Department of Fish and Wildlife
- National Marine Fisheries Service (NOAA)
- California State Polytechnic University, Humboldt

Project Contributors

Pacific States Marine Fisheries Commission, California Conservation Corps, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Coastal Commission, California State Water Board, California Coastal Conservancy, County of Marin, County of Santa Cruz, Santa Monica Resource Conservation District, South Coast Habitat Restoration, CalTrout, Trout Unlimited, Hoopa Tribal Fisheries, Karuk Tribe



A pedestrian exits the Metro station while a cyclist utilizes the bus/bike platform. Credit: Photo Courtesy of Johnson, Mirmiran & Thompson, Inc.

Pennsylvania Avenue SE Multimodal Project

Awarded in the category of Active and Multimodal Transportation

In the heart of D.C.'s Capitol Hill neighborhood, Pennsylvania Ave SE is a historic principal arterial, offering breathtaking views of the iconic U.S. Capitol. The District Department of Transportation (Washington, DC) and Johnson, Mirmiran & Thompson, Inc. redesigned the Pennsylvania Avenue corridor to create a compatible multimodal experience for bikes, pedestrians, and transit. The Pennsylvania Avenue SE Multimodal Project repurposed underutilized passenger-vehicle lanes into protected bike lanes and peak-hour protected bus lanes. The project aimed to optimize bus movement during peak commute times, streamline transit experiences and offer viable alternatives to single-passenger vehicles by establishing seamless connections between the Metro train and bus service. The project accommodates

pedestrians, bicyclists, buses, single-passenger vehicles, and several different types of parking considerations within the same corridor. The project improved safety through the installation of concrete blocks and delineators to separate bike lanes from traffic and protect users. The project design also accommodates existing curbside management without compromising the availability of existing parking with dedicated loading zones and accessible parking spaces, ensuring inclusivity for all travelers.

Agencies Awarded

- District Department of Transportation
- Johnson, Mirmiran & Thompson, Inc.

Project Contributors

Washington Metropolitan Area Transit Authority

Colorado Department of Transportation Air Quality Monitoring and Public Alert System

Awarded in the category of Air Quality and Greenhouse Gas Emissions

To improve the tracking and reduction of air pollutants, the Colorado Department of Transportation (CDOT) and its partners installed monitors that collect project-level air quality data in the urban I-270 corridor and rural I-70 mountain corridor. These monitors collect data on temperature, wind direction, wind speed, humidity, carbon monoxide (CO), nitrogen dioxide (NO₂), and airborne particulate matter (PM₁₀ and PM_{2.5}) levels. When monitors detect poor air quality at a project location, an integrated alert system notifies construction personnel, who can use that data to reduce air emissions by stopping activities that trigger the alert, checking weather and wind conditions before beginning an activity, or implementing measures to reduce air pollution at the source, such as applying water to reduce airborne dust. CDOT's air quality system also alerts the public about poor air quality conditions and shares that data via publicly accessible dashboards, empowering individuals to make informed

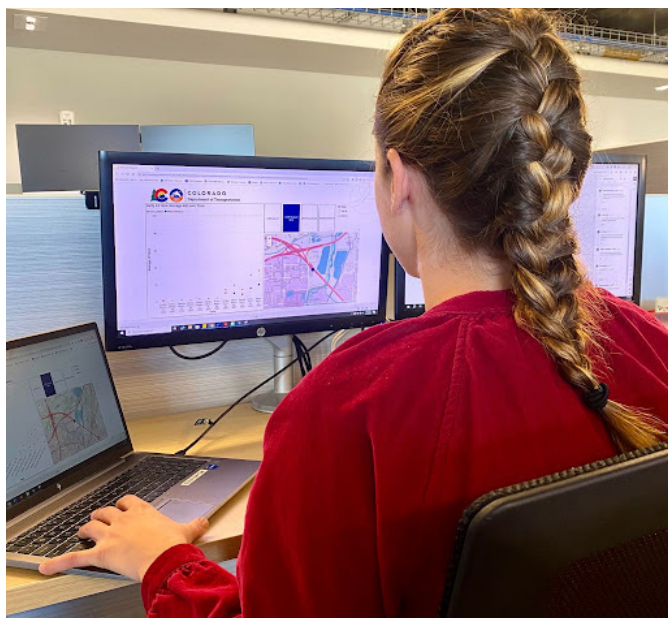
choices about whether and how they interact with the project area. Additionally, air quality monitoring and reporting increases transparency and trust between CDOT and the public and fosters a better understanding of air quality impacts from large-scale transportation projects.

Agencies Awarded

- Colorado Department of Transportation
- Air Sciences, Inc.
- Quandary Consultants

Project Contributors

Colorado Department of Public Health and the Environment (CDPHE)



A citizen accesses the air quality dashboard on a desktop computer. They are facing away from the camera and looking at the computer screen. **Credit: Photo Courtesy of the Colorado Department of Transportation (Abbie Modafferi, Environmental)**



A 2B Tech AQ Sync Monitor is pictured at its installed location, I-270 and York Street. **Credit: Photo Courtesy of the Colorado Department of Transportation (Steve Cohn, Environmental Programs Branch)**

North Carolina Department of Transportation Flood Inundation Mapping for Transportation Resiliency and Climate Adaptation

Awarded in the category of Climate Change Adaptation, Resilience, and Sustainability

To increase the resilience of its transportation network in a changing climate, the North Carolina Department of Transportation (NCDOT) and its partners implemented a critical, real-time flood warning system. Comprised of three separate systems that work together and powered by more than 550 stream gauges, this flood warning system provides predictive roadway inundation information before a hurricane makes landfall and reports real-time flood vulnerability to roads, bridges, and culverts. The system provides flood vulnerability awareness for the state's highway network, helping NCDOT and state and local emergency responders anticipate, plan for, and adapt to changing climate conditions and flooding events. Today, the system monitors more than 11,000 miles of roads near the coast that are vulnerable to storm surge, an additional 2,000-plus miles of roads inland, and more than 15,000 critical waterway bridges and culverts statewide.

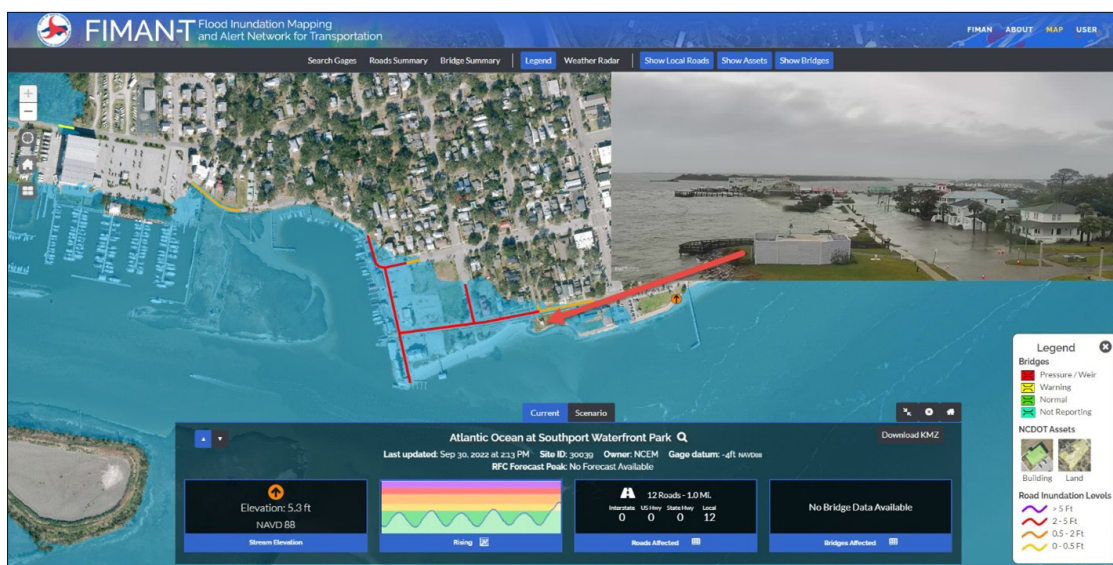
The capabilities and functionalities of the system can be duplicated on a national scale. NCDOT used the system during Tropical Storm Idalia in August 2023 to prioritize where to monitor flooding. Using this system, NCDOT and its partners can deploy resources more efficiently before, during, and after a storm, which ultimately can save lives and help communities recover faster after a natural disaster.

Agencies Awarded

- North Carolina Department of Transportation
- North Carolina Emergency Management
- University of North Carolina-Chapel Hill DHS Coastal Resilience Center of Excellence
- USEngineering Solutions
- ESP Associates, Inc.

Project Contributors

W3 Engineering, Green Stream, U.S. Geological Survey, National Weather Service



North Carolina Flood Warning System – Flood Inundation Mapping Alert Network for Transportation (FIMAN-T). Photo verification of FIMAN-T Graphical User Interface reporting road surge inundation from Hurricane Ian in Southport, NC. Credit: Photo Courtesy of NCDOT

Relocating a Rare Crayfish: Jefferson County Crayfish

Awarded in the category of Collaboration and Partnership

The Jefferson County Crayfish, *Creaserinus gilpini*, is known only from the roadside ditches and wetlands along a 15-mile stretch of Highway 79 in southeast Arkansas, between the cities of Pine Bluff and Rison. To mark its commitment to conservation actions for this rare and endemic crayfish, the Arkansas Department of Transportation (ARDOT) signed a Voluntary Prelisting Species Conservation Program with the U.S. Fish and Wildlife Service in 2011. Putting this commitment to action, in May 2023, ARDOT and its partners worked with volunteers to relocate Jefferson County Crayfish before a planned project to widen Highway 79. As part of this effort, 24 volunteers from multiple agencies successfully relocated 83 of these freshwater crustaceans—representing more Jefferson County Crayfish than scientists have cumulatively observed since the species

was discovered in the late 1980s—to a decommissioned Highway 79 rest area, which ARDOT retained for the conservation of this rare crayfish species. Volunteers also relocated an additional 176 crayfish of other species as part of this conservation effort.

Agencies Awarded

- Arkansas Department of Transportation
- Arkansas Game and Fish Commission
- U.S. Fish and Wildlife Service
- Arkansas Natural Heritage Commission

Project Contributors

Central Arkansas Water, University of Arkansas at Pine Bluff



Painted Devil Crayfish. Credit: Photo Courtesy of Arkansas Department of Transportation/Rusty Hubbard.



Volunteers and ARDOT personnel dig for crayfish. Credit: Photo Courtesy of Arkansas Department of Transportation/Rusty Hubbard.



I-5 Rose Quarter Improvement Project

Awarded in the category of Community Considerations in Transportation Improvements

Through years of community input and regional collaboration, the Oregon Department of Transportation (ODOT) and its partners developed plans for the state's first highway cover over I-5 in Portland, Oregon as part of the I-5 Rose Quarter Improvement Project. The purpose of the project is to improve safety and congestion where three major interstates converge, and reconnect the Albina neighborhood and business district, part of Portland's historically Black community. In response to criticism of the original design, ODOT listened and responded to the community as they voiced their desire for a single, larger connected highway cover that will allow for multi-story buildings and economic development opportunities. As a result of community leadership and advocacy, the project design was modified to provide options for community development and wealth creation, and deliver safer, more accessible multimodal transportation choices, such as a separate pedestrian- and bicycle-only bridge. ODOT also convened two advisory committees composed entirely of

members with ties to the Black community and historic Albina district to ensure that the project outcomes reflect community interests and meet community expectations. These community conversations have led to the adoption of project values and design changes that better fit the community's vision and can be used as a model for meaningful engagement in transportation planning.

Agencies Awarded

- Oregon Department of Transportation
- City of Portland
- Project Advisory Committees: The Historic Albina Advisory Board, and the Community Oversight Advisory Committee
- Albina Vision Trust

Project Contributors

Governor of Oregon, Oregon Legislature, Co-Chairs of Joint Committee on Transportation, Metro, Multnomah County, TriMet, Port of Portland, Portland Public Schools, Oregon Trucking Associations, Rip City Management/Portland Trail Blazers, Portland Chamber of Commerce and business community

Second Street (US 60) Corridor Transportation Investment Generating Economic Recovery Grant (TIGER) Project

Awarded in the category of Complete Streets and Context Sensitive Solutions

Running through the heart of Frankfort, Kentucky, Second Street features infrastructure that is more than a century old. In the 1930s, Second Street (US 60) became a vehicle-centric corridor and was given the nickname “Gasoline Alley.” To address safety concerns, the City of Frankfort and its partners fully redesigned and reconstructed Second Street to improve its accessibility and usability for vulnerable road users. The design included enhanced accessible pedestrian areas, sidewalks and plazas, traffic signalization, and other key landscaped areas and streetscape elements, such as a rain garden. The project allowed for curb ramps at High Street and a two-tiered sidewalk section along East Main Street, eliminating stairs that were previously a barrier to the downtown for people with mobility challenges. Removing these barriers now allows for unimpeded access between the State Capitol and Downtown Frankfort for residents and visitors alike. The project’s Complete Streets elements were shaped by public engagement, which included two public

meetings and 23 community meetings—during which a high percentage of young users voiced that they felt more comfortable with off-street facilities in a wider off-road bicycle corridor. The resulting Complete Streets approach led to a 58 percent increase in pedestrian users.

Agencies Awarded

- City of Frankfort, Kentucky
- Kentucky Transportation Cabinet
- Federal Highway Administration Kentucky Division
- Frankfort Sewer Department
- Strand Associates, Inc.
- Human Nature, Inc.
- Frankfort Plant Board
- Pace Contracting

Project Contributors

City of Frankfort Public Works, Franklin County Arts Council (FrankArts), Frankfort Independent Schools, Columbia Gas of Kentucky, KY Wired, Third Rock Consultants, Cultural Resource Analysts, Inc., Vector Engineers Inc., Inside Out Landscaping Design, Basham Construction, H. G. Mays Corporation



Intersection modifications improved mobility for vulnerable users. At the intersection of Bridge Street and Second Street, the crossing distance was cut in half, free flow turn movement conflicts with pedestrians were eliminated, and pedestrian signal enhancements were implemented. Credit: Photo Courtesy of Strand Associates, Inc. and Abstract Photography, Inc.



The Second Street project set out to redefine the pedestrian as an equally important user of the public rights of way. The narrower street width helps lower vehicular speeds, thereby, supporting bicycle and pedestrian mobility and increasing the tree canopy along the corridor. Credit: Photo Courtesy of Strand Associates, Inc. and Abstract Photography, Inc.

Gilcrease Expressway Corridor Post Review and Construction Coordination

Awarded in the category of Cultural and Historical Resources

Following the post-review discovery of an archaeological site during construction on the Gilcrease Expressway, the Oklahoma Department of Transportation (ODOT), Oklahoma Turnpike Authority (OTA) and partners coordinated with the State Historic Preservation Office (SHPO) and Tribal Nations to undertake an archaeological study of the site. With ODOT's assistance, OTA rapidly mobilized archaeological crews to excavate the site and conduct a study that used geoarchaeological techniques to identify site formation processes, floral and faunal analyses, and specialized analysis of ceramic and stone tool materials. These analyses identified a Woodland period archaeological site, occupied around 1000 A.D., whose inhabitants incorporated a broad range of available resources into their subsistence strategies and diet. The information and data recovered from the study provide important insights into Oklahoma's prehistory and illustrate the opportunities that result from meaningful engagement and consultation. With the Muscogee

(Creek) Nation taking the lead due to the site's location, coordination with Tribal Nations ensured appropriate treatment and disposition of human remains uncovered at the site. Additionally, the data recovery mobilizations, fieldwork, and coordination happened during the height of the COVID-19 pandemic, when virtual meetings supplanted in-person meetings and consultation with SHPO, Tribal Nations, and other stakeholders was particularly challenging. This consultation led to stronger relationships with ODOT's tribal partners and set the standard for future projects.

Agencies Awarded

- Oklahoma Department of Transportation
- Oklahoma Turnpike Authority

Project Contributors

City of Tulsa, Indian Nation Council of Governments (INCOG) MPO, Muscogee (Creek) Nation, Oklahoma State Historic Preservation Office, Oklahoma State Archeologist, U.S. Fish and Wildlife Service



Berryhill Creek archaeological site (34TU220) at the Gilcrease Expressway project. Photograph of Area B with multiple units open. Credit: Photo Courtesy of ODOT/Scott Sundermeyer



Completed fish weir in Bartlett Brook. Credit: Photo Courtesy of NHDOT

Successful Fish Passage Improvement Through Innovative Weir Construction on Bartlett Brook

Awarded in the category of Ecosystems, Habitat, and Wildlife

The New Hampshire Department of Transportation (NHDOT) and its partners designed and implemented innovative aquatic organism passage improvements at the Bartlett Brook crossings under I-89 in Warner, New Hampshire. NHDOT selected the Bartlett Brook as part of a larger corridor-wide project to reconnect valuable habitat for brook trout and other fish that had been cut off by barriers that included perched water conditions and low water levels through two culverts. Through coordination with subject matter experts at multiple regulatory and advisory groups, the project designed and installed innovative grade-control structures, known as weirs, with a step-pool configuration that increased stream connectivity by eliminating the perched condition and backwatering the pipes, even during unusually low water flow. These improvements successfully provided fish

passage for wild brook trout and at least six other species of fish to essential cold-water spawning and refuge habitat during a range of conditions, despite the project's location in a fragile flood-prone area. Extensive inter-agency cooperation enabled successful design, permitting, construction, and monitoring of these innovative weirs, which can be used as an example for how to improve habitat access at other challenging sites.

Agencies Awarded

- New Hampshire Department of Transportation
- University of New Hampshire, Stormwater Center
- New Hampshire Fish and Game Department
- Weaver Brother's Construction Company, Inc.

Project Contributors

New Hampshire Department of Environmental Services

Georgia Bats in Transportation Structures Program Approach

Awarded in the category of Educational and Training Programs

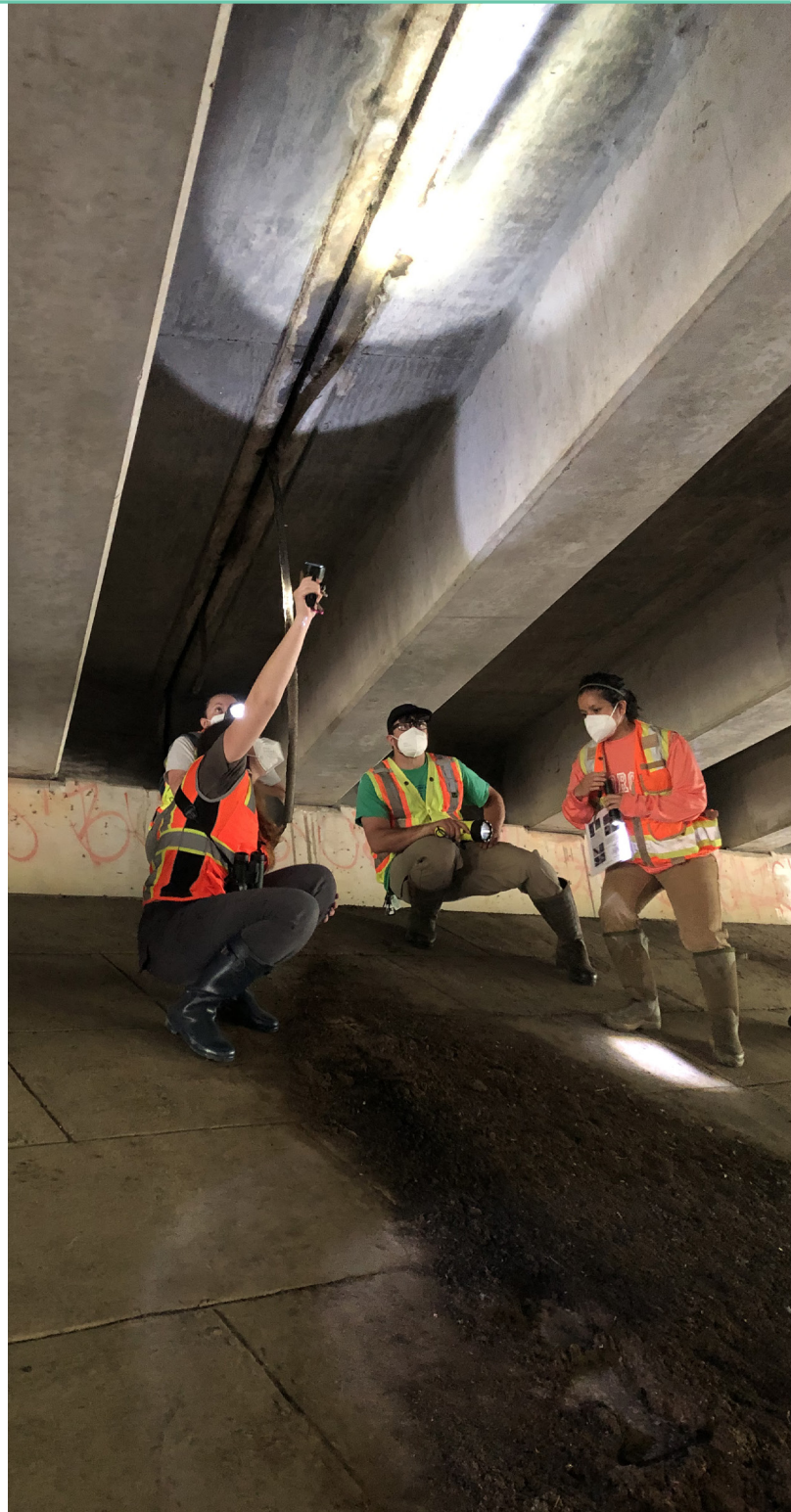
To reduce the impacts of all Georgia Department of Transportation (GDOT) projects on endangered and threatened bat species, GDOT and its partners cooperatively developed a training program to provide targeted expertise to all GDOT ecology staff. Collaborating on this effort, GDOT, the U.S. Fish and Wildlife Service, and the Georgia Department of Natural Resources developed comprehensive survey and reporting methods, an in-person and virtual training program, and avoidance and minimization measures. Trained GDOT staff and consultants can now identify, early in a project's lifecycle, structures that have bat presence or bat signs and apply meaningful avoidance and minimization measures to help recover protected bat species without causing significant project delays or increased costs. This collaborative approach culminated in a programmatic agreement that covers formal consultation for all Federally listed and State-protected bat species in Georgia and streamlines consultation timelines from 90 days down to 21 days. The programmatic agreement outlines conservation strategies and consultation pathways for all projects within GDOT's program, granting flexibility, predictability, and efficiencies in the consultation process.

Agencies Awarded

- Georgia Department of Transportation
- Georgia Department of Natural Resources
- U.S. Fish and Wildlife Service
- Federal Highway Administration Georgia Division

Project Contributors

U.S. Department of Agriculture, U.S. Army Corps of Engineers, Arcadis, ICF



Agency staff and consultant ecologists learn to identify key characteristics of bat occupancy during a Bats in Transportation Structures Training session. Credit: Photo Courtesy of Georgia Department of Natural Resources

Wildlife Vehicle Collision Reduction and Habitat Connectivity Transportation Pooled Fund Project

Awarded in the category of Environmental Research

The Wildlife Vehicle Collision Reduction and Habitat Connectivity Transportation Pooled Fund Project was formed with the goal to reduce the risk of wildlife-vehicle collisions and improve habitat connectivity. Under the leadership of the Nevada Department of Transportation, the Wildlife Connectivity Institute and its partners conducted a two-nation study, researching and evaluating how U.S. State departments of transportation (State DOTs), Metropolitan Planning Organizations, and Canadian ministries of transportation incorporate wildlife connectivity concerns into their transportation processes. The researchers surveyed transportation professionals in the U.S. and Canada to learn about their challenges and strategies to help protect and connect wildlife across roadways. The researchers collected crash data from every U.S. State DOT and used this information in creating the Manual for Strategic Integration of Wildlife Mitigation into Transportation Procedures, which provides a blueprint for how to protect motorists from wildlife-vehicle collisions and restore wildlife connectivity across transportation corridors. This manual presents instructions on how to prioritize locations and actions to minimize wildlife-vehicle conflict and to institutionalize and incorporate wildlife concerns into the transportation process. These groundbreaking research results have been presented to national and state audiences, used by States to apply for funding from the Wildlife Crossings Pilot Program, and used by nonprofit organizations and legislators to support state wildlife mitigation legislation.

Agencies Awarded

- Nevada Department of Transportation
- Wildlife Connectivity Institute
- Volunteers with the Wildlife Connectivity Institute
- University of Georgia Odum School of Ecology
- Habitat Restoration Solutions
- Aztec Engineering
- Arizona Game and Fish Department
- University of Texas Austin Center for Transportation Research
- Wildlife Logistics
- TD&H Engineering
- ECO-Resolutions

Project Contributors

Parks Canada, California Department of Transportation, Iowa Department of Transportation, Ontario Ministry of Transportation, Washington Department of Transportation, Arizona Department of Transportation, New Mexico Department of Transportation, Oregon Department of Transportation, Michigan Department of Transportation, Minnesota Department of Transportation, Alaska Department of Transportation, ARC Solutions



A mule deer herd exits a wildlife underpass beneath US 191 in Monticello, Utah. Credit : Photo Courtesy of Utah Department of Transportation and P. Cramer

Tires to Trails: A Full Circle Project

Awarded in the category of Equity and Environmental Justice

Working across multiple agencies, nonprofit organizations, and private-sector businesses, Tennessee State Parks and its partners collected more than 26,000 illegally dumped scrap tires from around the Boxtown neighborhood in Memphis, Tennessee, an economically disadvantaged community. The project recycled those scrap tires into clean and usable rubber crumb, which was then used to resurface recreational walking pathways in the T.O. Fuller State Park to create more than 2 miles of local multi-use trails. This project created new partnerships between the city, county, state agencies, and nonprofit volunteer organizations and resulted in new high-quality recreational opportunities to the state park. The T.O. Fuller State Park was the first state park east of the Mississippi River open to Black Americans and has been a pillar to the neighborhood and city for decades.

Agencies Awarded

- Tennessee State Parks
- Tennessee Department of Environment and Conservation
- Tennessee Department of Transportation
- City of Memphis
- Memphis Tire Recyclers

Project Contributors

Shelby County



Michael McClanahan, of TDOT, pulls tires out of roadside mud during the Martin Luther King Jr. Day of Service, January 21st, 2019. Credit: Photo Courtesy of Michael Meister, Tennessee State Parks



New Trail head kiosk to recognized project contributors, project partners, with a history of the place detailed on the reverse side. Credit: Photo Courtesy of Michael Meister, Tennessee State Parks

Driving Transportation Sustainability: Decarbonization, Resilience, and Land Stewardship in the Virginia Department of Transportation

Awarded in the category of Roadside Resource Management and Maintenance

To address emerging environmental challenges, including resilience and hazard mitigation, adaptation, and habitat conservation, the Virginia Department of Transportation (VDOT) established the Office of Transportation Sustainability (OTS). Consisting of three programs—Decarbonization, Resilience, and Land Stewardship—OTS provides a central hub to incorporate climate and sustainability throughout the agency. Since its inception, OTS has submitted four discretionary grant applications and supported the implementation of over \$265 million in sustainability-focused FHWA formula funding. The Office has also worked to identify transportation decarbonization strategies, developed resilience measures, led the development and implementation of VDOT's Resilience Improvement Plan, contributed to Virginia's first Wildlife Corridor Action Plan, supported aquatic organism passage

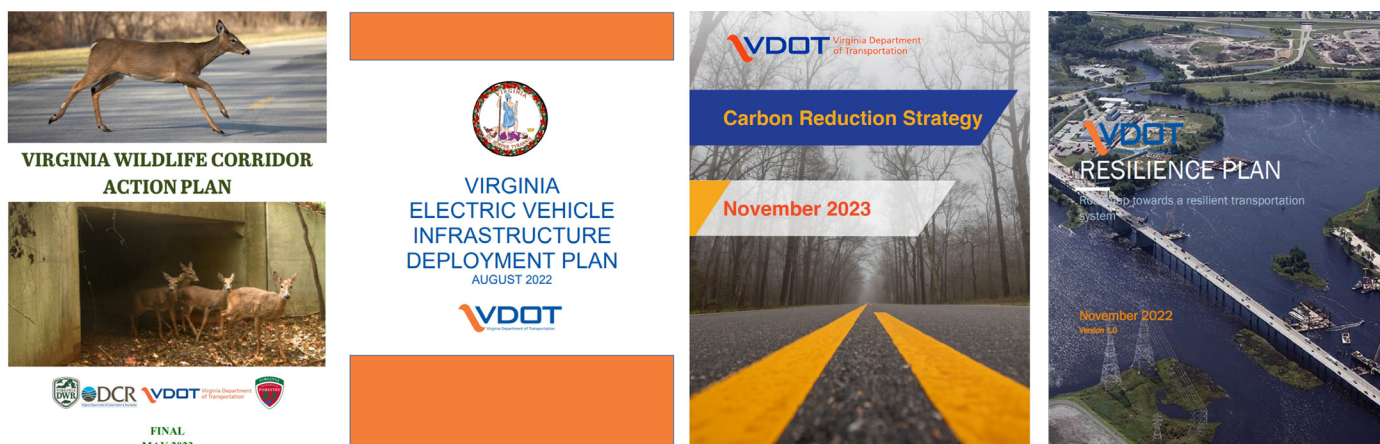
and wildlife crossings, and enhanced VDOT's right-of-way through monarch butterfly habitat preservation and reforestation. In taking a holistic approach to planning, coordinating, and implementing sustainability measures, VDOT's OTS has maximized funding and initiatives to tackle emerging environmental challenges and drive Virginia's transportation system toward a more sustainable future.

Agencies Awarded

- Virginia Department of Transportation

Project Contributors

Virginia Energy, Virginia Department of Rail and Public Transportation, Virginia Department of Environmental Quality, Virginia Department of Conservation and Recreation, Virginia Department of Wildlife Resources, Virginia Department of Emergency Management



Collage of plans developed by the OTS Team (NEVI, CRS, Resilience Plan, WCAP). Credit: Photos Courtesy of Virginia Department of Transportation

Nassau Expressway (NY 878) Operational and Resiliency Improvements

Awarded in the category of Wetlands, Watersheds, and Water Quality

In a project to make operational and safety improvements to the Nassau Expressway (NY 878), the New York State Department of Transportation (NYSDOT) redesigned and reconstructed several intersections, raised the roadway to bolster the area's resiliency to flooding, cleaned up an abandoned construction disposal site, and converted the site into a valuable wetland habitat with improved water quality. Prior to the project, Nassau Expressway experienced elevated crash rates, chronic flooding during storm events, and substantial congestion and delays during peak hours. In addition to making much-needed operational and safety improvements, the project excavated and removed 262,000 cubic yards of construction and demolition debris over 7 acres, removed invasive vegetation, and planted native wetland species, facilitating the creation of over 2 acres of productive intertidal vegetated wetland habitat. To further minimize impacts to the nearby intertidal marsh wetlands, NYSDOT adjusted the original project alignment and reduced

the project footprint. The project also created a closed drainage system of retention basins and an oil separator chamber to filter highway runoff before it enters the basins, thus decreasing flooding and benefitting existing surrounding wetlands.

Agencies Awarded

- New York State Department of Transportation

Project Contributors

Federal Highway Administration, U.S. Army Corps of Engineers, New York State Department of Environmental Conservation, U.S. Fish and Wildlife Service, National Marine Fisheries Service, New York State Department of State Coastal Management Program, Town of Hempstead Department of Waterways and Conservation, City of New York, Borough of Queens, Nassau County, Village of Lawrence, Village of Cedarhurst, Village of Atlantic Beach, Village of Woodburgh, Hempstead Hispanic Civic Association, Inwood Civic Association, North Lawrence Civic Association



Tidal Wetland Mitigation Site after debris removal and regrading – view showing tidal channel and Intertidal marsh vegetation (*Spartina alterniflora*). Credit: Photo Courtesy of NYSDOT



View of Tidal Wetland Mitigation Site during Second Season of Development. Credit: Photo Courtesy of NYSDOT



https://www.fhwa.dot.gov/environment/environmental_excellence_awards/