Welcome to the Spring 2022 Research Review.

The Research Review’s Spring issue highlights sustainability initiatives for Earth Day including the Environmental Excellence Awards (EEAs), the Carbon Reduction Program created under President Biden’s Bipartisan Infrastructure Law, and newly announced FHWA greenhouse gas reducing programs. The biennial EEA program features a range of human and natural environment categories designed to highlight best practices across the Nation. To learn more about the EEA and the recipients awarded on April 29, 2022, please read the article below.

With the increase in transportation funding from the Bipartisan Infrastructure Law, we are highlighting the availability of our recent 2021 Transportation Liaison Guidebook. The guidebook provides information on how to establish transportation liaison positions (dedicated staff) in Federal and state resource and regulatory agencies and Indian Tribes to improve the environmental review process. Any questions on establishing a liaison program, please do not hesitate to reach out to myself (Anne Rowe) or Richard Darden.

This quarter’s Research Review also includes upcoming webinars, the Office of Planning, Environment, and Realty’s new report on “Example Practices for Performance-Driven Programming research highlights”, and May’s Bike Month with other events of interest. Please keep the ideas coming for future research opportunities and collaborations.

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Environmental Excellence Awards

The Environmental Excellence Awards (EEAs) recognize outstanding transportation projects, processes, and organizations that incorporate environmental stewardship into the planning and project development processes using Federal Highway Administration (FHWA) funding sources. This year’s 2022 awards are coordinated with FHWA’s Offices of Human Environment, Natural Environment, and Project Development and Environmental Review.

FHWA accepted nominations in Fall 2021, and a panel of judges with varying backgrounds, disciplines, and expertise helped select the winning entries. FHWA awarded 14 projects or programs in 2022 that exemplify FHWA’s priorities of climate change and sustainability, equity and environmental justice, complete streets, economic strength, and safety for all road users. For the category of Environmental Research, FHWA selected the “Advancing Science to Better Consider the Ability of Nature Based Solutions to Protect Transportation Infrastructure from Sea Level Rise and Flooding” project submitted by the National Oceanic and Atmospheric Administration (NOAA). This application described the efforts by NOAA and FHWA to develop a competitive funding opportunity to attract proposals for projects to help communities and agencies evaluate the use of nature-based solutions, such as sand dunes or living shorelines, rather than conventional hardened engineering designs.

Carbon Reduction Program Announced

FHWA has announced the Carbon Reduction Program (CRP), created under the President’s Bipartisan Infrastructure Law that unlocks $6.4 billion in formula funding for states and localities over five years. The CRP will fund a wide range of projects designed to reduce carbon dioxide emissions from on-road highway sources. For more information about the new Carbon Reduction Program and guidance, please see the Carbon Reduction Program Implementation Guidance and fact sheet. FHWA also announced information on other new programs and funding to lower transportation sector emissions and accelerate the deployment of clean technologies:

- Federal Funding is Available for Electric Vehicle Charging Infrastructure on the National Highway System
- Quantifying Emissions of Sustainable Pavements
- Flex Funding Website

For more information on FHWA’s climate change resources, please see FHWA’s Sustainable Transportation Website.

HEP Virtual Booth is Live HEP Research has released a new Virtual Booth that features multiple resources including five research fact sheets, banners that connect to research programs like the Alternative Fuel Corridors program, and a QR code page highlighting research work like the INVEST course program. This is a great way to quickly connect to FHWA HEP research and resources.
Performance-Driven Programming

The Office of Planning, Environment, and Realty is pleased to announce the availability of a new report on “Example Practices for Performance-Driven Programming.” Performance-driven programming involves the use of performance measures, metrics, targets, and/or data to help inform or guide the development of a statewide transportation improvement program or metropolitan transportation improvement program. This report highlights how State Departments of Transportation (State DOTs) and Metropolitan Planning Organizations (MPOs) are implementing performance-driven programming processes and aligning transportation investment decisions with the Federal performance areas for safety, infrastructure condition, and system performance.

The intended audience for this report includes planning and programming staff from FHWA Division Offices, State DOTs, and MPOs, and their planning partners. Please share this information with your State DOT and MPO colleagues and contact Corbin Davis, 202-366-6072, or Steve Call, 801-955-3513, if you have any questions.

Highlights from the 23rd Annual National Bike Summit

The 23rd Annual National Bike Summit was held on March 27th-30th with the theme of Choosing our Future. The event helped attendee’s coordinate with national bicycle stakeholders to advance equitable outcomes in underserved communities and implement resilient connected bicycle transportation networks. HEP is a co-sponsor of the National Bike Summit.

Upcoming Webinars

Reconnecting Communities Pilot Discretionary Grant Program

The U.S. Department of Transportation (DOT) will host a webinar for potential applicants to get ready for the forthcoming Reconnecting Communities Pilot.
(RCP) discretionary grant program. It is intended for a broad range of attendees, including representatives of organizations eligible to receive funds under the RCP program: States, units of local governments, Federally recognized Tribal governments, metropolitan planning organizations, nonprofit organizations, and owners of transportation facilities eligible for capital construction grants. The webinar is scheduled on Thursday, May 19 from 1:30pm – 2:30pm EDT. Register here. If you need alternative formats or services because of a disability, please contact ReconnectingCommunities@dot.gov. (No cost)

Communities, Climate Change, and Health Equity—State-Level Implementation

This workshop will delve deeper into specific state-level actions and actors that could help improve climate-related health outcomes in disproportionately impacted communities, particularly through the deeper integration of health equity into climate programs and consideration of climate justice in public health programs. Intended participants include representatives from: state agencies, legislatures, and governors’ offices; state consortiums; federal agencies and universities. This workshop is scheduled on Tuesday, May 24, 2022 12:00 - 3:00 PM (ET) and Thursday, May 26, 2022 12:00 - 3:00 PM (ET). Register here. (No cost)

Transportation Alternatives Guidance Webinar

This webinar will describe the Transportation Alternatives (TA) Set-Aside (TASA) guidance released on March 30, 2022. The TA Set-Aside provides funding for projects such as pedestrian and bicycle facilities; construction of turnouts, overlooks, and viewing areas; community improvements such as historic preservation and vegetation management; environmental mitigation related to stormwater and habitat connectivity; recreational trails; safe routes to school projects; and vulnerable road user safety assessments. The webinar is scheduled for June 1, 12:30 to 2:00 pm ET. For more information, contact Christopher B Douwes, 202-366-5013.

Research in Shared Micromobility

This webinar will present findings from three research projects funded by the National Institute for Transportation and Communities (NITC) and conducted at the University of Arizona and at Portland State University. Each study aimed at gaining a better understanding of a particular aspect of e-scooter use. The webinar is scheduled on Tuesday, June 7, 2022, 10:00am to 11:00am PDT. Register here. (No cost)

Courses of Interest

National Highway Institute (NHI) Resilience Training Courses: The National Highway Institute (NHI) recently released four one-hour web-based courses focused on resilience to climate change and extreme weather events. The four courses provide an introduction to past and expected future environmental conditions, future sea levels, climate datasets and modeling
tools for temperature and precipitation change, system level vulnerability assessment, and methods for conducting project-level resilience assessments. (No cost)

- FHWA-NHI-142081 Understanding Past, Current and Future Climate Conditions
- FHWA-NHI-142082 Introduction to Temperature and Precipitation Projections
- FHWA-NHI-142083 Systems Level Vulnerability Assessments
- FHWA-NHI-142084 Adaptation Analysis for Project Decision Making

Research Highlights

Planning

The American Routable Network (ARN)
ARN is a dataset that can be used in geographic information systems (GIS) and travel modelling software to help users understand and visualize the flow of people and goods across the nation. The ARN contains 1.1 million miles of road representing the National Highway System (NHS), which includes the Eisenhower Interstate System, the Strategic Highway Network, and NHS Intermodal Connectors, and other important arterial roads. It takes advantage of existing FHWA processes that bring in more comprehensive road networks from each of the State DOTs, but extracts a subset and connects the roads at state boundaries. The ARN is being updated to accurately reflect where turning movements can take place and with more current attribute data with a newer version expected for this summer. Staff Contact: Mark Sarmiento, 202-366-5853.

Environment

Updated Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards
The 2015 ozone maps have been updated to reflect revised Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). These revised designations were in response to a July 2020, D.C. Circuit Court remand and EPA took action to review the Agency’s original designation for 16 counties for the 2015 ozone NAAQS. The boundaries for 6 nonattainment areas in four states (Illinois, Indiana, Missouri and Wisconsin) were revised. The 2015 ozone maps have been updated to reflect the revisions and are posted on the FHWA HEP AQ Website. Staff Contact: Edward Dancausse, 919-747-7026.

Realty

Uniform Act Residential Relocation Retrospective Study
This research will document the adequacy and effectiveness of the Uniform Act’s relocation assistance benefits and services for displaced persons. This research will review up to 12 completed Federal Aid projects which relocated residential occupants, and may have included impacts to minority and low income populations. The final report will identify any program benefit or service improvements that may be needed to minimize or mitigate the impacts relocation may have on low income and minority communities and individuals. The project will serve to improve future program and project decision making processes. Staff Contact: Melissa Corder, 202-366-5853.
Upcoming Events

**May is Bike Month!**

The annual “Bike Month” organized by the League of American Bicyclists is happening during the month of May. Bike Month is a celebration to promote bike riding and that helps communities become healthier, economically stronger, environmentally cleaner and more energy independent. Here are some opportunities to participate:

- Register for the [National Bike Challenge](https://www.bikeleague.org/bike-month/national-bike-challenge)
- Connect with local Bike to Work Week events, May 17-23, and Bike To Work Day events, May 21.

**National Trails Day is June 4**

Taking place on the first Saturday in June, [National Trails Day®](https://www.bikeleague.org/national-trails-day) is a day of public events aimed at advocacy and trail service. Thousands of hikers, bikers, rowers, horseback riders, trail clubs, Federal and local agencies, land trusts, and businesses come together in partnership to advocate for, maintain, and clean up public lands and trails. Learn about ways to celebrate the 30th annual #NationalTrailsDay, like finding a trail service project.

**TRB Conference on Sustainability and Emerging Transportation Technology**

The [TRB's Conference on Sustainability and Emerging Transportation Technology](https://www.trb.org/Conferences/Sustainability/19266.aspx) will address questions around how policy makers, the private sector, and others can work together to support transportation innovations in ways that promote sustainability and benefit all users of the transportation system particularly in terms of public health, equity, and accessibility. The conference will be held on May 31 - June 2, 2022 in Irvine, CA and [registration is open](https://www.trb.org/Conferences/Sustainability/19266.aspx). (There is a fee)

**Bridging Transportation Researchers (BTR) Conference**

[BTR](https://www.bridgingtransportation.org) brings transportation engineers, planners, & policymakers together globally by removing the burden of travel, the cost of registration, & greenhouse gases associated with transport & accommodations. The conference is online on August 4 & 5, 2022, including multi-track Zoom-based meetings. You can pursue continuing Education credits with this conference! Certificate of attendance will be provided to be used for continuing education (CE) or Professional Development Hour (PDH) credits should the activity meet the guidelines set forth by your state board. [Registration is open](https://www.bridgingtransportation.org/registration). (There is no fee)

**TRB's Tools of the Trade Conference**

The [17th National Tools of the Trade Conference](https://www.trb.org/Conferences/ToolsOfTheTrade/17), convened by TRB, will take place August 29-31, 2022 in Boise, Idaho. This event brings together practitioners from a wide array of public, private, and non-profit sector organizations to discuss methods, tools, and techniques designed to improve the state of practice in transportation planning for small and medium-sized communities. [Registration is open](https://www.trb.org/Conferences/ToolsOfTheTrade/17). (There is a fee)
Preserving the Historic Road International Conference

The Preserving the Historic Road International (PHRI) is being held in Portland, Oregon on September 22-24, 2022. After four years of planning (and pandemic) the conference offers a dynamic new format, designed to meet the challenges for historic roads in the coming decades. PHRI will engage you in direct conversations with experts, put you in the field with some of America’s greatest roads and invite you to reimagine how we identify, preserve and manage the next generation of historic roads. View the preliminary conference agenda and register for the event. (There is a fee)

The Office of Human Environment's Research and Financial Services Team administers research programs and financial support to HEP for research initiatives. The Team provides leadership, coordination, support and implementation of research activities. It also works toward improving outreach, communication and partnerships between Federal, State, and local stakeholders in managing the research programs. For more information, please contact HEP's Primary Research Coordinator: Patricia Cazenas, 202-366-4085.