Welcome to the Winter 2022 Research Review.

The Office of Planning, Environment, and Realty (HEP) research newsletter has a new name, the Research Review. The latest issue features the FHWA's Office of Project Development and Environmental Review's (HEPE) environmental review process and the Eco-Logical Program.

HEPE focuses on the National Environmental Policy Act (NEPA) project development process as a balanced and streamlined approach to transportation decision making. This process takes into account the potential impacts on both human and natural resources and the public's need for safe and efficient transportation improvements. This is accomplished through HEPE's project development specialist's engagement with FHWA Division office staff in tracking projects, addressing questions related to environmental review, and providing direction and technical assistance in complying with current requirements.

The ongoing promotion of efficiency initiatives in NEPA and the environmental review process continue to balance transportation needs and impacts to communities and the natural environment. In addition, HEPE's research supports promoting and expanding approaches to expediting project delivery and lessons learned. HEPE uses research to assist regional transportation programs and decision makers effectively account for projects impacts and identify and implement sound mitigation that improve community and environmental outcomes.

Despite the challenges of Covid, multiple HEP staff participated in Transportation Research Board’s (TRB) 101st annual meeting. A few TRB highlights from the event are shared below.

Additional features in this quarter’s newsletter include upcoming webinars, a National Highway Institute (NHI) web-based training course, research highlights, and the 23rd Annual National Bike Summit along with other events of interest. Please share ideas for future research opportunities and collaborations, that can deepen and expand HEP research work.

Stephanie Perez-Arrieta
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**TRB Conference Summary and Staff Highlights**

The 101st TRB Annual Meeting in January had thousands of transportation administrators, practitioners, policy makers, and researchers participate in more than 400 workshops, lectern sessions, and poster sessions, as well as nearly 400 committee meetings. Here are some video highlights from the conference:

- Transportation Secretary Pete Buttigieg's plenary remarks and "fireside chat" with Susan Shaheen and Nathaniel Ford of the TRB Executive Committee
- The full Chair's Plenary Session
- U.S. DOT sessions on Bipartisan Infrastructure Law Implementation and Innovation for Transformation

HEP staff members attended sessions and presented at the meeting. Reena Mathews, Office of Planning (HEPP) attended a session called "Make it a Priority! Spotlight on Project Prioritization Best Practices." Understanding how agencies prioritize projects using data-driven approaches to support their decision-making process is critical to support HEPP’s capacity building efforts.
There was also a great turnout for the Pedestrian Committee meeting. Shari Schaftlein, HEPH and Michael Griffith from the Office of Safety covered a range of topics in their FHWA update including: opportunities to fund pedestrian infrastructure and safety in Bipartisan Infrastructure Law, recent research products, and initiatives such as Complete Streets and the Safe System Approach. In addition, the leadership of the TRB Equity Committee spoke very highly of FHWA contributions over the years to Environmental Justice, Community Impact Assessment, and the successful TRB Equity Conference.

This year’s TRB booth showcased HEP offices and recent research projects. HEP had numerous attendees and students visit the booth. Many were surprised to see the breadth of issues addressed through the five offices.

Visit the TRB summary page for additional highlights and pictures. For future conferences and events, a new HEP virtual booth is being created as a resource and will be available soon.

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**Eco-Logical: A programmatic approach to mitigation**

The FHWA’s Eco-Logical Program documented Orange County Transportation Authority’s (OCTA) approach that prioritizes sensitive habitats and species, allows for advance compensatory mitigation, and expedites permit decision making and project delivery for the suite of transportation projects defined in the OCTA M2 Highway/Freeway Program (M2 Program). The case study was delivered as a panel discussion at the 2021 International Conference on Ecology and Transportation. Videos of the panel included an introduction by Dave Williams (HEPE); an overview of the environmental mitigation program from the Orange County Transportation Authority; information about the program’s early planning and history; U.S. Fish and Wildlife Service’s perspective on the habitat conservation planning, implementation, and evaluation process; and a description of the U.S. Army Corps of Engineers letter of permission procedures for Section 404 permitting.

HEPE’s Eco-Logical team anticipates publication of a Programmatic Mitigation Planning (PMP) Guidebook later this year. The guidebook will be a resource for transportation and environmental practitioners to assist in the development and implementation of PMP, as well as highlighting PMP’s project and environmental benefits. **Staff contact: David Williams, 202-366-4074**

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**Upcoming Webinars**

- March 9 - TRB Webinar: Mobility and Transit—Keys to Successful Collaboration
- April 20 – APBPs Transforming the Experience for People on Bikes: How Two North American Communities Have Successfully Implemented Low Stress Networks, Quickly Livability. (There is a fee)

The cities of Houston, TX and Victoria, BC could hardly be more different. Yet both have successfully implemented multi-phase bikeway networks in an uncommonly fast time, including many miles of separated bike lanes. The workshop will describe how this has transformed and expanded the low-stress bicycle network in both communities, with an emphasis on lessons learned from both the similarities and differences in the planning, design, and delivery methods that were used.
Courses of Interest

Foundations of Federal-Aid Highway Program Appraisals

- This 7-hour Web-based Training course offered by NHI, is the authoritative source in transportation training, and certified by the International Distance Education Certification Center (IDECC). To appraise real property for acquisition for Federal-aid highway programs, it is essential for appraisers to understand how to incorporate Uniform Act and 49 CFR Part 24 appraisal requirements into classical appraisal principles.

Research Highlights

Planning

TMIP Modeling and Analysis Tool (TMIP-EMAT) for Forecasting Uncertainty
Over the past decades, transportation agencies have used predictive planning with a predetermined plan within a specific timeframe. However, emerging connected and autonomous vehicle (CAV) technology, new mobility services, and changing travel patterns will potentially have significant unpredictable impacts on future surface transportation operations and travel demand. The FHWA Travel Model Improvement Program has developed an Exploratory Modeling and Analysis Tool (TMIP-EMAT). TMIP-EMAT aims to empower metropolitan planning agencies to manage uncertainties by providing insights of potential, possible, plausible, probable, or preferred futures. The final report is now available. Staff Contact: Sarah Sun, 202-493-0071

Environment

Dana Tool and TNMAide
FHWA’s Office of Natural Environment has released the DANA Tool, which combines and processes existing traffic data to produce properly formatted inputs to the EPA’s MOVES emissions model. FHWA also provided the related TNMAide, which is a spreadsheet tool that aids in the determination of the worst noise hour of the day, for use in the FHWA’s Traffic Noise Model (TNM), as required by 23 CFR 772. Staff Contact: David Kall, 202-366-6276

Toolkit on Innovative Finance Strategies to Accelerate Bicycle and Pedestrian (Active Transportation) Project Delivery
This research builds on Strategies for Accelerating Multimodal Project Delivery and "Diversifying DOT’s Build America Bureau (BAB) Portfolio to Include Underutilized Stakeholders" to compile, analyze, and document best practices for innovative finance strategies to accelerate bicycle and pedestrian project delivery. The research will highlight innovative finance approaches for implementing active transportation projects in various community contexts. Staff Contact: Fleming El-Amin, 202-366-0233

Realty

On-Premise Signs Legal Research Study
This project will assist FHWA in cataloguing and analyzing States’ legislative responses to recent First Amendment-based court challenges to States’ highway sign laws that are largely based on the language found in the Federal Highway Beautification Act of 1965. FHWA is interested in changes in State laws modelled after the language of 23 USC 131 (c) (3) regarding “on-premise signs”, which allows signs, displays and devices “advertising activities conducted on the property on which they are located.” Staff Contact: Jennifer Janik, 202-493-0350
Upcoming Events

• March 27-30, 2022

The 23rd Annual National Bike Summit

The 23rd Annual National Bike Summit will be a hybrid in-person and virtual event. The theme is Choosing Our Future, focusing on coordination with national bicycle stakeholders to advance equitable outcomes in underserved communities and implementing resilient connected bicycle transportation networks. All keynote speeches, plenary sessions, and panels will be online. In Washington, DC, in-person Summit attendees will be able to attend the virtual sessions, while also participating in workshops, bike rides, and other networking events. HEP is co-sponsorship the National Bike Summit, and is organized by the League of American Bicyclists (LAB). Registration is open.

• March 29 - 31, 2022

Professional Trail Builders Association’s 2022 Sustainable Trails Conference

The 2022 Sustainable Trails Conference will provide the knowledge, skills, and professional networking to help you and Professional Trail Builders Association (PTBA) achieve the mission of continually improving the trails industry. If you or your organization is involved in trail planning and design, construction and maintenance, or fundraising, marketing and management, this conference provides access to the world’s highest quality trail professionals. Location: Bentonville, Arkansas.

• April 11-14, 2022

National Stormwater Practitioners Forum hosted by FHWA and NCDOT will be held in Raleigh, NC. The National Stormwater Practitioners Forum is a forum for the states Departments of Transportation (DOT) stormwater practitioners from across the nation will assemble to discuss state-of-the-art practices, emerging technologies, barriers to stormwater permit compliance and other associated regulatory challenge. The forum will include Peer to Peer topics on existing or new requirements affecting Project Planning and Design, Construction, Maintenance and Operations of DOT Highway and Non-Highway facilities. For additional information, contact Susan Jones.

• May 31-June 2, 2022

TRB’s Conference on Sustainability and Emerging Transportation Technology

The TRB’s Conference on Sustainability and Emerging Transportation Technology 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 in Irvine, CA and registration is open. (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.