

# OFFICE OF CORPORATE RESEARCH, TECHNOLOGY, AND INNOVATION MANAGEMENT

**Turner-Fairbank Highway Research Center** 

The Office of Corporate Research, Technology, and Innovation Management leads the development and coordination of a national highway research program that closes critical knowledge gaps, identifies collaboration opportunities, and accelerates innovations and technology deployments. The office's key responsibilities include providing strategic direction to the Federal Highway Administration (FHWA) on research, executing corporate research programs, coordinating FHWA research programs, ensuring research innovations move from the laboratory to implementation, and communicating research results.

# STRATEGIC DIRECTION AND RESEARCH PLANNING

The office oversees and performs three core functions:

- Strategic planning: Collaborates with the Office of the Secretary of the U.S. Department of Transportation (USDOT) and other operating administrations to develop the USDOT RD&T Strategic Plan (1)
- Legislative and intergovernmental action: Provides legislative analysis and support for research and technology (R&T).
- Budget preparation and execution: Leads the coordination and development of FHWA's Annual Modal Research Plan, spend plan, annual R&T budget request, and annual R&T budget delivery plan.

# **RESEARCH COORDINATION**

The office leverages a long history of strong partnerships and collaborations with State and Federal agencies to coordinate efforts and benefits that advance shared goals through the following:

 Liaisons and partnerships: Works with FHWA division offices on R&T issues related to the research portion of the State Planning and Research program,

- the Transportation Research Board, and the American Association of State Highway and Transportation Officials.
- International coordination: Takes
   place through the Turner-Fairbank
   Highway Research Center's (TFHRC's)
   associate membership with the Forum
   of European National Highway Research
   Laboratories.

# **RESEARCH EXECUTION**

The Office of Corporate Research, Technology, and Innovation Management implements a portion of the FHWA R&T portfolio and manages the following programs:

- Exploratory Advanced Research Program:
   Matches opportunities from discoveries in science and technology with the needs of the highway transportation community, focusing on longer-term, higher-risk transformative research with high payoff potential.
- National Research Council Research
   Associateship Program: Provides
   postdoctoral scientists and engineers the
   opportunity to conduct research at FHWA
   that addresses transportation challenges.
- Small Business Innovation Research
  Program: Encourages domestic small
  businesses to engage in research and
  development addressing high-priority
  research areas within USDOT. The
  goal of the program is to develop and
  commercialize products and services that
  meet the needs of end users, including
  State departments of transportation (DOTs),
  local transportation agencies, and the
  construction industry, while advancing
  USDOT's strategic goals.
- Transportation Pooled Fund Program:
   Allows State DOTs and FHWA to create
   synergy by leveraging resources, avoiding
   duplication of effort, and collaborating on
   planning and researching projects of mutual
   interest.

### RESEARCH TRANSITION

The office leads the evaluation and assessment of FHWA research programs and projects and provides resources and expertise to appropriately transition technology from the laboratory to implementation. It also aims to accelerate the adoption of proven innovative practices and technologies as standard practice through the following:

- R&T Evaluation Program: Assesses project performance, communicates the benefits of R&T projects and programs to stakeholders, and ensures that FHWA is expending public resources efficiently and effectively.
- Technology Transfer Program: Provides support services for moving research from the laboratory to implementation and transfers market-ready technology to the appropriate FHWA program office, Federal agency, local or State government.
- Research services: Oversees the FHWA Research Library, which conducts literature searches and provides digital resources to FHWA employees.

### MARKETING AND COMMUNICATIONS

Through its marketing, communications, and outreach initiatives, the office supports FHWA's R&T program by ensuring the public and stakeholders are informed on current research through the following:

Publishing, marketing, and communications:
 Manages and disseminates all published
 communications and information related to the
 R&T program.

- Publications and exhibits: Produces research-related publications, including Public Roads and R&T Now, which highlight research activities and best practices in highway transportation construction and management. (2,3)
- Website management: Manages the content and development of the TFHRC website in support of all FHWA R&T programs.

### **REFERENCES**

- U.S. Department of Transportation. (2016). Research, Development, and Technology Strategic Plan U.S. Department of Transportation, FY 2017–2021, U.S. Department of Transportation, Washington, DC. Available online: <a href="https://www.transportation.gov/administrations/assistant-secretary-research-and-technology/dot-five-year-rdt-strategic-plan">https://www.transportation.gov/administrations/assistant-secretary-research-and-technology/dot-five-year-rdt-strategic-plan</a>, last accessed October 23, 2020.
- Federal Highway Administration. (2020). Public Roads. Federal Highway Administration, Washington, DC. Available online: <a href="http://www.fhwa.dot.gov/publications/publicroads">http://www.fhwa.dot.gov/publications/publicroads</a>, last accessed October 23, 2020.
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