

# TRB TRANSPORTATION RESEARCH BOARD

# TRB Snap Search: Resilience

#### TRB's involvement in research on Resilience from 2021-2024

The <u>Transportation Research Board (TRB)</u> provides innovative, research-based solutions to improve how we move. TRB is part of the National Academies of Sciences, Engineering, and Medicine, an independent, non-profit institution that provides objective advice on scientific, engineering, and medical issues.

A resource to the nation and to the transportation community worldwide, TRB provides an extensive portfolio of services:

- Opportunities for information exchange on current transportation research and practice
- Management of cooperative research and other research programs
- Analyses of national transportation policy issues and guidance on federal and other research programs
- Publications and access to research information from around the world

All available Snap Searches can be accessed online here: <a href="http://www.trb.org/InformationServices/Snap.aspx">http://www.trb.org/InformationServices/Snap.aspx</a>

#### **TRB Research**

TRID - The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation

o Click here to view search results on TRB published research Resilience within the past year.

### **Specialty Report**

- o Critical Issues in Transportation for 2024 and Beyond
- o Critical Issues in Transportation 2019
- o COVID-19 Addendum to Critical Issues in Transportation
- o Racial Equity Addendum to Critical Issues in Transportation

#### **Recent Reports & Publications**

- <u>Consensus Study Reports</u>
  - o Investing in Transportation Resilience: A Framework for Informed Choices
- National Cooperative Highway Research Program (NCHRP)
  - o Report 1088 State DOT Models for Organizing and Operating Emergency Response: A Guide
  - o Report 1052 Integrating Resilience Concepts and Strategies into Transportation Planning: A Guide
  - o Report 1014 Developing a Highway Framework to Conduct an All-Hazards Risk and Resilience Analysis
  - o Report 986 Implementation of the AASHTO Guide for Enterprise Risk Management
  - Report 985 Integrating Effective Transportation Performance, Risk, and Asset Management Practices
  - o Synthesis Report 610 Leveraging Social Media Data for Emergency Preparedness and Response
  - o Synthesis Report 602 Resilient Design with Distributed Rainfall-Runoff Modeling
  - o Web-Only Document 378 Emergency Response: Organizational and Operational Models Used by State DOTs
- Transportation Research Circulars
  - o <u>Circular 288</u> Innovations in Freight Data: 2023 Workshop
  - Circular 285 Workshop on Building More Resilient Supply Chains
  - o <u>Circular 277</u> 13th National Conference on Transportation Asset Management
  - o <u>Circular 275</u> Measuring and Managing Freight System Resilience Workshop
- Transit Cooperative Research Program (TCRP)
  - o Web-Only Document 75 Command-Level Decision Making for Transportation Emergency Managers

### **Recently Completed Projects/Pending Publication**

- o ACRP 11-02/Task 44 Developing an Airport Communicable Disease Response Plan Template
- o ACRP 02-93 Guidebook for PFAS Management at Airports

- o ACRP 02-92 Creating Self-Directed Resiliency Plans at GA Airports
- o NCHRP Report 1066 Risk Assessment Techniques for Transportation Asset Management: Conduct of Research
- o NCHRP 23-15 Guidance on Risks Related to Emerging and Disruptive Transportation Technologies
- o NCHRP 20-127 Business Case and Communications Strategies for State DOT Resilience Efforts
- TCRP J-11/Task 42 Transportation for People with Disabilities and Older Adults during COVID-19: Lessons for Emergency Response

### **Current & Upcoming Projects**

#### • Current Projects

- o ACRP 02-97 Update to the Guidelines, Tools, and Resources Related to ACRP Reports 11, 147, and 160
- o ACRP 02-98 Airport Energy Resiliency Primer and Roadmap
- o ACRP 03-60 Incorporating Shock Events into Aviation Demand Forecasting and Airport Planning
- o ACRP 04-25 Airports and Communicable Diseases—Preparedness and Response
- o ACRP 03-68 Integration of Contingency Planning for Small Airports
- ACRP Synthesis 11-03/Topic S10-20 Identifying Military Resources and Strategies to Improve Civilian Airport Resiliency
- o NCHRP 01-62 Impact of Flooding on the Resiliency of Pavement Systems
- o NCHRP 08-146 Integrating Resiliency into Transportation System Operations
- o NCHRP 08-51 Risk Management at State DOTs: Building Momentum and Sustaining the Practice
- NCHRP 15-80 Design Guide and Standards for Infrastructure Resilience
- NCHRP 20-05/Topic 54-21 Practices in the Transportation Planning Process to Address Climate Resilience and GHG Emission Quantification and Reduction
- o NCHRP 23-13(04) Scoping Supply Chain Challenges and Solutions amid COVID-19
- NCHRP 23-24 Methods to Allow Agencies to Incorporate Quantitative Risk Assessment at Project and Network Level
- o NCHRP 23-26 Measuring Impacts and Performance of State DOT Resilience Efforts
- o NCHRP 23-32 Transportation Asset Risk and Resilience
- NCHRP 25-64 Considering Greenhouse Gas Emissions and Climate Change in Environmental Reviews: Resources for State DOTs
- NCHRP Synthesis 20-05/Topic 55-17 Practices to Enhance Resiliency of Existing Roadway and Embankment Culverts
- <u>TCRP Synthesis J-07/Topic SA-61</u> State of Practice for Transit Recovery in the Aftermath of Severe Weather Events

#### • <u>Upcoming Projects</u>

- o ACRP 03-77 Incorporating Climate Change into Aviation Forecasts
- o ACCRP 04-30 Airport Emergency Management Capabilities Development
- o <u>ACRP 07-27</u> Seismic Resiliency for Horizontal Infrastructure at Airports
- ACRP 11-08(24-02) ACRP Insight Event Improving Extreme Weather Resiliency of Airport Infrastructure
- o ACRP 11-08(24-03) ACRP Insight Event Airport Energy Resiliency
- NCHRP 08-181 Impacts of Climate Change and Extreme Weather on the Mobility of Socially Vulnerable Populations
- NCHRP 15-61A Hydrologic and Hydraulic Design Guide to Incorporate Climate Science in Transportation Infrastructure
- o NCHRP 19-26 Modernizing Fuel Tax Revenue Forecasting
- NCHRP 20-24(148) Transportation Climate Adaptation through Asset Management Prioritization of Resilient Routes
- o NCHRP 20-44(41) Deploying Transportation Resilience Practices in State DOTs: Implementation
- NCHRP 20-44(44) Implementing the Design Practices Guide for Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure
- o NCHRP 23-13(03) Guide on Truck Rest and Service Areas for Critical Supply Chain Delivery
- o NCHRP 23-28 Incorporating Risk Management into Roadway Infrastructure Maintenance Practices
- o NCHRP 23-33 Managed Retreat to Address Extreme Weather, Natural Hazards, and Climate Impacts
- o NCHRP 23-35 A Guide for Program-Level Risk Management Performance Metrics
- o NCHRP 24-52 Guidelines for Resilient Erosion- and Sediment-Control Practices
- o NCHRP 25-70 Evaluating Carbon Reduction in Project Selection and Planning
- o TCRP A-50 Practical Considerations for Developing Transition Plans to Zero-Emission Fleets
- o TCRP H-61 A Guide for Resilient Zero-Emission Transit Bus Fleets

#### Reports from the National Academies Press on Resilience

- Searchable Collections -- Flood Resilience: Preparedness and Recovery Collection
- Supply Chain Disruptions: Impacts on Vulnerable Communities: Proceedings of a Workshop—in Brief
- o National Plan for Health Workforce Well-Being
- o Climate Security in Central America
- o Community-Driven Relocation: Recommendations for the U.S. Gulf Coast Region and Beyond
- Building Resilience in the Face of Emerging Threats to Child and Youth Well-Being: Proceedings of a Workshop in Brief
- o Borders, Cyber Resilience, and the Implications of Data Localization: Proceedings of a Workshop-in Brief
- o <u>Integrating Public and Ecosystem Health Systems to Foster Resilience: A Workshop to Identify Research to Bridge</u> the Knowledge-to-Action Gap: Proceedings of a Workshop
- o <u>Integrating the Human Sciences to Scale Societal Responses to Environmental Change: Proceedings of a Workshop</u>
- Strengthening Equitable Community Resilience: Criteria and Guiding Principles for the Gulf Research Program's Enhancing Community Resilience (EnCoRe) Initiative
- o Advancing Health and Resilience in the Gulf of Mexico Region: A Roadmap for Progress
- o Building Resilience into the Nation's Medical Product Supply Chains
- o Resilience for Compounding and Cascading Events
- o Enhancing Community Resilience through Social Capital and Connectedness
- o Motivating Local Climate Adaptation and Strengthening Resilience: Making Local Data Trusted, Useful, and Used

#### **Committees & Panels**

Sign-up to be a committee "Friend"

TRB Standing Committees - Search by transportation mode and committee topic

- o AM000 Transportation Sustainability and Resilience Group
- o AME80 Community Resources and Impacts
- o AMR00 Section Transportation Systems Resilience
- o AMR40 Systems, Enterprise, and Cyber Resilience
- o <u>B0171</u> Transportation Resilience Metrics

Task Forces - Search for task force under committee here

#### **CRP Panels**

- o <u>D1580</u> Design Guide and Standards for Infrastructure Resilience
- D204441 Deploying Transportation Resilience Practices in State DOTs: Implementation
- o <u>D205953A</u> A Guide to Flood Forecasting for Transportation Resilience
- o <u>D2326</u> Measuring Impacts and Performance of State DOT Resilience Efforts
- o <u>D2332</u> Transportation Asset Risk and Resilience
- o DA0292 General Aviation Airports and Resilience: Complete Toolkits for Self-Directed Planning
- o SAS1020 Resilience Partnerships with the Air National Guard and other Military Organizations
- o TF29 Mental Health, Wellness, and Resilience for Transit System Workers

#### **Councils**

o <u>A001C</u> – Young Member Coordinating Council

### **Recent and Upcoming Events**

Upcoming TRB Conferences/Webinars – Use left hand menu to filter events

### TRB's Transportation Symposium on Environment, Energy, and Livable Economies

August 25-28, 2024

Denver, CO

<u>Past Conferences/Webinars</u> - In the Past Events tab under Types, choose what event you are interested in, search titles by keyword

TRB Webinar: Lessons of Agency Resilience During Periods of Disruption

March 20, 2024

### **TRB's Transportation Resilience 2023**

November 13-15, 2023

Washington, DC

### <u>National Cooperative Highway Research Program (NCHRP) Transportation Emergency Management and Security</u> Summit and Exchange

November 15-16, 2023 **Washington, DC** 

TRB Webinar: Solutions for Resilient Supply Chain Management

November 16, 2023

TRB Webinar: Transportation Resilience Addressing Climate Change Challenges

July 26, 2023

TRB Webinar: Community-Based and Equitable Transportation Response in Disaster

July 19, 2023

## TRB's Transportation Research Information Services (TRIS)

TRIS includes the TRB Library and the TRIS Databases (listed below) which are available free on TRB's website.

The TRB Library provides information services to TRB staff, sponsors, TRB Committee members and panels and researchers. Access to the TRB Library is a benefit to TRB sponsors and TRB committee members. In cooperation with your State DOT Library or Information Service, the TRB Library provides:

- Reference and research assistance
- Literature searches
- Articles for TRB Committee work

The TRB Library provides training on effective and efficient use of the following TRIS resources:

- **Transportation Research International Documentation (TRID)** <u>trid.trb.org</u> The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- Transportation Research Thesaurus (TRT) <u>trt.trb.org</u> A tool to improve the indexing and retrieval of transportation information.
- **Research in Progress (RiP) Database** <u>rip.trb.org</u> Current or recently completed transportation research projects
- **Publications Index (PubsIndex) Database** <u>pubsindex.trb.org</u> The papers, articles and reports published by the Transportation Research Board, Strategic Highway Research Programs or the Marine Board

Contact or Questions: TRBLibrary@nas.edu