



DEBORAH MATHERLY, AICP

Principal Planner



CAREER SUMMARY

Ms. Matherly provides a broad technical and management background in major facets of transportation analysis. Since joining WSP in 2001, she has become a national expert focusing on the nexus of emergency planning, transportation planning, and resiliency. She is leading or has led six major TRB projects on that nexus, as described below, is currently supporting FHWA resilience and durability pilots, and has supported emergency planning for local clients.

PROFESSIONAL EXPERIENCE

Emergency Management and Resilience

- **NNCHRP 20-116 An Emergency Management Playbook for State Transportation Agencies:** Principal investigator responsible for updating the Emergency Response Guide and providing training materials and train the trainer outreach opportunities to the 50 states plus DC and Puerto Rico.
- **NCHRP 20-59(51)B, “A Guide to Emergency Response Planning at State Transportation Agencies, Second Edition”:** Ms. Matherly provided subject matter expertise supporting CASE in the development of this updated guide.
- **Rockaway Crossings Alternatives Analyses, Triborough Bridge Authority, New York:** Ms. Matherly provided technical support for evaluation and operations expertise with regards to evacuation analyses for the bridge refurbishment or replacement alternatives.
- **NCHRP Project 20-59 (42), Report 777, “Guide to Regional Transportation Planning for Disasters, Emergencies and Significant Events” Washington, DC:** Principal investigator to establish this guide for transportation and emergency managers. The guide describes the basic principles required to achieve multijurisdictional resilience through partnerships with public and private sectors. Case studies and tools support a more comprehensive understanding of threats, interdependencies, and opportunities for jurisdictions and agencies to work together. Published 2014.
- **NCHRP Report 769, “Guide for Public Transportation Pandemic Planning and Response.”, Washington, DC:** Ms. Matherly directed the WSP support for this Guide, as a subcontractor to Abt Associates. Public transportation agencies, particularly in rural and small urban areas, rarely have the resources to research and develop their own guide or response plan for pandemic response. This guide provides a concise summary of the research along with templates, checklists and other tools. It helps agencies know who to work with in their community and provides guidance for creating a plan. Published 2014.
- **NCHRP Project 20-59 (32), Report 740, “A Transportation Guide for All-Hazards Evacuation,” Washington, DC:** Ms. Matherly was the principal investigator to establish a multi-modal operational guide for transportation and emergency managers. The guide includes operational templates, checklists, and guidance, especially for multi-modal, multi-jurisdictional planning and coordination. Published 2012.
- **TCRP Project A-33, Report 150, “Communication with Vulnerable Populations: A Transportation and Emergency management Toolkit,” Washington, DC:** Ms. Matherly served as principal investigator. This study developed a practical guide for including vulnerable populations with access and functional needs in the planning, response and recovery stages of an emergency. It provides a clear step-by-step guide with supporting tools (e.g., a letter template for securing executive support, templates for meeting agendas, talking points, etc.) for effectively developing and sustaining outreach efforts in collaboration with partner agencies and organizations, such as public health and

Years with the firm 18

Years of experience 40

Education

MBA, Finance, Hood College, 2001

Public Administration, Northern Kentucky University, 1979

Professional registrations

American Institute of Certified Planners

Envision ENV/SP

Professional affiliations

Chair, TRB APO45 Committee, Passenger Intermodal Facilities

Member, TRB ABR30 Emergency Evacuation Committee

Member, APTA Working Group-Climate Change Guide Update

Founding Member, WTS- SC chapter

Areas of practice

Transportation / Transit System Resilience and Sustainability

Transportation Emergency Management and Planning

Outreach/ Engagement with Vulnerable Populations

High Speed Rail / Transit Planning and Operations

community-based organizations. The basic premise is to expand on existing connections to maximize scarce resources and reach people through trusted messengers. Published 2011.

Transportation System and Community Resilience

- **NCHRP Project H-55, Transportation System Resilience, CEO Primer and Engagement:** Principal investigator leading this effort to engage DOT CEOs across the country to identify effective paths and approaches to DOT resilience. The Primer succinctly demonstrates why and how to integrate resilience into the organization- asset management, operations, design and engineering, cybersecurity, and more, with cogent, hard hitting quotes from other DOT CEOs to bring the lessons home. The draft Primer was featured at the 2018 Resilience Innovations Summit and Exchange. Carlos Braceras, AASHTO President, held up the CEO Primer during his testimony to Congress at the Senate Committee on Environment and Public Works hearing, “Investing in America’s Surface Transportation Infrastructure: The Need for a Multi-Year Reauthorization Bill”, on July 10, 2019. “I just picked up yesterday...it is for all DOT directors, talking about resilience, a DOT imperative. What we can do to help make our systems better prepared for this changing environment.” The study team is now working to implement the Primer, engaging a largely new generation of CEOs.
- **Federal Highway Administration, Advancing Transportation Agency Capabilities on Incorporating Resilience and Durability in Programs and Practices, Washington, DC (subcontract to Cadmus):** WSP program manager, technical support. This task order is developing case studies of eleven selected pilots and nine additional agencies (to be determined.) It is also developing webinars and providing technical support to the pilot agencies.
- **SamTrans, Sustainability and Resilience Program Support, California:** Subject matter expert who supported the evaluation of adaptation measures for SamTrans. This included development and evaluation of potential adaptations to help passengers who would be most adversely affected by increasing high heat days. The potential adaptation measures supported a workshop with SamTrans staff to narrow and fine-tune the initiatives, in advance of broader stakeholder engagement on the topic.
- **TCRP Web-Only Document 70, Improving the Resilience of Transit Systems Threatened by Natural Disasters:** Principal investigator who led this effort to assist transit agencies nationwide to incorporate resiliency into their corporate culture, in concert with the closely related culture of safety and state of good repair/ asset management. The study identified varied transit agency paths to resilience, including emergency events, asset management, and environmental sustainability programs. The steps, examples and tools in the guide and the associated database, resilienttransit.org, show the value of integrating resilience throughout all disciplines of the organization, “baking it in” to the culture. The guide also explains the need to look outside one’s agency, identify critical interdependencies, and coalitions. Published December 2017, TRB webinar March 2018.
- **The Navy Climate Change Adaptation and Resilience Handbook, Naval Facilities Engineering Command Headquarters, Washington, DC:** The Handbook, developed to aid in the implementation of the Department of Defense Climate Change Adaptation Roadmap and Department of Navy related guidance, provides a framework and process that guides planners and managers as they incorporate the best climate science and best adaptive practices in their workflows. Ms. Matherly provided technical support and quality assurance on the handbook.