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Harnessing Technology for a Safe, Equitable, Resilient System

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TRANSPORTATION RESEARCH BOAR

Julie K. P. Dunbar

Dunbar Transportation Consulting, LLC

PROFILES

Julie K. P. Dunbar attended her first TRB Annual Meeting in 1984. Then a transportation planner with the North Central Texas Council of Governments (NCTCOG), Dunbar was assisting her supervisor, Michael Morris, who is now Director of Transportation for NCTCOG and also served as the 2010 TRB Executive Committee Chair.

"I recall being overwhelmed and energized by the size of the gathering and all of the presentations and meetings that were packed into the week," Dunbar comments. Some aspects of the meeting have changed significantly—for example, the number of women and young professional attendees has increased and the amount of paper hauled back and forth from the meeting has decreased—but she observes that other aspects remain the same: "I imagine that today's first-time attendee is just as overwhelmed and energized as I was back then."

Dunbar received bachelors' degrees in physics and civil engineering from Illinois Wesleyan University and the University of Illinois, respectively. She also has a master's degree in civil engineering from the University of Illinois.

At NCTCOG, Dunbar gained extensive experience with traditional four-step models and used the Dallas-Fort Worth Regional Model to support the successful implementation of passenger rail in the region. She was part of NCTCOG's model development and coordination team in the late 1980s and early 1990s, at a time when NCTCOG and the Texas Department of Transportation worked to form a common modeling platform for projects in the Dallas-Fort Worth region. Dunbar also assisted local governments and other regional transit agencies with corridor and system planning efforts throughout north central Texas.

After more than 18 years at NCTCOG, she formed Dunbar Transportation Consulting, LLC (DTC). As managing principal and owner of the firm, Dunbar specializes in project management, technical analysis, model development and transit corridor analysis. Current projects include evaluating travel forecasts for concepts and alternatives considered in the Los Angeles

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Metro Sepulveda Transit Corridor Study, forecasting ridership for Los Angeles Metro rail fleet management efforts, evaluating alternatives for Dallas Area Rapid Transit's 2045 Transit System Plan Update, and working with the University of Texas at Austin on the federally funded Multimodal Public Transportation System Connectivity Performance Measures Project to help transit agencies better assess the impacts of service changes on transit constituents.

In 1997, Dunbar joined the TRB Standing Committee on Transportation Planning Applications. She has chaired the committee since 2015 and also is cochair of the subcommittee that plans the Transportation Planning Applications Conference, also known as TRBAppcon.

"The idea behind TRBAppcon is to provide a practice-focused conference setting that also allows researchers and practitioners to connect and share their work with peers," Dunbar notes. "Research ideas often are born out of challenges uncovered in practice."

Dunbar brings a practitioner's perspective to TRB activities. "From the very beginning of my career, I have been about transportation planning; working with local governments, transit providers and departments of transportation to develop comprehensive transportation plans, airport system plans, long range regional transportation plans, long-range transit system plans, corridor development plans and alternatives analyses," she observes. "All of this planning work had travel forecasting as a foundational component, and in this travel forecasting niche TRB research has allowed new techniques and processes to come into play in my work."

Dunbar also has served on the planning committee for the biannual Innovations in Travel Modeling Conference (ITM), first held in 2006, which addresses innovations born of research but fo-

cused on practice. ITM tackles new issues in transportation planning with innovative modeling techniques and serves as a venue for networking and sharing among practitioners, researchers, and innovators.

Dunbar is a longtime supporter of the Special Committee for Travel Forecasting Resources in the development of the online Wiki-based Travel Forecasting Resource, or TFResource. "The need for TFResource came from TRB Special Report 288, Metropolitan Travel Forecasting: Current Practice and Future Direction, which identified a knowledge gap between research and practice along with a gap in expertise among practitioners," she comments. "The intent of this effort is to gather travel forecasting-related resources into one place to assist practitioners in identifying the tools they need, to allow researchers to share new tools, and to provide another forum for researchers and practitioners to connect."

Dunbar muses that a common thread among her TRB experiences is connections: "Connecting new young professionals via the Annual Meeting experience to a broader group of colleagues encouraging them to think outside the boundaries of their agency's way of doing things; connecting practitioners via the Transportation Planning Applications Conference enabling them to share work outcomes, challenges and new ideas; connecting modelers via the ITM to discuss and debate innovative ideas and research results; and connecting travel forecasters via TFResource, providing a place to learn and share techniques and tools."