

Journeying Through Public Lands

Why Transportation Planning

Is Essential

PLUS

A Trail for Everyone Forecasting Recreational Travel Demand



NATIONAL Sciences Engineering Medicine

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The Transportation Research Board is one of seven major programs of the National Academies of Sciences, Engineering, and Medicine. The mission of the Transportation Research Board is to provide leadership in transportation improvements and innovation through trusted, timely, impartial, and evidence-based information exchange, research, and advice regarding all modes of transportation. The Board's varied activities annually engage about 8,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The of transportation, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

Learn more about the Transportation Research Board at www.TRB.org.



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Number 345 / May-June 2023

Journeying Through Public Lands: Why Transportation Planning Is **Essential**

Natalie Villwock-Witte

National parks and public lands are places of the people, and how we get to them and navigate around them takes special transportation planning. The author introduces the articles in this theme issue by highlighting the efforts that maintain such locales and keep them accessible to all of us.

Federal Lands Transportation Planning 101

Benjamin Rasmussen and Nicholas Grisham

Federal lands make up 25 percent of the United States and require complex interactions among public, private, and nonprofit organizations to guide transportation planning. The authors provide a primer on how to navigate this process, who does what, and other essential tips for planning practitioners.

Enhancing the Visitor Experience: The National Park Service's Data Collection Innovations

Erica Cole and Rachel Collins

The National Park Service is integrating emerging technologies—including mobile device data analysis—to better understand key transportation and visitor travel patterns, congestion, and other transportation analytics. The authors explain how data show the way visitors reach and move through parks and determine what travel information quests need and when, thereby better connecting them to their outdoor destinations.

13 Integrated Planning: Closing the Tribal Engagement Gap

Elijah Henley

Planning transportation projects on tribal lands can be fraught with challenges, not the least of which is finding effective ways to bring tribal representatives to the table. The author makes the case for integrated planning, in which multiple jurisdictions, funding sources, parties, and purposes merge for the good of all.

16 A Trail for Everyone: Active Transport in State Parks

Katherine Pritchett, Linda Lanterman, David Kelly, and **Shea Lewis**

Kansas, Arkansas, and Missouri state parks are dedicated to active transportation and are partnering with neighboring communities to plan trail linkages. Their goal is that one day everyone might reside within 15 minutes of a trail.











19 Wild Open Spaces: Cultivating the **Next Generation of Public Lands** Stewards

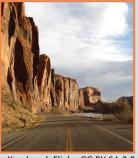
Jaime Sullivan, Pat McMahon, Charlie Gould, Tommy Egland, Ella Weber, and Taylor Long

The Public Lands Transportation Fellows Program provides recent college graduates with hands-on professional development, opportunities to explore America's natural splendors, and a route to federal service. In return, national parks and wildlife refuges get help developing and implementing cost-effective transportation innovations. Five current fellows share their experiences.

23 Transportation Connections 2040: **Preserving Transportation Within** America's Great Outdoors

Reuben Vidaurrazaga, Rosemarie Spano, David Jeppesen, and Katie Lamoureux

The Bureau of Land Management conserves and maintains public lands for activities as varied as wilderness camping and solar-energy generation. Its first transportation planning tool and performance framework aims to support collaboration with partners and ensure future access to America's great outdoors for generations to come.



Ken Lund, Flickr, CC BY-SA 2.0

COVER Soaring sandstone walls line a stretch of Utah SR-279 near Moab, a breathtaking route for explorers in search of Native American petroglyphs, dinosaur tracks, and rock climbing. The road gives way to jeep trails winding toward nearby Canyonlands National Park. Whether for major state roads or a smaller network of trails, all transportation elements and infrastructure through these special places must be planned with safety, innovation, and preservation in mind.

27 NCHRP PROJECT 08-132

Peaks and Valleys: Forecasting Recreational Travel Demand

Mark Bradley, Greg Spitz, Aaron Lee, Ben Swanson, and Theodore Mansfield

National and state parks welcome millions of visitors annually, but seasonal surges can jam roads and overcrowd facilities. A National Highway Cooperative Research Program project is harnessing smartphone data to develop recreational traveldemand models aimed at helping public lands transportation planners better forecast and manage congestion.

RESEARCH PAYS OFF

Indirect Tension Asphalt Cracking Test: Ensuring Asphalt Mix Designs for Durable Pavements

Fujie Zhou and Kelly West

Road repairs can be costly, particularly when pavement breaks up before anticipated. Researchers at Texas A&M Transportation Institute have developed a cracking test that will help state departments of transportation gauge asphalt resiliency, saving time—and money.

ALSO IN THIS ISSUE

35 Transportation Influencer

Arif Sadri, The University of Oklahoma

TRB COVID-19 Resources

Agencies and organizations can use TRB publications and online resources for useful and timely information to help address issues related to the COVID-19 pandemic. To read about TRB's current research and activities, and for a list of relevant publications, visit www.nationalacademies.org/trb/blog/transportation-in-the-face-of-communicable-disease.

Coming Next Issue

The July–August 2023 issue of *TR News* explores the theme of transportation-related advancements in accessibility and mobility. From individuals with disabilities that affect the senses and physical movement to the concerns of older adults and those with invisible disabilities that present cognitive issues, the authors look at innovations and their applications in myriad settings that make transportation for this population easier or, at times, possible for everyday living.

A warm, sunny day beckons a man to the paths in New York City's Central Park. As the 843-acre greenspace undergoes restoration, accessibility is at the forefront of plans when installing such features as sloped pathway: restrooms, and adaptive swings on playgrounds. Such efforts empower people with disabilities as they navigate their larger environment.



36 Profiles

Roxanne Bash, FHWA, and Robert L. Bertini, Oregon State University

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The *TR News* Editorial Board thanks Christine Gerencher, TRB, for her work assembling and developing this issue.

TR NEWS

features articles on innovative and timely research and development activities in all modes of transportation. Brief news items of interest to the transportation community are also included, along with profiles of transportation professionals, meeting announcements, summaries of new publications, and news of Transportation Research Board activities.

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