The 2nd TRB Conference on Transportation Needs of National Parks and Public Lands: Partnerships for Enhancing Stewardship and Mobility

September 11-13, 2017
Keck Center
500 5th Street, NW, Washington, DC

Organized by
Transportation Research Board

Sponsored by
TRB Standing Committee on Transportation Needs of National Parks and Public Lands (ADA40)
Thank You Patrons

TRB sincerely appreciates the following organizations for their generous support of the 2nd Transportation Needs of National Parks and Public Lands

PLATINUM

ATKINS

GOLD

Kimley-Horn  vhb

BRONZE

Booz Allen Hamilton  Fehr Peers
# AGENDA AT A GLANCE

## Sunday, September 10

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
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<tbody>
<tr>
<td>1:00 p.m. – 5:00 p.m.</td>
<td>Optional Afternoon Tour – Glen Echo Park, Clara Barton Parkway, and Great Falls</td>
<td>Offsite</td>
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## Monday, September 11

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<tr>
<td>8:00 a.m. – 5:00 p.m.</td>
<td>Registration</td>
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<td>8:00 a.m. – 9:00 a.m.</td>
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<tr>
<td>9:00 a.m. – Noon</td>
<td>Committee Meeting</td>
<td>Room 105</td>
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<tr>
<td>Noon – 1:30 p.m.</td>
<td>Lunch on Own</td>
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<tr>
<td>1:30 p.m. – 2:45 p.m.</td>
<td>Concurrent Workshops</td>
<td>Room 105</td>
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<tr>
<td>Room 105</td>
<td>1A - National Park Service Congestion Management Program</td>
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<tr>
<td>Room 106</td>
<td>1B - Wildlife Crossings on the Trans-Canada Highway in Banff National Park</td>
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<tr>
<td>2:45 p.m. – 3:00 p.m.</td>
<td>Break</td>
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<td>3:00 p.m. – 4:15 p.m.</td>
<td>Workshop 2</td>
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<td>• Collaborate with State and Local Agencies on Safety Plans</td>
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<td>5:00 p.m. – 6:30 p.m.</td>
<td>Optional Walking or Biking Tour</td>
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## Tuesday, September 12

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<tr>
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<td>Continental Breakfast</td>
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<tr>
<td>9:00 a.m. – 10:15 a.m.</td>
<td>Opening Session</td>
<td>Room 100</td>
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<td>10:15 a.m. – 10:45 a.m.</td>
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<td>Concurrent Breakout Sessions 2A, 2B</td>
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<tr>
<td>Room 105</td>
<td>2A - Climate Change and Sustainability</td>
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<td>Room 105</td>
<td>2B - Innovative Partnerships</td>
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<td>3:30 p.m. – 5:00 p.m.</td>
<td><strong>Concurrent Breakout Sessions 3A, 3B</strong></td>
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<td>3A - Innovative Approaches to Bicycle Use in National Parks and Federal Lands</td>
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<td>3B - Integrated Transportation Planning and Visitor Use Management</td>
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<tr>
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<td>4A - Managing the System</td>
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<td>4B - Innovative Practices</td>
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<td>4C - Partnerships to Enhance Transportation and Visitor Experience</td>
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<td>10:30 a.m. – 10:45 a.m.</td>
<td><strong>Break</strong></td>
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<td>10:45 a.m. – Noon</td>
<td><strong>Closing Session – What Does the Future Hold?</strong></td>
<td>Room 100</td>
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**TRANSPORTATION RESEARCH BOARD**

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 increase the benefits that transportation contributes to society by providing leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied committees, task forces, and panels annually engage about 7,000 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 program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

[www.TRB.org](http://www.TRB.org)
Katherine Turnbull, Texas A&M Transportation Institute, Conference Planning Committee Co-chair

Steven Suder, U.S. National Park Service, Conference Planning Committee Co-chair

Stephen Albert, Montana State University


Roxanne Bash, Federal Highway Administration

Cassandra Bhat, ICF International

Lauren Blackburn, Vanasse Hangen Brustlin, Inc.

Thomas Brigham, HDR

Thomas Burchett, Kimley-Horn and Associates, Inc.

Nola Chavez, Denver, Colorado

Rachel Collins, U.S. National Park Service

Christopher Conklin, Montgomery County Department of Transportation

Brenda DeMone, Parks Canada

Aung Gye, Federal Highway Administration

Kris Hoellen, National Aquarium, Iceland

Stephen Hoover, Atkins North America

Edward Huijbens, University of Akureyri

David Jeppesen, U.S. Bureau of Land Management

Brandon Jutz, U.S. Fish and Wildlife Service

Linda Lanterman, Kansas Department of Wildlife, Parks and Tourism

Bill Legg, Washington State Department of Transportation

Linda MacIntyre, U.S. National Park Service

Morgan Malley, Federal Highway Administration

Jeffrey Mast, U.S. Forest Service

Haley Peckett, District Department of Transportation

Daniel Piatkowski, University of Nebraska

Eric Plosky, Office of the Assistant Secretary for Research and Technology

Nathan Reigner, RSG, Inc.

Jeremy Schroeder, Athey Creek Consultants

Emelyn Sheffield, California State University, Chico

Jonathan Upchurch, Transportation Engineering Consultant

Natalie Villwock-Witte, Western Transportation Institute

Jeremy Wimpey, Applied Trails Research

Carol Zimmerman, Zimmerman Consulting

TRB Staff

Jennifer L. Weeks

Kate Debelack

Mary Kissi
Sunday, September 10

1:00 p.m. - 5:00 p.m., Offsite
Optional Afternoon Tour – Glen Echo Park, Clara Barton Parkway, and Great Falls

Monday, September 11

8:00 a.m. - 5:00 p.m., 1st Floor Lobby
Registration

8:00 a.m. - 9:00 a.m., 1st Floor Lobby
Coffee and Tea

9:00 a.m. - Noon, Room 105
Committee on Transportation Needs of National Parks and Public Lands Mid-Year Meeting (Open to all registrants)

Noon - 1:30 p.m.
Lunch on Own

1:30 p.m. - 2:45 p.m.
Concurrent Workshops

Workshop 1A - Room 105
National Park Service Congestion Management Program
Linda MacIntyre, National Park Service

Workshop 1B - Room 106
Wildlife Crossings on the Trans-Canada Highway in Banff National Park
Tony Clevenger, Western Transportation Institute, Montana State University; Terry McGuire, former Director Highway Service Centre Parks Canada Agency

2:45 p.m. - 3:00 p.m., 1st Floor Lobby
Break

3:00 p.m. - 4:15 p.m., Room 105
Workshop 2
Road Safety Audits and State Highway Safety Plans Roundtable
Moderator: Haley Peckett, District of Columbia Department of Transportation

Collaborate with State and Local Agencies on Safety Plans
Natallie Villwock-Witte, Western Transportation Institute, FHWA National Center for Rural Road Safety

Growing Partnerships through a Road Safety Audit Program for the U.S. Forest Service
Thomas Fowler, Kimley-Horn

5:00 p.m. - 6:30 p.m.,
Optional Walking or Biking Tour – Destination: Anacostia Park (NPS) and the Anacostia Riverfront Trail
Tuesday, September 12

8:00 a.m. - 5:00 p.m., 1st Floor Lobby
Registration

8:00 a.m. - 9:00 a.m., 1st Floor Lobby
Continental Breakfast

9:00 a.m. - 10:15 a.m., Room 100
Opening Session
Moderator: Steve Suder, National Park Service and Chair of the TRB Transportation Needs of National Park and Public Lands Committee

Welcome from the Conference Planning Committee
Katie Turnbull, Texas A&M Transportation Institute

Welcome from TRB
Neil Pedersen, Executive Director

Working at the National Level to Enhance Partnerships
Aron Reif, Department of the Interior- Office of Acquisition and Property Management

Local Project Delivery and Partnerships in the District of Columbia
James Sebastian, District Department of Transportation

10:15 a.m. - 10:45 a.m., 1st Floor Lobby
Break

10:45 a.m. - Noon
Concurrent Breakout Sessions

Breakout Session 1A, Room 100
Transit, Inter City Bus, Private Shuttles, and Transportation Network Companies Serving National and State Parks and National Scenic Trails
Moderator: Nathan Caldwell, U.S. Fish and Wildlife Service

Serving National Scenic Trails
Nathan Caldwell, U.S. Fish and Wildlife Service

Intercity Bus Service
Stephen Abernathy, Greyhound Lines/First America

The Columbia Gorge Express - The Easy Way to Multnomah Falls
Susan Law, FHWA-Western Federal Lands

Transportation Network Companies and National Parks
Corey Ershow, Lyft

Breakout Session 1B, Room 105
Data for Enhancing Visitor Experiences
Moderator: Steve Hoover, Atkins

Collaborative Visitor Transportation Survey (CVTS): Incorporating Feedback into Transportation Planning and Performance Management
Margaret Petrella, U.S. Department of Transportation, Volpe National Transportation Systems Center
Utilization of Non-Motorized Crowd-Sourced Data Technology in the Recreational Setting
Morgan Malley, FHWA-Western Federal Lands

Generational Access Interest to United States Fish and Wildlife (USFWS) Refuges in the West
Natalie Villwock-Witte, Western Transportation Institute, Montana State University

Breakout Session 1C, Room 106
Managing Demand
Moderator: Rachel Collins, National Park Service

Getting There: The U.S. Fish and Wildlife Service Urban Transportation Connections Study Examines Equitable Access
Elizabeth Tucker, Kimley-Horn

Parking Meters – National Mall and Memorial Parks
Eliza Voigt, National Park Service

Pensacola Bay Ferry: Resilient Transportation and Tourism at Gulf Islands National Seashore
Tracy Little, VHB

Noon - 1:00 p.m., 1st Floor Lobby
Lunch

1:15 p.m. - 3:00 p.m.
Concurrent Breakout Sessions

Breakout Session 2A, Room 100
Climate Change and Sustainability
Moderator: Carol Zimmerman, Consultant

Regional Vulnerability Assessments of Constructed Real Property Assets at Service-Managed Lands for the Potential Impacts of Climate Change
Cassandra Bhat, ICF International

Effects of Climate Change on Infrastructure
Natalie Little, USDA Forest Service, Intermountain Region

U.S. Forest Service Climate Change and Transportation Resiliency Guidebook: Addressing and Assessing Climate Change Impacts on U.S. Forest Service Transportation Assets
Benjamin Rasmussen, U.S. Department of Transportation, Volpe National Transportation Systems Center; Pablo Cruz, USDA Forest Service, Southeast Region

"Green Roads" Projects in Latin America – Case Studies
Gordon Keller, Genesee Geotechnical

Breakout Session 2B, Room 105
Innovative Partnerships
Moderator: Lauren Blackburn, VHB

Radical Partnerships for a Fiscally Constrained World
David Daddio, U.S. Department of Transportation, Volpe National Transportation Systems Center

Capital Trails Coalition – A Regional Vision for Trails
Katie Harris, Washington Area Bicyclist Association

Little Cottonwood Canyon – Solutions One Step at a Time
Jon Nepstad, Fehr and Peers
Engaging New Audiences through University Partnerships: Three CAR-LESS California Pilot Projects for Mobility and Stewardship
Emilyn Sheffield, California State University at Chico

Working with a Private Partner: L.L. Bean Outdoor Discovery Schools and the John Heinz National Wildlife Refuge at Tinicum Marsh
Steve Johnson, L.L. Bean

3:00 p.m. - 3:30 p.m., 1st Floor Lobby
Break

3:30 p.m. - 5:00 p.m.
Concurrent Breakout Sessions

Breakout Session 3A, Room 100
Innovative Approaches to Bicycle Use in National Parks and Federal Lands
Moderator: Tom Brigham, HDR

Guidance to Improve Safety on Rural Roads with Mixed Motor Vehicle and Bicycle Traffic
Rebecca Gleason and Taylor Lonsdale, Western Transportation Institute, Montana State University

Bicycle Mobility in Glacier National Park: Assessing Going-to-the-Sun Road Travelers’ Attitudes, Knowledge, and Perceptions of Bicycling
Brian Battaglia, Alta Planning + Design

Bicycling Glacier National Park’s Going-to-the-Sun Road: Acceptability of Strategies to Address Capacity Limitations and Increase Safety
Jeremy Sage, University of Montana

USFWS National Bicycle and Pedestrian Counting Program
Kevin Smith, Kimley Horn

Breakout Session 3B, Room 105
Integrated Transportation Planning and Visitor Use Management
Moderator: Katie Turnbull, Texas A&M Transportation Institute

Visitor Use Management, Visitor Experience, and Transportation Initiatives in the National Park Service
Rachel Collins, National Park Service

Visitor Use Management as a Framework to Address Transportation and Resource Management Challenges Arapaho-National Forest
Susan Ivizarry, Resource Systems Group

Simulation Modeling to Estimate Integrated Transportation and Visitor Experience Capacities, Cadillac Mountain, Acadia National Park
Steve Lawson, Resource Systems Group

Restoration of the Giant Sequoias in Mariposa Yosemite National Park – Implementing a 50-Year Dream
Dianne Croal, National Park Service, and Steve Hoover, Atkins

5:00 p.m. - 6:30 p.m., 3rd Floor Atrium
Reception / Poster Session

Connecting Communities through Transportation and Recreation Networks
Dan Goodman, Federal Highway Administration

George Parks Highway – Milepost 231 Wayside
Kevin Doniere, National Park Service
Effective Planning, Monitoring, and Managing of Parking Systems for Parks and Public Lands
Bill Cranshaw, VHB

Denali National Park and Preserve: A Risk Assessment for the Denali Park Road
Paul Schrooten, National Park Service

Interagency Visitor Use Management Council
Rachel Collins, National Park Service

Case Study: Proterra Battery Electric Bus Performance at Zion and Bryce Canyon National Parks
Alan Westenskow, Proterra

Effects of Climate Change on Infrastructure
Natalie Little, USDA Forest Service

WABA Trail Rangers Program
Ursula Sandstrom, Washington Area Bicyclist Association

Wednesday, September 13

8:00 a.m. - 10:00 a.m., 1st Floor Lobby
Registration

8:00 a.m. - 9:00 a.m., 1st Floor Lobby
Continental Breakfast

9:00 a.m. - 10:30 a.m.
Concurrent Breakout Sessions

Breakout Session 4A, Room 100
Managing the System
Moderator: Aung Gye, FHWA-Office of Federal Lands

Yellowstone National Park Regional Economic and Transportation Analysis
Jeremy Sage, University of Montana

Your Pass Now – A Great Idea for the Great Outdoors
Cody Murk, NIC

Best Practices for Monitoring Visitation on Federal Lands
William Baron, U.S. Department of Transportation, Volpe National Transportation Systems Center

Planning for Sustainable Access to a High-Use and Sensitive Recreation Site from a Small Gateway Community
Benjamin Rasmussen, U.S. Department of Transportation, Volpe National Transportation Systems Center

Creating a Hierarchical Route Identification System Using GIS for the Bureau of Land Management in Owyhee County, Idaho
Thomas Clifford, Bureau of Land Management
Breakout Session 4B, Room 105

Innovative Practices
Moderator: Linda MacIntyre, NPS Transportation Program; Morgan Malley, FHWA, Central Federal Lands Highway

Everyone’s a speaker at this fun and interactive session. We’ll adapt the concept of "speed dates" and explore how pending changes in transportation might impact public lands transportation investments and operations. It’s a great opportunity for public lands officials to share ideas with consultants and for researchers to share with innovators. By the end of the session, you’ll have met everyone in the room. Bring your ideas, questions and business cards!

Breakout Session 4C, Room 106

Partnerships to Enhance Transportation and Visitor Experience
Moderator: Thomas Fowler, Kimley-Horn

Four Years and Counting: Experience to Date in the Implementation of the Federal Lands Access Program
Lewis Grimm, FHWA-Eastern Federal Lands

Alaska Collaborative Long Range Transportation Plan (AKCLRTP) – A Five-Year Update
Roxanne Bash, FHWA-Western Federal Lands

Utilization of Strategic Planning and Policy Documents to Jump-Start the Long Range Transportation Planning Process
Devin Louie, Atkins North America

NPS "People Powered Parks" Initiative and Active Transportation Guidebook
Krista Sherwood, National Park Service; Amy Plovnick, U.S. Department of Transportation, Volpe National Transportation Systems Center

10:30 a.m. - 10:45 a.m., 1st Floor Lobby
Break

10:45 a.m. - Noon, Room 100
Closing Session – What Does the Future Hold?
Moderator: Steve Albert, Western Transportation Institute

Panel:
- John Madera, Northern Shenandoah Valley Regional Commission
- Laura Loomis, National Parks Conservation Association
- Curt Cottle, ITA - National Travel and Tourism Office
- Erik Hansen, U.S. Travel Association
- Mark Hartsoe, National Park Service