

Transportation Symposium on Environment, Energy and Livable Communities

August 25-28, 2024

Denver, Colorado

Agenda (as of March 20, 2024)

Concurrent Sessions will be eligible for AICP Credits. Room locations provided in printed program available on-site.

NOTE: Concurrent session topics subject to change depending on responses to our [Call for Presentations](#), which closes on April 15th. Everyone interested in presenting is encouraged to submit an abstract(s) via this Call.

Sunday, August 25, 2024

3:00pm

Registration Opens

4:00 PM -5:30 PM

Committee Meetings (*open to all registered attendees*)

TRB Standing Committee on Resource Conservation and Recovery (AMS20)

Chair: David Wilson, Virginia Department of Transportation

The committee is concerned with innovative development and integration of proactive sustainability and resiliency concepts for improved transportation programs including: recycling and beneficial reuse of materials; contamination investigation and remediation technologies; pollution prevention and resource-efficiency; environmental management systems; energy harvesting; and alternative uses of transportation rights of way.

5:30 PM -7:30 PM

Welcome Reception and Poster Session

Join your fellow attendees for a social event that will include a catered reception and discussions with select participants about their latest research in transportation environment, energy, and livable communities.

Monday, August 26, 2024

7:30AM -8:30AM

Breakfast with Exhibitors

8:30AM – 10:00AM

Opening Plenary Session

Welcome provided by Symposium Co-Chairs Jane Lin, University of Illinois-Chicago, and Tim Sexton, Minnesota Department of Transportation

- Keynote Address from H. Christopher Frey, Assistant Administrator, Office of Research and Development, U.S. Environmental Protection Agency
- Icebreaker Event

10:00AM-10:30AM

Break with Exhibitors

10:30AM - Noon

First Set of Concurrent Sessions

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
The Impact of Sustainability and Climate Change on Economic Development and Land Use Climate change and severe environmental conditions are challenging all modes of transportation to meet	Critical Issues in Electric Vehicle Infrastructure This session delves into the pressing concerns of Electric Vehicle (EV) infrastructure, focusing on key areas such as accessibility and availability of	Emerging Contaminants The highway, transit, and aviation sectors are well versed at addressing impacts related to historic contamination. In addition to per- and polyfluoralkyl substances (PFAS), this session will look

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present needs without compromising the needs of the future. This session explores how climate change is presently impacting transportation, economic development, and land use and the likely future impacts.	charging stations. We will scrutinize the reliability of EV charging networks and explore future deployment strategies, including their significance in multi-unit dwellings, rural regions, and other critical locations. Join us for an insightful discussion on shaping the future of EV infrastructure.	at what additional emerging contaminants, such as an organic chemical used in rubber tires (6PPD) and microplastics, are on the horizon that may impact future projects and operations and what are some of the strategies to address the impacts in the most efficient manner.
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Noon - 1:00PM

Lunch

1:00PM - 2:30PM

Second Set of Concurrent Sessions

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p><u>Innovations and Technology Transforming Economic Development and Land Use</u> Technological advancements, including electrification, alternate fuels, artificial intelligence, and intelligent transportation systems, are changing transportation. This session explores how technological innovations are changing transportation and their impact on the economy, environment, and society.</p>	<p><u>Reducing Emissions from Long-Distance Freight Transportation</u> Long-distance freight transportation—by road, rail, air, or waterway—consumes a large amount of energy while significantly contributing to both greenhouse gas and criteria pollutant emissions. This session will explore different ways to overcome the unique challenges in reducing emissions from the different modes of long-distance freight transportation.</p>	<p><u>The Lingering Impacts of Per- and Polyfluoroalkyl Substances (PFAS)</u> Similar to other historic contaminants such as Polychlorinated Biphenyls (PCBs), asbestos and lead, PFAS are emerging contaminants that will define a generation. The surface-transportation and aviation industries are seeing, and will continue to see, PFAS-related impacts in projects and operations. This session will explore the latest legal, liability, policy, investigation, management, and remediation strategies to address PFAS impacts in the transportation sector.</p>

2:30PM – 3:00PM

Break with Exhibitors

3:00PM – 4:30PM

Third Set of Concurrent Sessions

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p><u>Diversity, Equity, and Inclusion Considerations with Economic Development and Land Use</u> Transportation policy and planning decisions have significant equity impacts: they affect the allocation of public resources, quality of life, economic opportunities, and uneven external costs. This session explores equitable transportation as it relates to economic development and land use.</p>	<p><u>Hydrogen Hubs</u> The U.S. Department of Energy is kicking off a new Hydrogen Hub program this year. This session will discuss where the program is going, what particular hubs are being planned, and what potential exists for hydrogen use in various transportation markets. Specifically, impacts on vehicle sales, fuel systems and costs, other sectors such as airports, as well as the overall environmental impacts will be discussed along with recommendations for best practice approaches for the hubs to take.</p>	<p><u>Salt – Deicing Alternatives Research and Impact Evaluation and Remediation</u> Salt continues to garner attention due to environmental impacts related to chloride concentration increases in surface and ground water as well as corrosion-related infrastructure impacts. During this session, we will look at the latest in alternative deicer research as well as the techniques to evaluate and remediate salt impacts.</p>

4:30PM – 5:00PM

Break

5:00PM – 6:30PM

Committee Meetings (open to all registered attendees)

Joint Meeting of the TRB Standing Committees on Economic Development and Land Use (AMS50) and Economics and Finance (AJE50)

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AMS50 Co-Chairs: Michael Lawrence, Jack Faucett Associates, Inc.; and Noreen McDonald, University of North Carolina, Chapel Hill

The Committee focuses on the impacts of transportation on the economy, environment, and society. It is concerned with efficient, effective, and equitable transportation systems that promote competitive advantage, economic resiliency, and sustainability for our cities, regions, and societies. This committee provides a cross-cutting forum for practitioners and researchers to understand the interrelationship between transportation, economic development and the economy, and land use, and the policies and management approaches required to create sustainable growth at national, regional, and local scales.

AJE50 Chair: Nathan Macek, HDR

The Committee is concerned with advancing economic and financial concepts, methods, and tools that can be applied to the analysis of transportation programs, policies, systems, and infrastructure investment. Key focus areas include the measurement of economic benefits and impacts; financial forecasting and planning; assessment of infrastructure funding needs; traditional and alternative revenue sources and financing mechanisms; innovations in project financing and delivery; and fiscal management.

Joint Meeting of the TRB Standing Committees on Transportation Energy (AMS30) and Alternative Fuels and Technologies (AMS40)

AMS30 Chair: Alan Jenn, University of California, Davis

To consider factors that affect energy efficiency and energy use in passenger and freight transportation and the resulting impacts on energy consumption, energy security, greenhouse gas emissions, and related public concerns.

AMS40 Chair: Rachael Nealer, U.S. Department of Energy

To consider institutional, behavioral, environmental, economic, technological and policy implications associated with the introduction and potential extended use of alternative transportation fuels and enabling technologies, and promote policy analysis, evaluation and planning to address those implications.

6:30PM

Adjourn

Tuesday, August 27, 2024

7:30AM-8:30AM

Breakfast with Exhibitors

8:30AM– 10:00AM

Plenary Session

Moderated by Symposium Co-Chairs Jane Lin, University of Illinois-Chicago, and Tim Sexton, Minnesota Department of Transportation

- Keynote Address from John Putnam, Senior Advisor, Colorado Department of Transportation
- Panel Discussion with TRB Standing Committee Leadership
 - Kate Andrus, Mead & Hunt
 - Marianne Hatzopoulou, University of Toronto
 - Alan Jenn, University of California, Davis
 - Michael Lawrence, Jack Faucett Associates, Inc.
 - Nathan Macek, HDR
 - Noreen McDonald, University of North Carolina, Chapel Hill
 - Rachael Nealer, U.S. Department of Energy
 - David Wilson, Virginia Department of Transportation

10:00AM - 10:30AM

Break with Exhibitors

10:30AM - Noon Fourth Set of Concurrent Sessions

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p>Influence of Changing Work and Lifestyle on Economic Development and Land Use Society is changing how we live, work, and play. Remote work and an aging workforce are just some of the factors influencing transportation and its relationship with economic development and land use. This session will explore various aspects of these emerging forces on the transportation system.</p>	<p>Powering the Future: Innovative Integration of Electric Vehicles the Grid In this session, innovative interactions between Electric Vehicles (EVs) and Grid Systems and investigate their social, economic, and environmental impacts will be explored. These cutting-edge technologies and innovations shaping the intersection of clean transportation and smart grid solutions, such as monetization of grid reliability, will be discussed along with how these advancements are paving the way for a sustainable and interconnected transportation future from the aspects in economics, energy, and environment.</p>	<p>Stormwater Management Best Practices This session provides an opportunity to highlight the latest approaches related to climate change impacts and resiliency strategies including but not limited to impacts on contaminant migration, updated design guidance, nature-based solutions, green infrastructure, etc.</p>

Noon - 1:00PM Lunch

1:00PM - 2:30PM Fifth Set of Concurrent Sessions

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p>Exploring Financing and Fiscal Impact Across All Modes Transportation infrastructure and operations require extensive public and private investment in financial resources. This is a worldwide issue. In the U.S., new Legislation has made billions of federal grant dollars available to states and communities to improve transportation infrastructure, invest in clean energy technologies, establish an electric vehicle charging infrastructure network, and other opportunities. This session explores the financing of transportation across all modes.</p>	<p>Evaluating and Advancing the Equity of Electric Vehicle Adoption As electric vehicle adoption grows and aggressive goals and regulations are put in place to drive it toward high levels, the focus of government is shifting to questions of equity. Who will benefit and when during the transition? What role can incentives and other supportive measures play in accelerating equitable access to EVs by disadvantaged and rural consumers? This session will examine efforts to measure the equity of EVs and EV incentives and explore findings that inform equitable program design and implementation.</p>	<p>Due Diligence and Site Characterization The session will explore the latest techniques, strategies, and technologies available to conduct thorough due diligence and site characterization investigation related to the acquisition and divestiture of properties associated with transportation systems.</p>

2:30PM – 3:00PM Break with Exhibitors

3:00PM – 4:30PM Sixth Set of Concurrent Sessions

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p>Rural and Underserved Communities Context for Economic Development and Land Use Transportation can have significant positive and negative impacts on rural and underserved communities. This session will explore the different</p>	<p>Decarbonizing Emerging Mobility Systems We are in an age where mobility systems are in the process of evolution due to the advancements in the connectivity, automation, electrification and sharing concepts. This session will focus on</p>	<p>Environmental Remediation Contaminated properties pose unique challenges to transportation projects and operations. This session will explore some of those cases and the innovative solutions developed to remediate the contaminated properties and highlight</p>

approaches to achieving efficient, effective, and equitable transportation in the context of non-urban and disadvantaged communities.	decarbonizing the emerging ground and air mobility systems for people and goods movement with the focus on all modalities including last/first mile, on-demand, delivery, long/line haul and advanced air mobility systems.	some of the emerging technologies to abate contamination-related situations more efficiently within the transportation sector.
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4:30PM *Adjourn*

Wednesday, August 28, 2024

7:30AM - 8:30AM *Breakfast with Exhibitors*

8:30AM – 10:00AM **Seventh Set of Concurrent Sessions**

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p><u>Interaction of Moving Freight with Economic Development and Land Use</u> The physical process of transporting commodities, merchandise goods, and cargo has a significant impact on economic development and land use and, in turn, influences economic development and land use. This session will explore across the modes how freight movement interacts with economic development and land use efficiency, effectiveness, and equity.</p>	<p><u>Decarbonizing Transportation through Land Use, Housing, Transit and Active Transportation</u> Prioritizing investments in active transportation and transit, and effectively integrating transportation and land use planning, can yield significant environmental and equity benefits. Several states are pursuing these strategies to reduce emissions and vehicle miles traveled and to improve transportation equity. This session will explore challenges and opportunities in implementing investments in transit and active transportation and “land use/housing as a climate strategy” policies.</p>	<p><u>Recycling and Reuse of Resources, Waste and Industrial By-products and Lands</u> Recycling and reuse of waste materials and resources are a few of the strategies transportation systems can use to save resources and achieve waste reduction and sustainability goals. This session will evaluate some of the approaches, materials, and policies transportation agencies have used to successfully reuse and recycle resources and waste products in their projects and operations.</p>

10:00AM – 10:30AM *Break with Exhibitors*

10:30AM - Noon **Eighth Set of Concurrent Sessions and Committee Meetings**

International Transportation and Economic Development & Land Use	Decarbonizing the Transport of People and Goods	Resource Conservation and Recovery
<p><u>Pre- and Post-Project Analysis of Economic Development and Land Use Outcomes</u> Efficient, effective, and equitable transportation policy and planning decisions require an understanding of anticipated impacts on economic development, land use, and finances. This session will provide cases, methodologies, and overviews of best practices for ex-ante and ex-post analyses of transportation projects.</p>	<p>Meeting of the TRB Standing Committee on Air Quality and Greenhouse Gas Mitigation (AMS10) <i>Chair: Marianne Hatzopoulou, University of Toronto</i> The committee is concerned with the full range of relationships among transportation, air quality, and greenhouse gas mitigation including regulatory and policy considerations, modeling practices, health effects, new technologies, and transportation management strategies.</p>	<p><u>Underutilized Property and Rights of Way Alternative and Innovative Use</u> Highway, transit, and aviation sectors have idle or under-utilized property and rights of way that can be re-purposed or up-purposed for public-benefit. This session will highlight some of the latest projects, policy initiatives and options for alternative and innovative uses of rights of way and repurposing and redevelopment of public lands, vacant lands, and brownfields.</p>

Noon – 1:00PM *Lunch*

TECHNICAL PROGRAM CONCLUDES

12:30PM-5:00pm [Optional Tour](#) (*must be registered separately*)