

TRANSPORTATION RESEARCH BOARD

TRB's Climate Change-Related Activities

Presented to:
Research and Technology Coordination Committee
and
Federal Highway Administration

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General TRB Climate Change Resources

- Specialty Webpage on Climate Change: <http://www.trb.org/main/SpecialtyPageClimateChange.aspx>
- Critical Issues in Transportation 2019, Section on Energy and Sustainability: <http://www.trb.org/Main/Blurbs/178402.aspx>
- Snap Searches from TRB Library:
 - Air Quality and Climate Change: <http://onlinepubs.trb.org/onlinepubs/snap/AirQualityAndClimateChange.pdf>
 - Environment and Sustainability: <http://onlinepubs.trb.org/onlinepubs/snap/Environmentandsustainability.pdf>
 - Electric Vehicles: <http://onlinepubs.trb.org/onlinepubs/snap/ElectricVehicles.pdf>

Climate Change-Related Committees

- Environmental Issues in Transportation Law
- Environmental Analysis and Ecology
- Hydrology, Hydraulics, and Stormwater
- Transportation and Public Health
- Critical Transportation Infrastructure Protection
- Disaster Response, Emergency Evacuations, and Business Continuity
- Extreme Weather and Climate Change Adaptation
- Air Quality and Green House Gas Mitigation
- Transportation Energy
- Alternative Fuels and Technologies
- Environmental Issues in Aviation
- Marine Environment
- Asphalt Materials Selection and Mix Design
- Design and Rehabilitation of Concrete Pavements
- Design and Rehabilitation of Asphalt Pavements
- Road Weather

TRB 2021 Annual Meeting Sessions

- 20 sessions on climate change-related topics
- Selected sessions:
 - Emerging Sustainable Technologies for [Cement and Concrete](#)
 - Decarbonization Challenges and Opportunities in [Marine](#) Transportation
 - Environmental Impacts of [Aviation](#) During and After COVID- 19
 - Partnering Greenhouse Gas and [Air Quality Management](#)
 - Community & Transportation Systems [Decision Making](#) for Climate Change
 - Electrification of [Fleet and Rideshare](#) Vehicles
 - [Alternative Fuel Vehicle Applications](#); Refueling and Infrastructure
 - Alternative Fuel [Consumer Perceptions](#) and Modeling

TRB Climate Change Related Activities

- 2 recent webinars
 - Modeling Long-Distance Intercity Travel for Sustainable Global Travel
- 8 recent *Transportation Research Record* papers
 - Integrating Climate Change into Scenario Planning: Can Mitigation Measures Also Make a Region More Resilient?
- 10 ongoing Cooperative Research Program projects and 19 reports
 - Methods for SDOTs to Reduce Greenhouse Emissions from Transportation Sector
 - NCHRP Implementation Support: Pilot Test of Climate Change Design Practices for Hydrology and Hydraulics
 - Transportation Resilience: Research Roadmap and White Papers
- Conference on Sustainability and Emerging Transportation Technology

From Other NASEM Units

- Climate Change: Evidence and Causes: Update 2020
- Advancing Urban Sustainability in China and the United States
- Reducing Fuel Consumption and Greenhouse Gas Emissions of Medium- and Heavy-Duty Vehicles
- Climate Change and Ecosystems
- Negative Emissions Technologies and Reliable Sequestration
- Making Climate Assessments Work - Learning from California and Other Subnational Climate Assessments
- Models to Inform Planning for the Future of Electric Power in the United States