

TR NEWS

Adapting to Climate Change

Building a Network of Solutions

- State, Regional, and Local Initiatives
- Learning from Severe Weather Events
- Solar, Green, and LED-Lit Highways
- The Ready Benefits of Ecodriving
- Scenario Planning for Priorities



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ADAPTING TO CLIMATE CHANGE: BUILDING A NETWORK OF SOLUTIONS

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**Implementing Climate Change Policies:
State and Local Innovations to Mitigate and Adapt to Climate Change**
Robert B. Noland and Cynthia Burbank

State and local transportation agencies are implementing a variety of innovative approaches to mitigate and adapt to climate change. In meeting the challenges, as the articles in this issue show, many are exercising their roles as “laboratories of invention.”

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Cynthia Burbank

5 Climate Change Adaptation in Michigan: Preparations, Strategies, and Examples

Gregory C. Johnson, Niles Annelin, and Kristin Schuster

The Michigan Department of Transportation (DOT) is preparing for altered climate conditions throughout the state, managing its system to increase motorist safety, protect the infrastructure, address changing conditions, and communicate with system users about weather events, taking into account site conditions, costs, and changes over time.

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Benjamin Rasmussen, Lindsey Morse, and David Perlman

A pilot project brought together stakeholders and agencies to consider the effects of climate change and transportation-related adaptation and mitigation, with a focus on land use, for Cape Cod, Massachusetts. The outcomes from the project are informing the region's long-range planning, priorities, and other related efforts.

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Keith Cotton, Kathy Johnston, Kathy Leotta, and Seth Stark

Washington State's Commute Trip Reduction program has built a foundation of partnerships for managing transportation demand, has improved transportation system performance, and has benefited the economy, the environment, and communities by reducing air pollutants, greenhouse gas emissions, and fuel consumption.



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COVER: Maxwell Bridge in Napa, California, after installation of LED streetlights. The California Department of Transportation is converting streetlights on state-maintained roads in one of many measures to conserve energy and reduce emissions. (Photo: Pacific Gas and Electric)

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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Ronald Killian

Ecodriving incorporates techniques and technologies to reduce fuel consumption and costs, greenhouse gas and other air pollutant emissions, vehicle miles traveled, vehicle and road degradation, and accident-related costs—such as property damage, injuries, fatalities, and insurance.

40 Innovative Approaches to Reduce Greenhouse Gas Emissions from Transportation: San Francisco Bay Area Launches Variety of Pilot Projects

Brant Arthur

The Climate Initiatives Program has launched pilot projects to reduce greenhouse gases from transportation, encourage the use of cleaner fuels, and inform strategies for sustainable communities. Partnerships have formed across sectors and jurisdictions to create an electric taxi fleet, a real-time ridesharing program, a bikesharing service, and more.

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A Sea Change: Adaptations in a Warming World

Nancy F. Huddleston, Anne Linn, and Claudia Mengelt

Global sea level, linked to changes in the Earth's climate, is projected to rise 1 meter by the end of the 21st century, threatening infrastructure, development, and wetlands along the coasts, according to a new National Research Council report. An iterative risk management approach offers a framework for supporting climate change adaptation choices.

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the SHRP 2 naturalistic driving study; and an opinion piece on building and training the safety workforce. Additional articles cover strategic highway safety plans, research on fatigue and safety, building a safety culture, the Interactive Highway Design Model, safety analysis and assessment, safety data needs, and more.

PHOTO: VIRGINIA DOT



Response teams clear a truck accident on a Virginia Interstate.