Transportation Resilience in the Northeast & Mid-Atlantic Region

Northeast Association of State Transportation Officials
2016 Annual Conference

Jessica Grannis
June 7, 2016

GEORGETOWN CLIMATE CENTER

• Convenes and serves as resource to states on climate and energy issues
• Brings together academics and policymakers to improve climate policy
• Informs the development of:
  – Legislation
  – Regulation
  – Transportation policy
  – Adaptation policy
Transportation and Climate Initiative

• 11 northeast and mid-Atlantic states and the District of Columbia

• TCI launched in 2010

• Working together to reduce energy use and GHG emissions from transportation
Transportation

These pages include resources to help policymakers understand, plan, and prepare for the impacts of climate change to transportation systems and assets. With the support of the U.S. Department of Transportation Federal Highway Administration, the Georgetown Climate Center developed 17 case studies of new state and local transportation authorities adapting to climate change in the transportation sector.

If you are interested in adaptation in the transportation sector, please sign up for email updates to receive monthly notifications about all of the latest transportation resources.

Sector Activity

Popular Transportation Resources

The resources below are popular among Clearinghouse users interested in the transportation sector. Users may influence their ranking by rating resources. Just click on resource and assign it a 1 star to 5 star rating. The highest ratings (4 and 5) should be granted to resources that you have found useful in your own work.


Average Rating: ★★★★★

Transportation Resilience Case Studies

These resources include case studies of Adaptation in the Transportation Sector, developed by the Georgetown Climate Center as part of a cooperative agreement with the Federal Highway Administration. The case studies include examples of how adaptation has been incorporated into decision-making at all stages of the transportation lifecycle, from vulnerability assessments and planning to design to operations and maintenance.

Resource: Maryland Climate Change and Coast Smart Construction Infrastructure Siting and Design Guidelines

Average Rating: ★★★★★

Receive New Resources by Email

Receive new resources from the Adaptation Clearinghouse via a variety email lists. Sign up for a list today.
Case Studies – Adapting Transportation

Climate Change Adaptation and Resilience Case Studies Series

FHWA will be highlighting climate change adaptation and resilience work in the transportation sector through a series of new case studies—check this page often for new additions.

- Case Study: Flood Low Water System Improvements, Washington, DC
- Surfers Inlet Managed Retreat Project
- Mainstreaming Climate Change Adaptation Strategies into New York State Department of Transportation's Operations
- District of Columbia DOT, Climate Change Adaptation Plan
- State of California Sea Level Rise Guidance Document
- Caltrans Guidance on Incorporating Sea Level Rise
- City of Santa Cruz Climate Adaptation Plan
- City of Lewes, Delaware Hazard Mitigation and Climate Adaptation Action Plan
- A Vulnerability Assessment for the Saco Bay Communities of Biddeford, Saco, Old Orchard Beach, and Scarborough
- Addressing Climate Change Adaptation in Regional Transportation Plans: A Guide for California MPOs and RTPAs

These case studies were developed by the Georgetown Climate Center (GCC) under a cooperative agreement with FHWA and are also available through the GCC Adaptation Clearinghouse.
Assess Vulnerability & Risk

Vulnerability Assessment: WILMAPCO (DE and MD)

Adaptation Planning

Sea-Level Rise
A Transportation Vulnerability Assessment of the Wilmington, Delaware Region

Climate Change Adaptation Plan

LONG RANGE TRANSPORTATION PLAN OF THE BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

CITY OF BALTIMORE
Disaster Preparedness and Planning Project
MassPort Floodproofing Design Guidelines

Old Design

New Design

Resilient Rebuilding Post Disaster: Vermont

Credit: VTrans
Integrate into Operations & Emergency Management

Operational and Emergency Preparedness Strategies:
New York & Atlantic City, NJ

TCI Survey – Adaptation Gaps & Needs

- Insufficient funds for adaptation and challenges justifying added costs
- Using federal funding programs for adaptation
- Understanding interdependencies and impacts at the mega-region level
- Integrating adaptation planning across sectors
- Aligning climate resilience and mitigation policies
- New federal policies – FFRMS, NEPA, Risk-based asset management
MAP-21: Performance-Based Planning

1. MAP 21 sets National Goals
2. FHWA performance criteria
3. State performance targets
4. Risk-Based Asset Management Plans

Legal Challenges: NEPA

IN-KIND REPLACEMENT
- Pre-Approved Activities
- Categorical Exclusion
- 2-3 months

ADAPTIVE REBUILDING
- Eligible Activities: Feasibility
- Betterments: Cost/Benefit Analysis
- Environmental Impact Statement
- 2-3 years
Legal Challenges: NEPA

IN-KIND REPLACEMENT

Pre-Approved Activities

Categorical Exclusion

2-3 months

ADAPTIVE REBUILDING

Programmatic

Environmental Impact Statement

Jessica Grannis
grannis@law.georgetown.edu