



# An Update from Our Laboratories of Democracy Transportation Adaptation in the States



**Vicki Arroyo**

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**GEORGETOWN CLIMATE CENTER**  
The Georgetown State-Federal Climate Resource Center



# Georgetown Climate Center

Inform development of and convene around topics including:

- Legislation
- Regulation
- Transportation/ Land Use
- Adaptation



# A two-tiered approach is needed

## **“Avoiding the unmanageable and managing the unavoidable”\***

Avoiding the unmanageable → mitigation

- Emissions reduction policies at state, regional, federal, and international levels

Managing the unavoidable → adaptation

- Preparedness, resilience, ecosystem management, protecting vulnerable populations

\*Title of the UN Foundation Scientific Expert Group Report on Climate Change and Sustainable Development

# Georgetown Climate Center's Focus

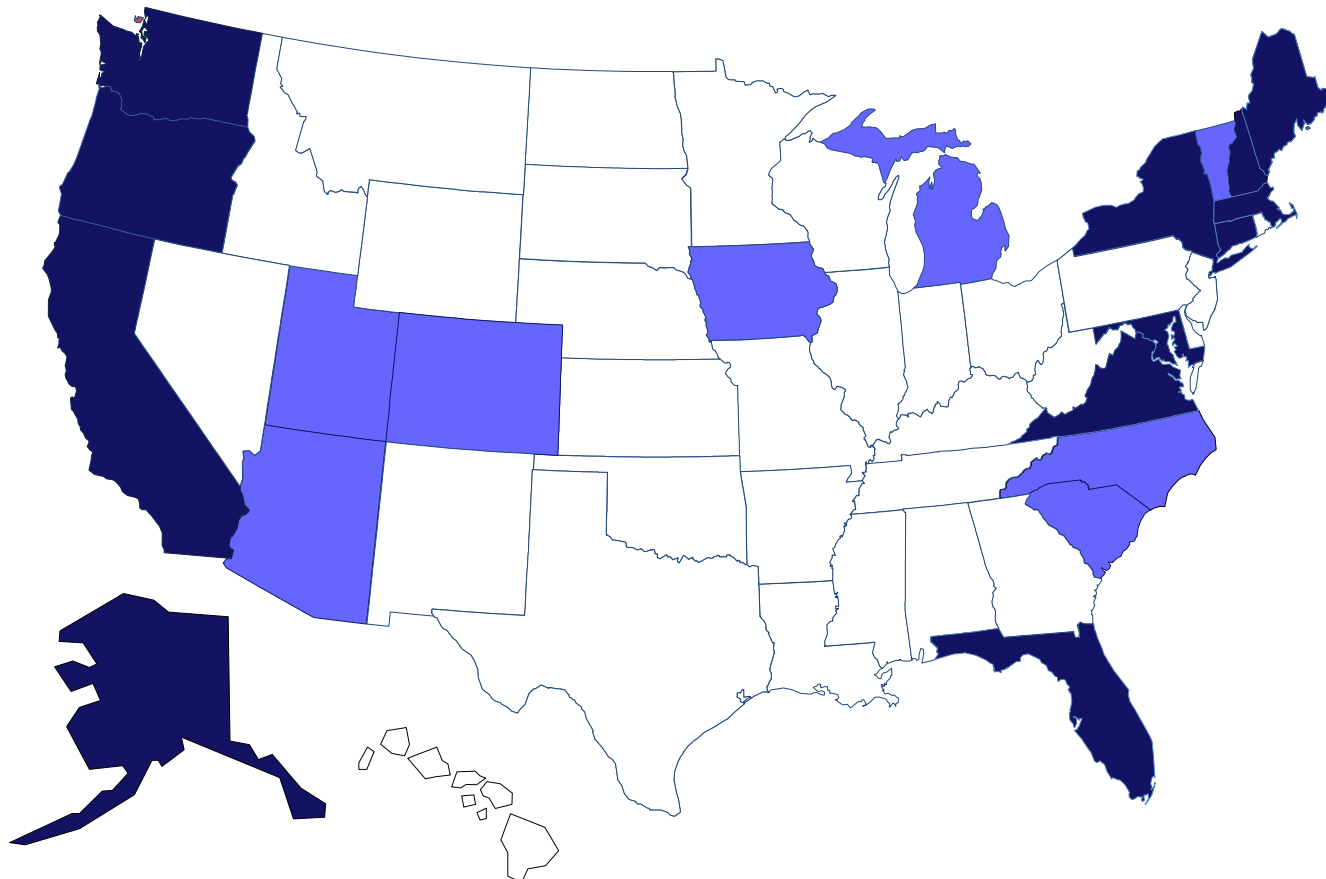
## **... in the adaptation arena:**



- Federal legislative analysis
- Working with state governments to identify and help eliminate legal and policy barriers to adaptation
- Adaptation clearinghouse – a toolkit of resources for adaptation planning



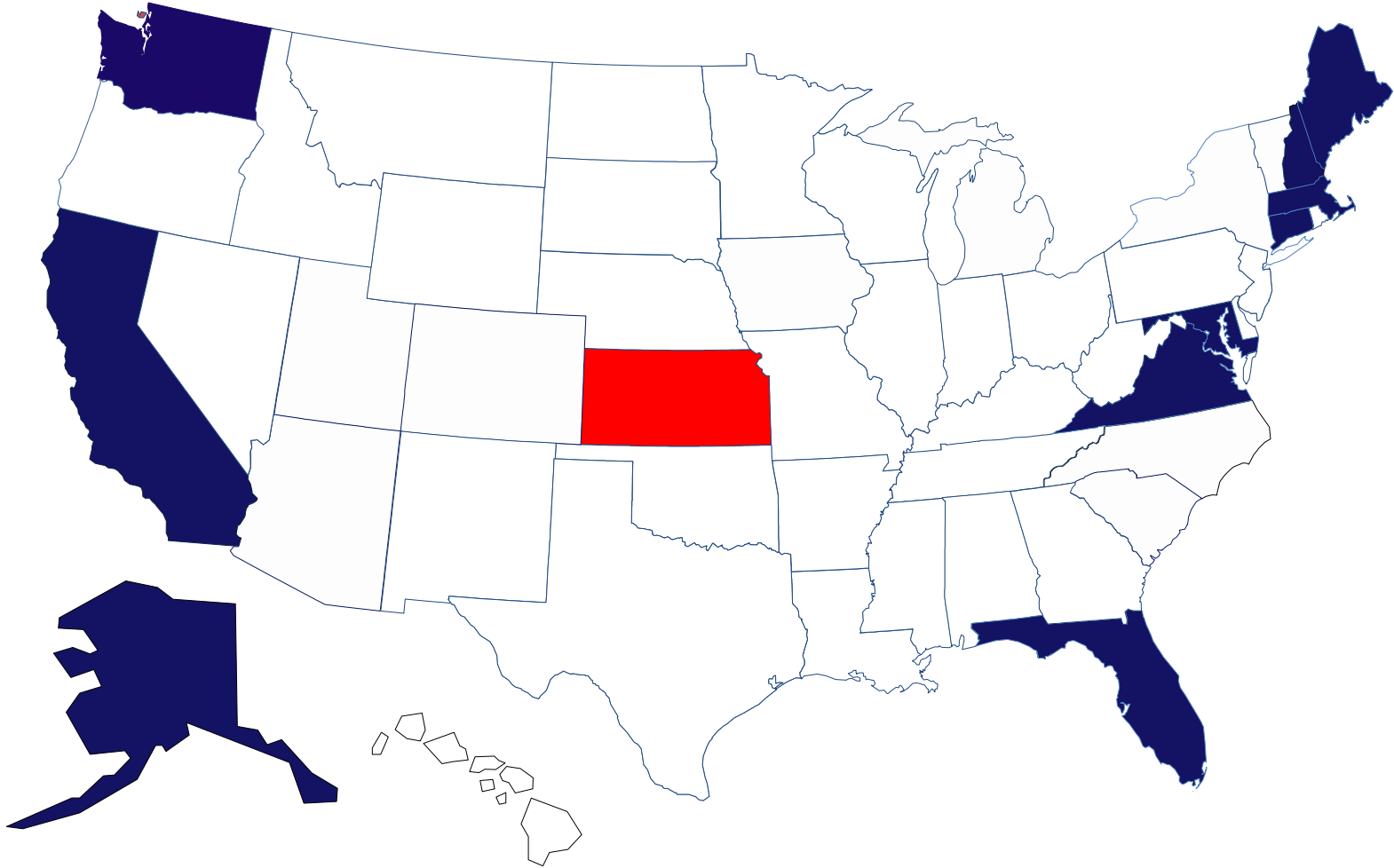


# State Adaptation Plans



-  State Adaptation Plans complete or in-progress
-  Adaptation Plan recommended in Climate Action Plans

# States Addressing Transportation



# **Common Transportation Elements in Adaptation Plans**

**Inventories: catalogue infrastructure and identify risks**

**Coordination: vertical and horizontal**

**Design Standards: improving resiliency**

**Planning and Risk Assessment**



# Starting Up: States Taking First Steps

## Connecticut

- Identify affected transportation sectors
- Broad identification of impacts

## Kansas

- Long Range Transportation Plan recognizes the need to address climate impacts
- Calls for development of resilient design standards

## Maryland

- Assess vulnerability of transit systems to SLR and extreme weather
- MDOT will formulate adaptation policies (ID options and assess design standards)

# Starting Up: States Taking First Steps (cont'd)

## New Hampshire

- Identified impact on transportation infrastructure
- Recommended development of adaptation strategy

## Virginia

- Calls for accounting for climate change in project planning and design, maintenance plans
- Calls for developing a plan to minimize risks to infrastructure

## Washington

- Called for development of partnerships

## Massachusetts

- Identified climate impacts
- Calls for accounting for climate change in planning
- Calls for statewide collaboration on transit adaptation

# Alaska



Yukon River	56
Coldfoot	175
Deadhorse	414



# Alaska

## Infrastructure Adaptation Strategy

Create a statewide system for assessing vulnerability

- Identify vulnerable infrastructure
- Create information sharing system

Promote improvements to state's transportation system

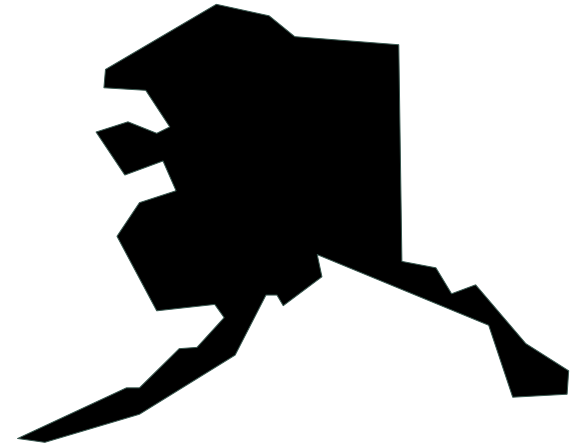
- Implement changes to planning and design
- Change funding and prioritization formulas

Build longer-lasting transportation infrastructure

## Actions Already Accomplished

Relocation of airports

\$10M in funding to combat permafrost melting under highways



# Florida



# Florida

## 3 Goals Identified

- 1. Inventory at-risk transportation infrastructure**
  - Perform cost-benefit analysis
  - FDOT will continue monitoring rainfall and storm surge
- 2. Coordinate state and local adaptation efforts**
  - Cooperation between state, local and regional entities
  - Information sharing
- 3. Address climate change in long-term planning**
  - FDOT will update its transportation plan







**California**



# California

## CalTrans' preliminary impact assessment

4 Sectors impacted: marine, airports, roads, regions/corridors

## State adaptation strategies

1. Develop detailed vulnerability assessment
2. Incorporate adaptation strategies into transportation and investment decisions
3. Develop new design and engineering standards
4. Incorporation of climate change into disaster preparedness plans





**Maine**





# Maine

## Maine DEP's adaptation strategy

1. Identify vulnerable roads and culverts and place on hazard maps
2. Share this inventory and methods to help build local capacity
3. Evaluate design standards and other policies

## Maine DOT's adaptation strategy

1. Short term strategies
  - A. Monitor conditions and assess infrastructure resilience
  - B. Prioritize infrastructure for retrofit and incorporate CC into planning
2. Long term strategies
  - A. Improve design standards and GIS resources
  - B. Maintain and restore natural buffers
  - C. Regularly inspect bridges and culverts
  - D. Provide guidance and support to entities outside Maine DOT



# For More Information

Visit: <http://www.georgetownclimate.org>

Email me: [arroyo@law.georgetown.edu](mailto:arroyo@law.georgetown.edu)