



U.S. Department of Transportation
Federal Highway Administration

OVERVIEW OF CLIMATE RESILIENCE IN TRANSPORTATION PLANNING

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Savannah, GA

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New Planning Factor

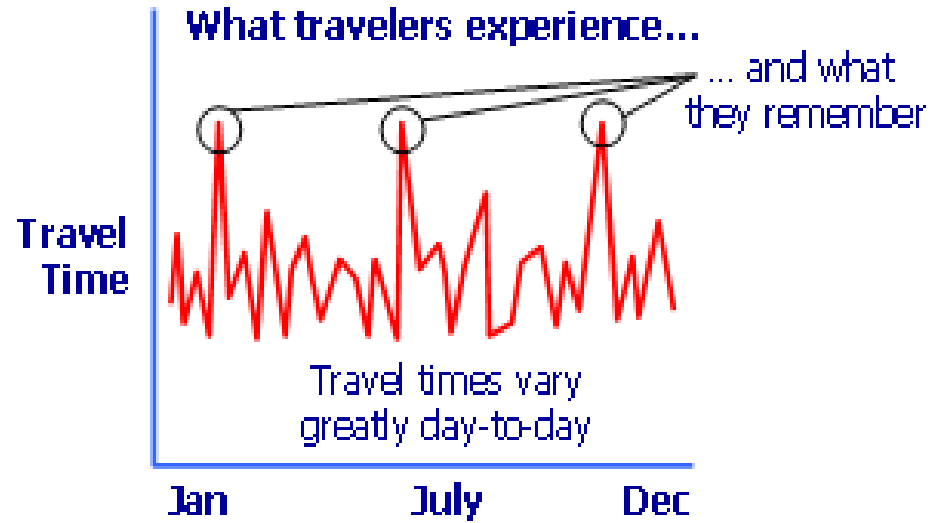
23 CFR 450.206(a) & 23 CFR 450.306(b)

- States and MPOs shall consider and implement:
Improving the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation

Order 5520

- Establish FHWA policy on preparedness and resilience to climate change and extreme weather events

Reliability & Resiliency



- **Travel Time Reliability =** The consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day.
- **Resilience =** The ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions

Consultation & Plan Development

23 CFR 450.324(f)(7)

- Recommendation that States and MPOs consult with agencies and officials responsible for natural disaster risk reduction when developing a MTP and TIP

23 CFR 450.316(b)

- MTP assess capital investment and other strategies that reduce the vulnerability of the existing transportation infrastructure to natural disasters

Resiliency in the Planning Process

- Metropolitan Transportation Plans
- Transportation Improvement Programs
- Public involvement and interagency consultation
- Risk-based transportation Asset Management Plans
- Planning and Research Work Programs
- Annual Unified Planning Work Programs
- Modal, subarea, and corridor planning
- Scenario planning

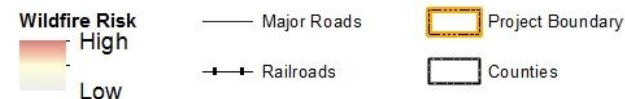
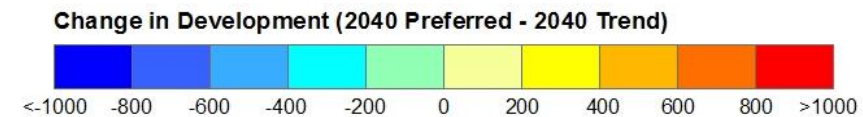
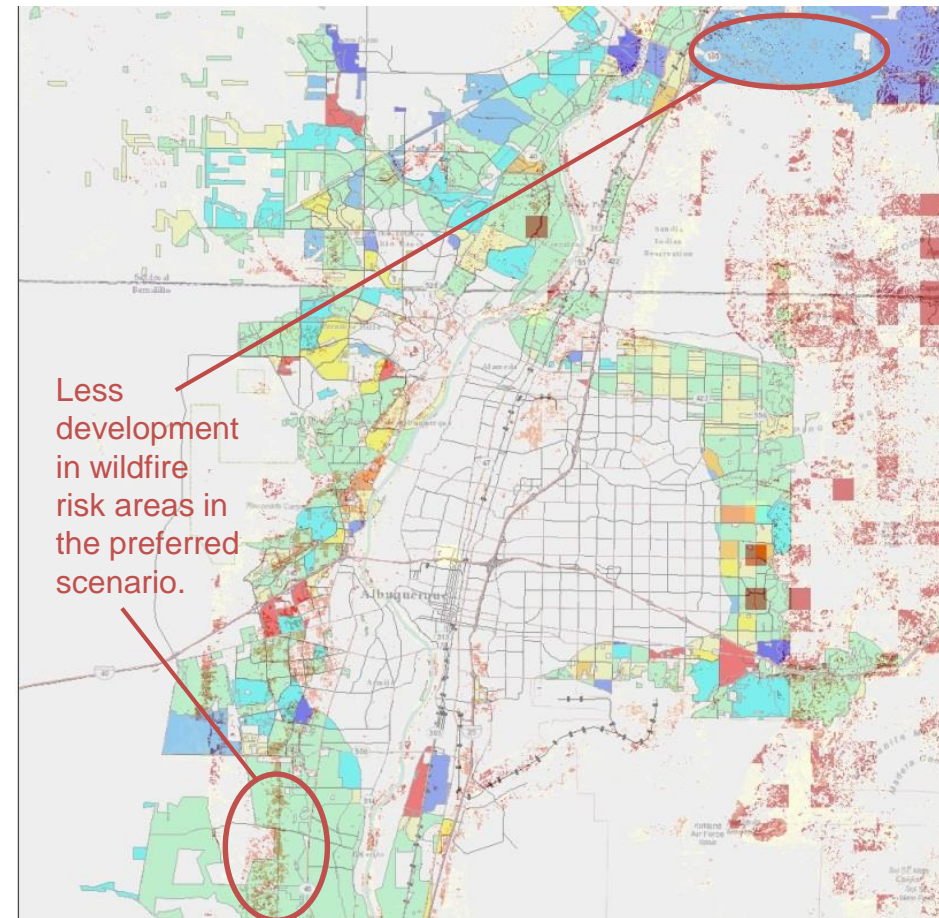
Integrating Climate into the Planning Process

Resources:

- [Integrating Climate Change into the Transportation Planning Process](#)
- Scenario Planning – [Cape Cod](#) and [New Mexico](#) reports

Example:

- In Albuquerque, New Mexico, FHWA partnered with the MPO on a scenario planning process to assess the impact of growth scenarios on climate resilience and mitigation, along with other community goals.



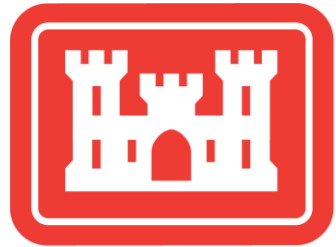
Strategies to Reduce Vulnerability

- Coordinate with agencies in natural disaster risk reduction
- Assess the vulnerability of transportation assets to types of natural disasters
- Identify at-risk assets and potential impacts of disasters
- Evaluate approaches to system management, operations, and maintenance
- Determine assets to retrofit, rehabilitate, or relocate
- Analyze appropriate areas to build new facilities
- Prioritize funding using costs, benefits, risks, and impacts
- Develop systems for monitoring and reporting
- Educate and engage decision-makers, partners, and public

In the Works



Inter-Governmental Emergency Evacuation Planning Coalition



1. Charter
2. Inventory Policies and Guidance
3. Align Policies and Guidance
4. Toolbox