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
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.

Less development in wildfire risk areas in the preferred scenario.
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
Inter-Governmental Emergency Evacuation Planning Coalition

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