



# TACIR

The Tennessee Advisory Commission  
on Intergovernmental Relations



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## **MEMORANDUM**

**TO:** Commission Members

**FROM:** Cliff Lippard  
Executive Director

**DATE:** 29 September 2020

**SUBJECT:** Community Resilience to Natural Catastrophes and Extreme Weather

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The attached Commission report is submitted for your approval. It was prepared in response to Senate Bill 1114 by Senator Jeff Yarbrow and House Bill 1120 by Representative Bob Freeman in the 111<sup>th</sup> General Assembly, which was referred to the Commission for study by the House State Committee. The sponsors requested that the Commission specifically

- identify risks for extreme weather events and earthquakes across the state,
- document the current status of planning to reduce the effects of these specific natural disasters and build community resilience in Tennessee at the state and local level,
- identify best practices for building community resilience, and
- determine the cost of action and inaction.

The report finds that from 1996 to 2018 in Tennessee, there was an average of \$343.5 million annually in property damage and economic losses resulting from natural disasters, according to analysis by 3 Sigma Consultants, LLC—the consulting firm the Commission contracted with to analyze past and future extreme weather events and earthquakes. Based on 3 Sigma’s analysis, Tennessee could see the annual cost of natural disasters nearly double to \$595 million per year by 2055. There are a variety of strategies that can reduce these costs and build resilience, many of which are already being implemented in Tennessee. For example, Pigeon Forge has been recognized nationally for its efforts to reduce the risks it faces from wildfires by adopting strategies including curbside brush removal and participation in the Ready, Set, Go! pilot

program, which prepares residents and businesses for evacuations. Other hazard mitigation strategies adopted in Tennessee include improving storm-water systems and purchasing residential property in flood-prone areas—both of which the Metropolitan Government of Nashville and Davidson County implemented to reduce its risk from future flooding following a catastrophic 2010 flood—while community storm shelters, such as the 600-person safe room Lake County built in one of its public schools, can save lives during tornados and severe storms.

For local governments and the state, planning for natural disasters includes the development of hazard mitigation plans. The state and most counties have Federal Emergency Management Agency (FEMA)-approved hazard mitigation plans in Tennessee. The Tennessee Emergency Management Agency (TEMA) created the state's latest hazard mitigation plan, which received FEMA approval in 2018. Of Tennessee's 95 counties, 75 have received FEMA approval for their local hazard mitigation plans, seven are revising or reviewing their plans, and 13 have either not submitted a plan or their plan has lapsed. In addition to TEMA's efforts, other state agencies, as well as universities, are working in partnership to promote community resilience, which goes beyond reducing physical vulnerabilities and includes reducing social and economic vulnerability as well. For example, the Tennessee Department of Economic and Community Development (ECD) is collaborating with TEMA and the Tennessee Department of Environment and Conservation (TDEC) to develop flood control projects in local communities using funding from the US Department of Housing and Urban Development's National Disaster Resilience Competition grant. TDEC is also working with the University of Memphis, East Tennessee State University, and community-based organizations to provide training to educate and empower Tennesseans to lead their community in the effort to prepare for and recover from a natural disaster as part of its Tennessee Citizens Resilience Academy pilot program.

Because Tennessee local governments and state agencies are implementing strategies to prepare for, withstand, and rapidly recover from disruptions to everyday life, and because interagency collaboration is already occurring, **the state should ensure the ongoing resilience efforts continue—including collaboration among state agencies and local governments. The Commission takes no position on the exact structure of these collaborative efforts, but they should include a focus on community resilience planning features such as assessing social and economic vulnerabilities and engaging community members in the decision-making process in addition to hazard mitigation strategies.**