



Extreme Weather Preparedness for State and Local Jurisdictions

Since 1999, CNA has supported emergency management services in local and state governments. We focus on preparedness activities such as assessments, planning, and exercises, as well as the provision of disaster support. CNA combines decades of boots-on-the-ground experience advising state, local, and federal emergency managers with expertise in innovative tools and methodologies—positioning us at the forefront of extreme weather preparedness for all levels of government.

Extreme Weather Preparedness

CNA and its partners have supported more than 70 weather-related preparedness projects, including workshops; tabletop, functional, and full-scale exercises; and the development of plans, handbooks, and checklists. For example, CNA developed a playbook for the Department of Health and Human Services (HHS) hurricane response, and a concept of operations for water-based search and rescue operations for extreme flooding in the Houston Urban Area Security Initiative.

Evacuation Planning

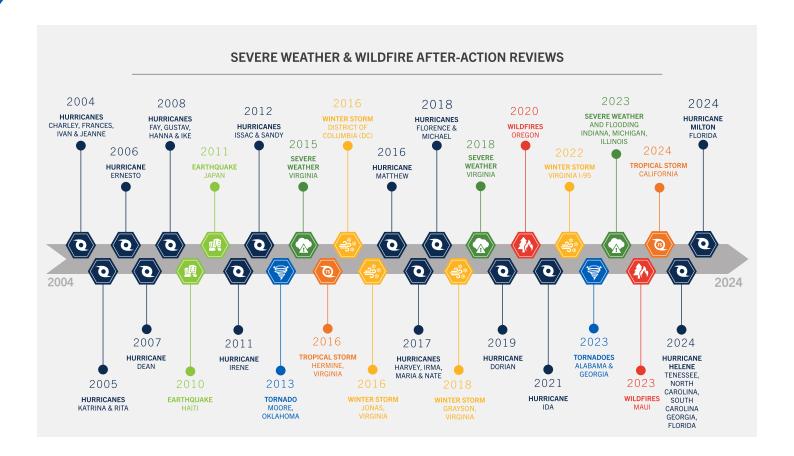
CNA has a 15-year history of planning for medical and general population evacuation due to extreme weather. For the Federal Emergency Management Agency's National Hurricane Program, CNA developed guidance, resources, tools, and recommendations to support state, local, tribal, and territorial partners in conducting evacuation planning and response to protect the lives of Americans. In New Orleans, CNA supported training, exercises, and planning for extreme weather city-assisted evacuations, and the National Disaster Medical System exercise to improve plans for data sharing, transportation, and medical care.

Hurricane Response and Recovery After-Action Reports

CNA's deep experience in developing after-action reports (AARs) for extreme weather events strengthens our ability to help state, local, tribal, and territorial partners prepare. CNA uses the information gleaned from our many AARs to engage in preparedness activities with the right tools, knowledge, and approach.

Hallmarks of CNA's Approach to AARs

- Interdisciplinary expertise in:
 - Federal, state, regional, and local emergency management
 - Interoperable and crisis communications
 - · Debris management
 - Continuity of operations
 - Evacuation and shelter-in-place operations
 - Mapping and modeling
 - Law enforcement/public safety
- Objective, data-driven analysis to improve operational performance and decision-making
- Actionable recommendations informed by on-the-ground response experience



Supply Chain Analysis

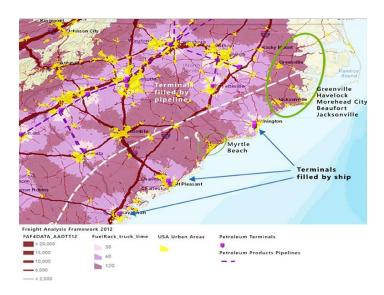
Over the past ten years, CNA has pioneered the analysis of regional food, fuel, and water networks and supply chains of other lifeline commodities to support emergency management planning and operations.

CNA developed the CNA Supply Chain Operational Engagement (CNA SCOPETM) Method, a geospatial approach to supply chain analysis to characterize lifeline commodity networks and inform both public and private sector decision-makers.

Step 1-Define study area Step 2 - Acquire data Step 3 - Map flows Step 4 - Analysis

The SCOPE $^{\text{TM}}$ Method characterizes lifeline commodity networks to inform decision makers.

As a core member of the of FEMA Supply Chain Analysis Network (SCAN) program, CNA contributes to the annual National Strategic Supply Chain Risk Analysis, presented to the FEMA administrator's office in advance of each hurricane season since 2022.



CNA fuel analysis during the 2019 Hurricane Dorian activation.

A more detailed overview of CNA's supply chain analysis capabilities and experience can be found on CNA's website.

Commodity Flow and Community Points of Distribution

CNA has extensive experience in the evaluation of locations to stage and position resources for emergency response in both state and local jurisdictions. In the Bay Area, CNA collected and analyzed geospatial data to generate and validate detailed profiles of regional food and water sectors. In the Puget Sound region, CNA conducted a robust geospatial analysis and developed several ArcGIS Online applications and other tools as part of a data-informed approach to distribute emergency relief after a disaster. In the Southeastern Pennsylvania Region, including the city of Philadelphia and four counties, CNA conducted a comprehensive fuel assessment in 2017–2018.



CNA identified population islands to inform planning for community points of distribution.



https://www.cna.org/centers-and-divisions/ipr/emo

About CNA

CNA is a not-for-profit analytical organization dedicated to the safety and security of the nation. With nearly 700 scientists, analysts, and professional staff across the world, CNA's mission is to provide data-driven, innovative solutions to our nation's toughest problems. It operates the Center for Naval Analyses—the Department of the Navy's federally funded research and development center (FFRDC)—as well as the Institute for Public Research. The Center for Naval Analyses provides objective analytics to inform the decision-making by military leaders and ultimately improve the lethality and effectiveness of the joint force. The Institute for Public Research leverages data analytics and innovative methods to support federal, state, and local government officials as they work to advance national and homeland security.

To learn more about extreme weather preparedness at CNA, contact Dawn Thomas at thomasdh@cna.org.

