

PrepTalks Resource Lists highlight publicly available materials that relate to the PrepTalk topic. These resources provide a more in-depth understanding of the topic to enhance the whole community discussion.

Using Complex Adaptive Systems Thinking to Understand Community Interdependencies

- [Adaptive Standard Operating Procedures for Complex Disasters](http://www.hsaj.org/articles/13946)
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Modern crises often demonstrate the prediction-defiant characteristics of complexity. To examine these unpredictable characteristics and assess the utility of SOP-driven crisis response vis-à-vis adaptive behavior, this master’s thesis for the Naval Post Graduate School Center for Homeland Defense and Security explores three modern crises that demonstrated complex characteristics: the 9/11 attacks, Hurricane Katrina, and the Tohoku Tsunami/Fukushima Dai’ichi nuclear incident.
- [Complex Systems Analysis – A Necessary Tool for Homeland Security](http://www.heritage.org/homeland-security/report/complex-systems-analysis-necessary-tool-homeland-security)
www.heritage.org/homeland-security/report/complex-systems-analysis-necessary-tool-homeland-security
Understanding how complex systems perform is a vital component of homeland security. The responsibilities of the Department of Homeland Security (DHS) include creating the systems that make the country more resilient in the face of natural or man-made disasters; preventing terrorist exploitation of the systems that support society; and advancing security measures in a manner that encourages healthy and stable global systems-which promote economic growth and protect individual liberties.
- [Community Resilience Planning Guide for Building and Infrastructure Systems](https://www.nist.gov/publications/community-resilience-planning-guide-buildings-and-infrastructure-systems-playbook)
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This Playbook is intended to help communities more easily improve community resilience planning by addressing: 1) the importance of connecting social and economic goals and services to the built environment, 2) the interdependencies of social and economic functions with the built environment, 3) the value and practical ways of planning for recovery, and 4) the benefits of a community-scale view of resilience.
- [Resilience Analysis and Planning Tool](http://www.fema.gov/rapt)
www.fema.gov/rapt
Every four years, the American Society of Civil Engineers’ Report Card for America’s Infrastructure depicts the condition and performance of American infrastructure in the familiar form of a school report card—assigning letter grades based on the physical condition and needed investments for improvement.



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