Dealing with Disasters: GIS for Emergency Management

Edited by Ryan Lanclos and Matt Artz

Esri Press (2021)

Part 1: Disaster preparedness

GIS case studies featured in the book

Ensuring tornado warnings work when it matters most 3D mapping helps prepare for flood events Counties organize evacuations well in advance Drone imagery helps stay crisis-ready despite growth Simulating a Nuclear Disaster Apps Help Fire District to Better Prepare for Emergencies

How to get started

FEMA's Resilience Analysis and Planning ToolLive feeds in the ArcGIS Living Atlas of the WorldOttawa, OH: A Mitigation Success StoryMDOT Metro Region Flood Mitigation ProjectsOhio Safe Room Rebate ProgramAre You Ready Tampa Bay?Essential Configurations for Highly Scalable (Viral) ArcGIS Online Web ApplicationsLearn ArcGIS Path for disaster preparednessSolution templates for disaster preparednessDisaster preparedness @ esri.com

Part 2: Disaster response

GIS case studies featured in the book

Tracking Coronavirus with Real-time Dashboards Transform Hurricane Response 71 Puerto Rico Emergency Operations Center GIS Supports Response to Hurricane Irma Scientists, Emergency Responders Put Drones to Work Extending GIS in the Field for Resource Advising

How to get started

Earthquake Public Information Map Flooding Public Information Map Hurricane Public Information Map Severe Weather Public Information Map Wildfire Public Information Map Essential Configurations for Highly Scalable (Viral) ArcGIS Online Web Applications Coronavirus COVID-19 Global Cases Dashboard ArcGIS Survey 1-2-3: Best Practices for Conducting Damage Assessments Learn ArcGIS Path for Disaster Response Solution Templates for Disaster Response Esri's Disaster Response Program Disaster Response @ esri.com

Additional case studies

Smart Maps Help Philippine Red Cross Respond Quickly to Hundreds of Disasters Reveal: Mapping and Tracking the Spread of Deadly Diseases Weathering Hurricane Florence

Part 3: Disaster recovery

GIS case studies featured in the book

Relief Workers Use Drone Imagery to Help Refugees The Eye After the Hurricane After a Disaster, Imagery Gives Insurance Companies a Clear Picture Authorities Map and Model Damage from Deadly Tornado Mapping the Needs of People Impacted by Deadly Tornadoes

How to get started

Resilient City Recovery Maps Devastation in Nepal: Katmandu Before and After the April 2015 Earthquake Katrina +10: A Decade of Change in New Orleans Carr Fire Imagery Learn ArcGIS Path for disaster recovery Solution templates for disaster recovery Disaster recovery @ esri.com