
Disaster Resilience

Grand Challenge:

Mitigate the impact of disasters on individuals and communities

Description:

Disasters have a lifecycle: prevention and mitigation; preparedness; response; and recovery. To understand the risks and impacts of disruptive events requires an understanding of a community's infrastructure and key resources, socioeconomic issues, environment, natural and cultural resources, and the physical and mental health of its people. Different communities have varying needs, and communities in Mississippi face unique challenges.

Developing technologies, tools, practices, policies, and laws to reduce the impact of disasters will involve disparate approaches: materials science, modeling, legal and regulatory expertise, communications (to increase public awareness), education, ethics, and more.

Foundations:

- Understand the risks and impacts throughout the lifecycle of disasters
- Develop technologies, tools, practices, policies, and laws to reduce those risks and impacts to achieve resilience and sustainability for communities