



---

# **Asset Management and Natural Disaster Resilience**

---

**Asset Leadership Network Annual Conference  
November 8, 2021**

---

# Asset Management Framework



# Key Characteristics of an Asset Management Framework

---

- Identified **6 key characteristics** of an asset management framework based on:
  - 32 in-depth interviews with experts and organizations;
  - ISO 55000 series of standards on asset management;
  - leading practices such as those from the International Infrastructure Management Manual (IIMM);
  - review of asset management literature.

# Key Characteristics of an Asset Management Framework



**Establishing formal policies and plans**



**Maximizing an asset portfolio's value**



**Maintaining leadership support**



**Using quality data**



**Promoting a collaborative organizational culture**



**Evaluating and improving asset management practices**

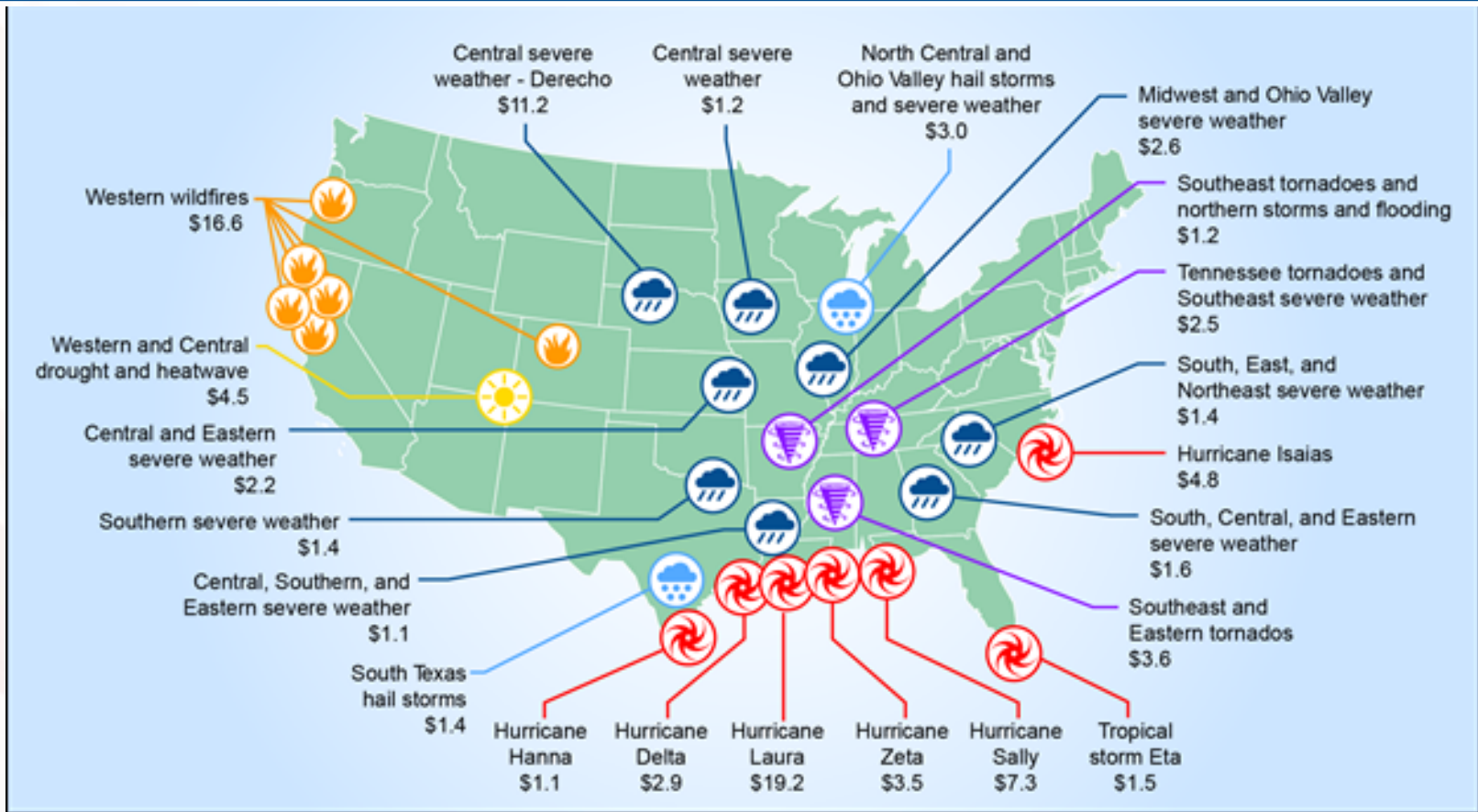
---

## Natural Disaster Resilience

---

- GAO defines natural disaster resilience as:  
  
preparing for anticipated hazards, adapting to changing conditions, and withstanding and recovering rapidly from disruptions caused by natural disasters.

## 22 Separate Weather and Climate Disaster Events in the United States in 2020 Costing More Than \$1 Billion in Damages (\$ in Billions) (NOAA)





## Jefferson Memorial Rehabilitation Project

Incorporating resilience into individual projects by assessing risks. Jefferson Memorial roof rehabilitation project to repair water damage. (GAO-21-596)





## National Park Service

Incorporating resilience into asset management by using quality data. National Mall and Memorial Parks Coastal Hazards and Climate Vulnerability Assessment of over 200 assets. (GAO-21-596)



---

# Federal Government-wide Guidance

---

- OMB Capital Programming Guide directs agencies to identify project risks.
  - It does not mention risks related to climate or weather.
- January 2021 Executive Order 14008 requires agencies to develop plans describing climate vulnerabilities and steps to increase resilience to effects of climate on facilities and operations.
  - It does not require agencies to incorporate these climate vulnerabilities into investment decisions.
- Recommendation to OMB to direct agencies to do so.

(GAO-21-596)