

CLIMATE CHANGE VULNERABILITY ASSESSMENT: EXAMINING CURRENT CLIMATE TRENDS, UNDERSTANDING YOUR ORG'S VULNERABILITY FOOTPRINT, AND BUILDING RESILIENCE STRATEGIES



Listen to Jay speak about this topic on **AlertMedia's Employee Safety Podcast** [here](#).

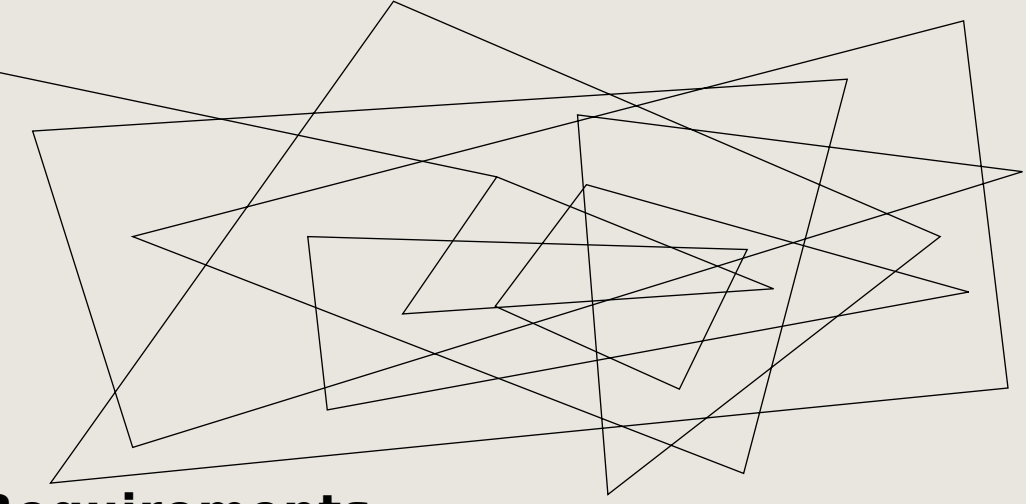
WHAT ARE WE TALKING ABOUT

Identifying Least Climate Resilient Areas in Your Footprint

- Current Trends in Extreme Weather Events and Climate Change Impact in the US
- A Tool More People Should Be Talking About: The Climate Vulnerability Index (CVI)
- Putting the CVI to Work: Findings, Deliverables & Implications for Resilience Strategy

Target Audience

- Sustainability
- Emergency Response & Disaster Relief
- Security & Safety
- Enterprise Risk Management
- Business Continuity
- Supply Chain
- HR and Benefits
- Facilities
- Senior Leadership



Requirements

- Access to your organization's site location data
- Access to employee directory (HR feed preferred)
- Risk event data (Extreme weather events affecting Your areas of interest)
- Analytic-minded personnel capable of pulling and entering data & compiling reports
- Executive sponsorship/project champion

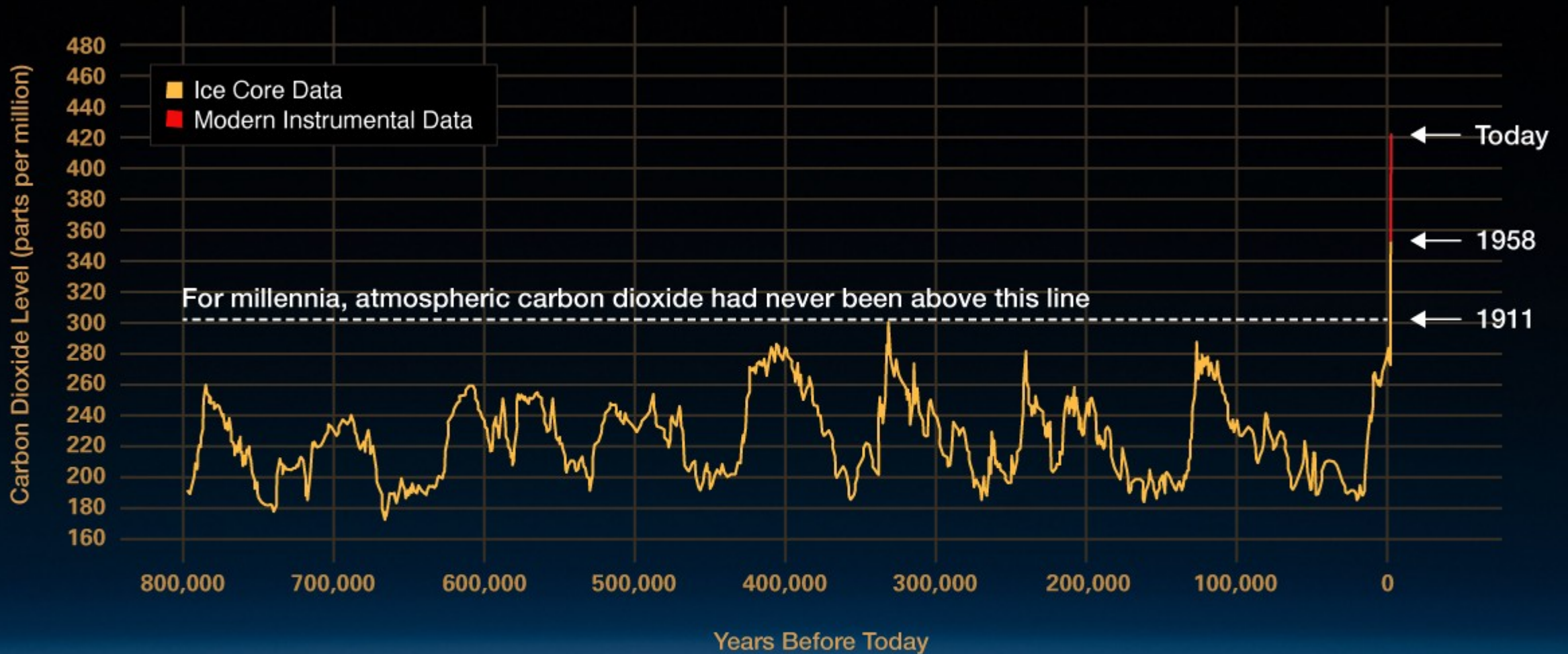


WHY IS THIS IMPORTANT

Climate change is regarded by the global scientific community, governments, and inter-governmental organizations as the preeminent risk event of the century that is placing increasing strain across all infrastructure supporting human health and security.

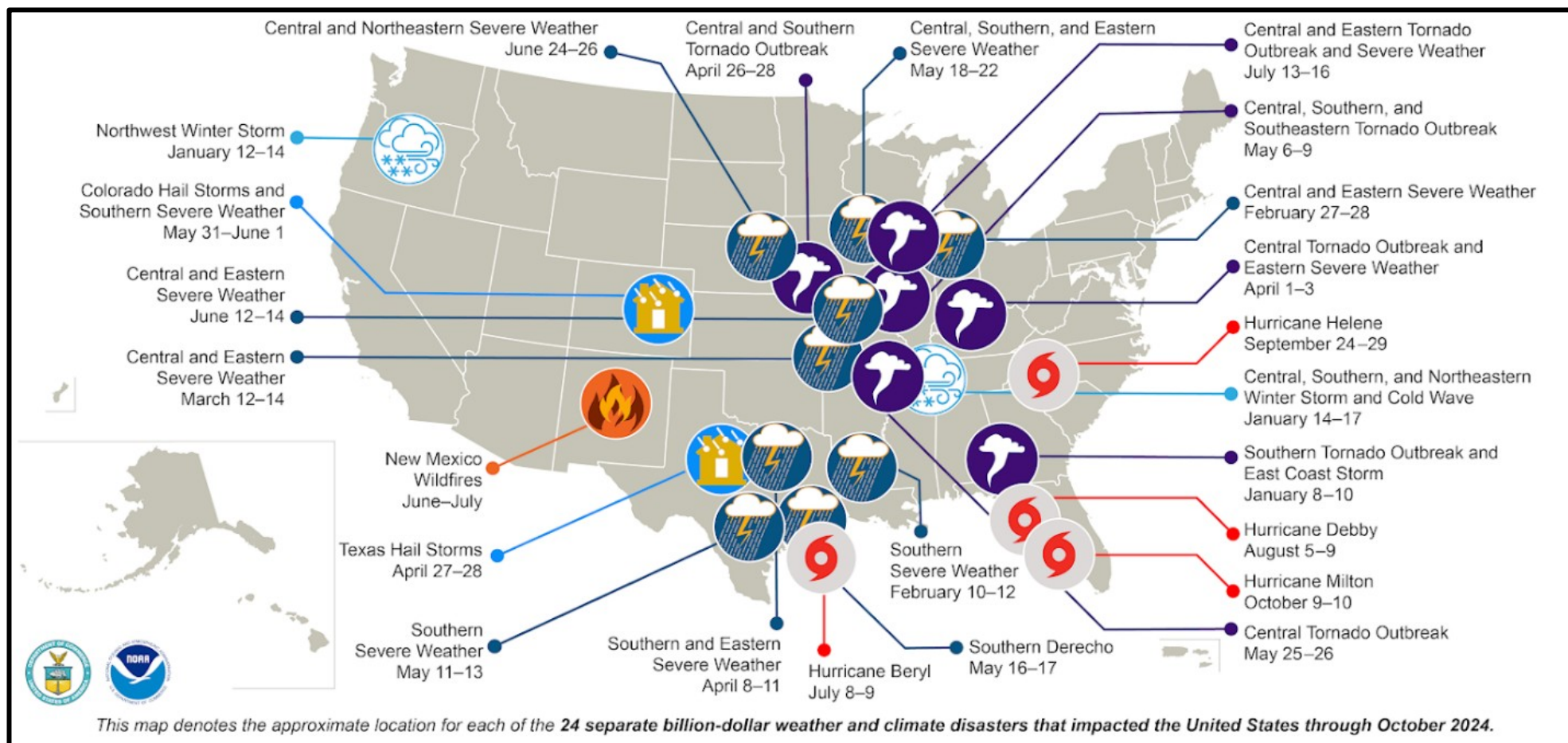
The increasingly disruptive impact of climate change is driving many organizations to reassess its placement on their risk registers.

Understanding how your organization may be impacted in the years ahead is critical particularly as the more severe scenarios become more likely.



CLIMATE CHANGE IS HAPPENING NOW!

HALF OF THE NEARLY \$3 TRILLION IN DAMAGES FROM EXTREME WEATHER EVENTS AND CLIMATE CHANGE SINCE 1980 WAS INCURRED IN THE LAST 5 YEARS ([NOAA](#))



Days between billion-dollar disasters

Since the 1980s, the U.S. has faced more frequent climate disasters with every passing decade. Between 2020 to 2022, the average number of days between billion-dollar disaster events within one year dropped to just 18.

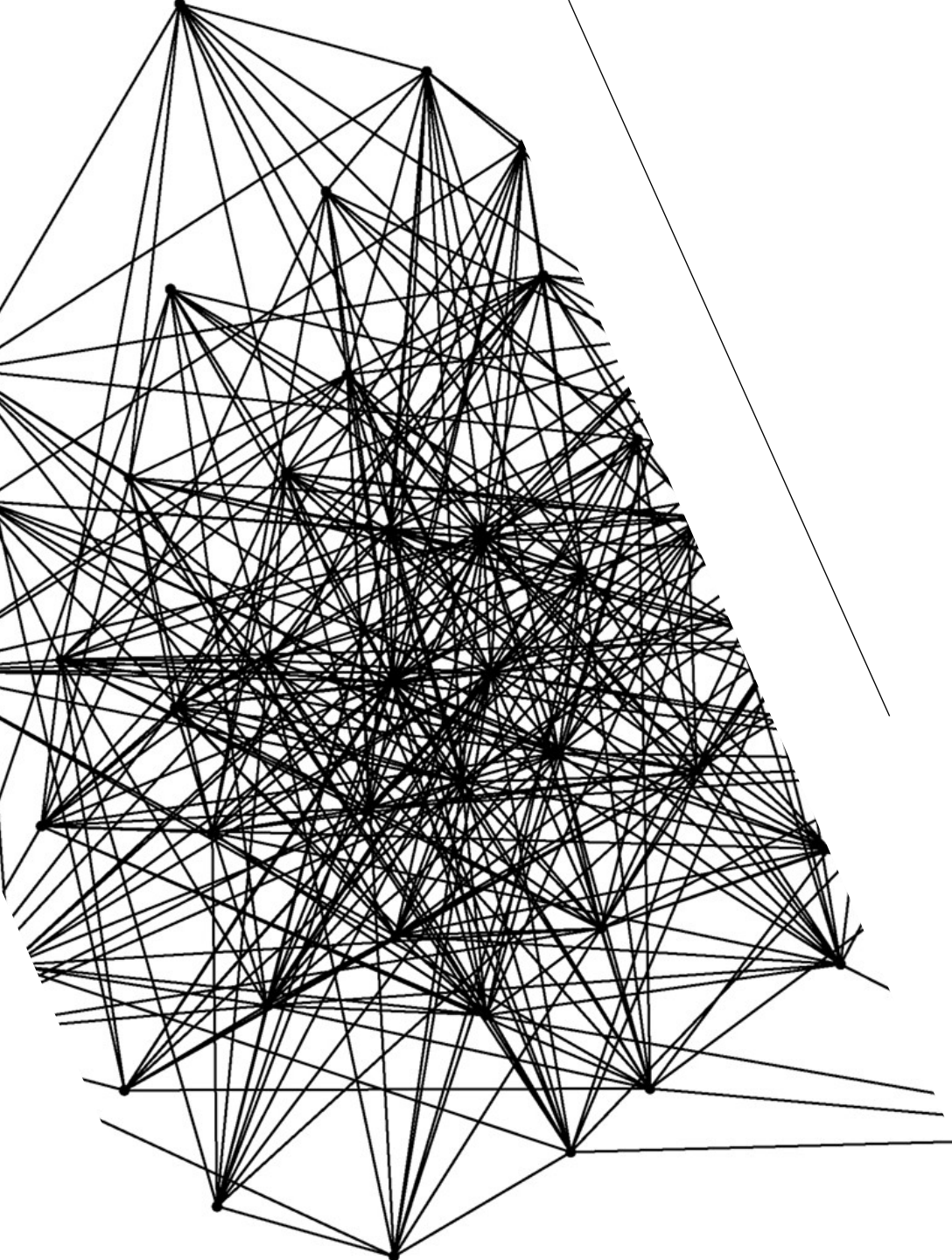


WITH DISASTERS RECURRING SO FREQUENTLY - ARE COMMUNITIES RECOVERING?

HOW IS OUR NATIONAL, STATE, AND LOCAL INFRASTRUCTURE HANDLING THE ADDITIONAL STRESS BROUGHT ON BY CLIMATE CHANGE?

WHAT ARE THE IMPLICATION TO PUBLIC HEALTH?

TO WHAT DEGREE OF CONFIDENCE ARE WE ABLE TO ANSWER ANY OF THESE QUESTIONS?



THIS IS A COMPLEX PROBLEM...

...COMPLEX DOES NOT ALWAYS
MEAN COMPLICATED

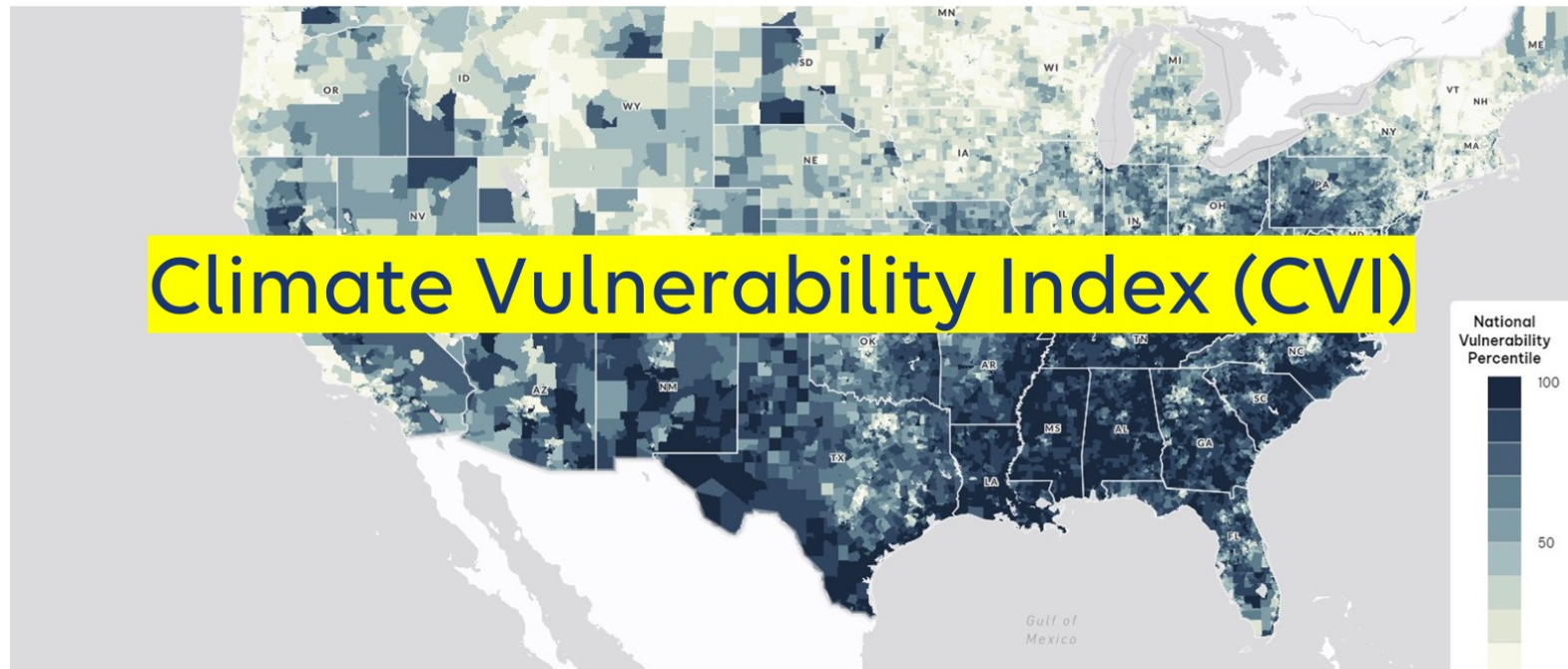
The magnitude of the climate change crisis makes it difficult to grasp due to the complex scenarios showing connections between human activity and scientific data over extended timeframes.

However, much can be done to prevent unnecessarily extreme losses and suffering over the years and decades ahead. By embracing the complexity, creating interdisciplinary teams, increasing cross-functional communication, and utilizing the right tools - the toll to your organization and your people can be mitigated.

THE [CVI](#) IS A TOOL THAT UTILIZES NEARLY 200 CROSS-CUTTING DATASETS CONSIDERING BOTH CLIMATE RISKS AND EXISTING SOCIO-ECONOMIC INDICATORS TO PROVIDE AN OVERALL INDEX SCORE FOR EVERY COUNTY* IN THE US. THIS TOOL CAN BE CENTRAL TO REDUCING UNCERTAINTY AROUND YOUR ORGANIZATION'S MOST VULNERABLE LOCATIONS

Overall Climate Vulnerability

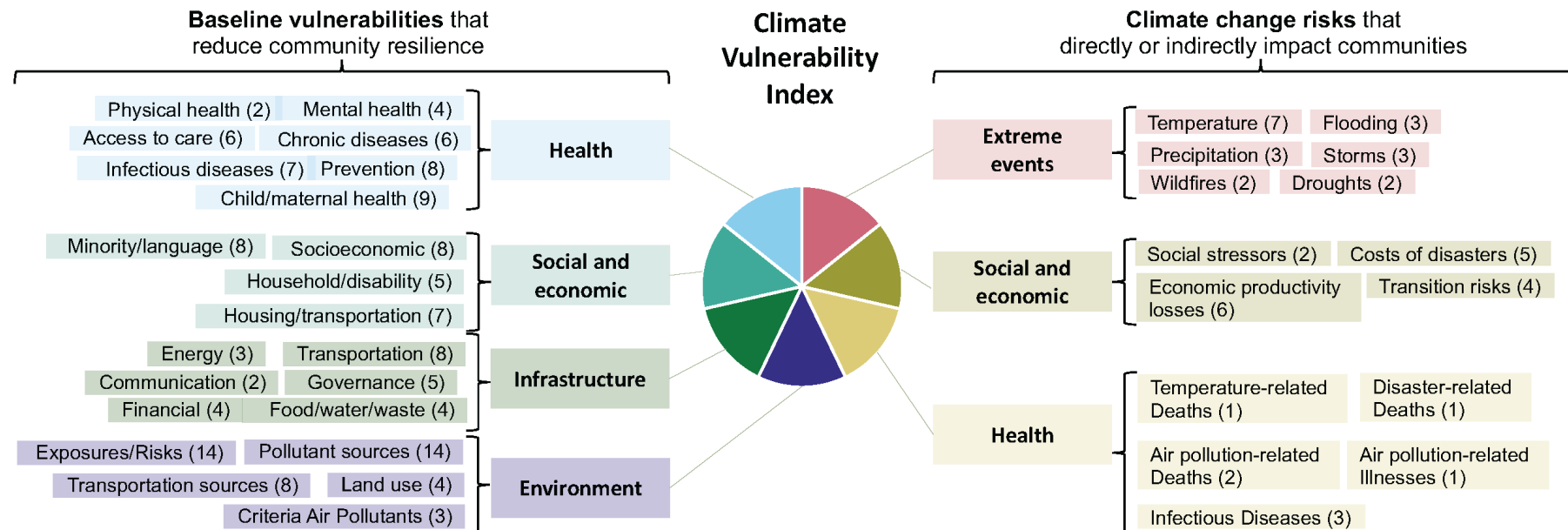
Score combining environmental, social, economic, and infrastructure effects on neighborhood-level stability.



[How to use the CVI](#)

*Also includes 70,000 census bureau tract scores

*“BETTER UNDERSTANDING OF THE INTERSECTIONS BETWEEN GROWING CLIMATE RISKS AND PRE-EXISTING, LONG-TERM HEALTH, SOCIAL, ENVIRONMENTAL, AND ECONOMIC CONDITIONS IS **CRITICAL** TO EFFECTIVELY BUILDING CLIMATE RESILIENCE FOR EVERYONE AND DEPLOYING TARGETED ADAPTATION EFFORTS.”*



THIS SAMPLE REPORT FOR HARRIS COUNTY, TX SHOWS THE BREAKDOWN OF THE OVERALL CVI SCORE. ADDITIONAL REPORTS DIVE INTO THE PRIMARY DRIVERS OF THE CLIMATE & COMMUNITY BASELINE SCORES.

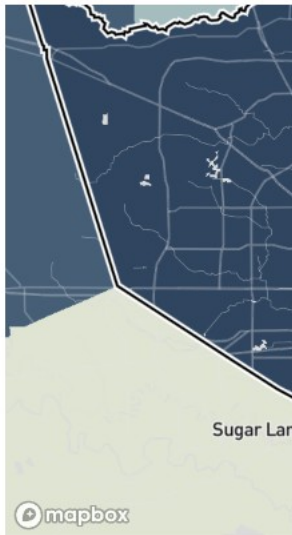
Overall Climate Vulnerability

Score combining environmental, social, economic, and infrastructure effects on neighborhood-level stability.

Ranks **44** out of **254** Counties in Texas

highest vulnerability 85th national vulnerability percentile

Click scale to filter map 0



Composition of Overall Climate Vulnerability

Community Baseline

The long-standing inequities shaping resilience to climate impacts.
This county ranks **42** out of **254** Counties in Texas

highest vulnerability 85th national vulnerability percentile

- Environment**
Environmental factors that pose a threat to community's well-being.
99th national vulnerability percentile
- Social & Economic**
Social and economic stressors that impact community resilience.
67th national vulnerability percentile
- Infrastructure**
Essential structures, services, resources that affect community resilience.
66th national vulnerability percentile
- Health**
Factors reflecting baseline or overall state of population health.
44th national vulnerability percentile

Top Drivers of Overall Climate Vulnerability

Community Baseline

National vulnerability percentile

Vulnerability Rank in TX,
out of **254** counties

Pollution Sources

Exposures & Risks

Land Use

Climate Impacts

National vulnerability percentile

Flooding

Economic & Productivity Losses

Costs of Climate Disasters

Climate Impacts

How a community is vulnerable to environmental and economic disruptions.

This county ranks **138** out of **254** Counties in Texas

higher vulnerability 69th national vulnerability percentile

- Social & Economic**
Social and economic costs and impacts associated with change in climate.
70th national vulnerability percentile
- Extreme Events**
Historical and projected extreme weather event occurrences.
58th national vulnerability percentile
- Health**
Expected changes in community health resulting from warming climate.
56th national vulnerability percentile

EXTRAPOLATING THIS DATA CAN ALLOW YOUR ORGANIZATION TO UNDERSTAND ITS EXPOSURE IN CLIMATE VULNERABLE AREAS, SPUR FOLLOW UP PROJECTS, AND DEVELOP STRATEGIES TO BUILD RESILIENCE



Develop top 10 site list



Enhance business continuity



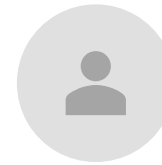
Identify higher risk suppliers and mitigate supply chain risks



Data driven relief, reconstruction, and resilience strategies



Support sustainability reporting requirements



Anticipate changes to your customer base



Support corporate real estate decisions



Reassess benefits offered for climate affected employees

A photo of the Goldman Sachs building in lower Manhattan during Hurricane Sandy in 2012. This picture is meant to drive home the difference between business continuity and business resilience. What does it mean when the lights are on, servers backed up, and buildings secure when your workforce is in the dark.

