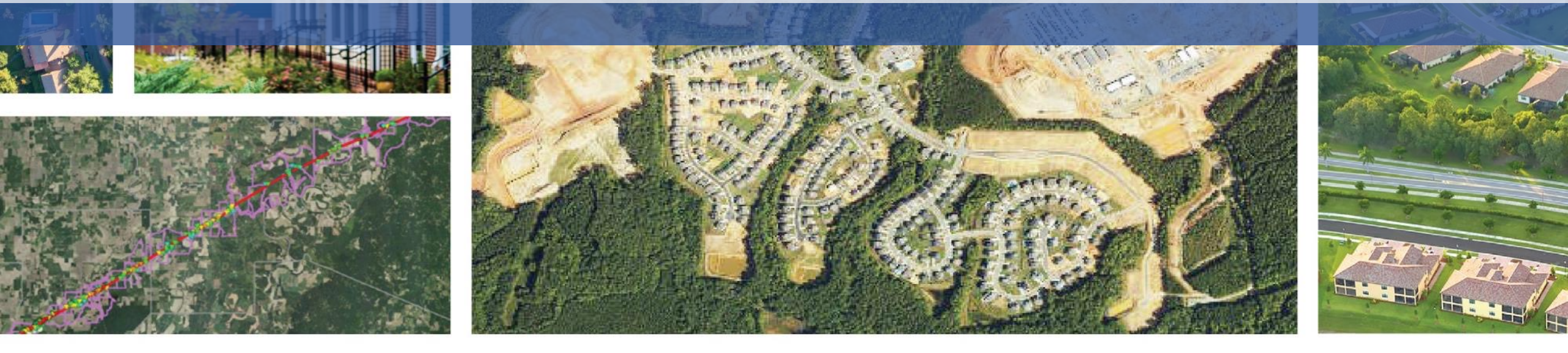




[**CLICK TO KNOW MORE**](#)



GEOSPATIAL INFORMATION DRIVING INNOVATION AT THE U.S. CENSUS BUREAU



CENSUS BUREAU VISION AND MISSION



Vision

To be the trusted source for timely and relevant statistical information, and the leader in data-driven innovation.



Mission

To serve as the nation's leading provider of quality data about its people and economy.



OUR WORK AT THE CENSUS BUREAU



Data Collection

3 Primary Censuses
Over 100 ongoing surveys



Data Analysis

Editing, Imputation,
Estimation
Disclosure and
Confidentiality



Data Dissemination

Data Tools and
Applications
data.census.gov

GEOGRAPHY DIVISION'S GEOGRAPHIC SUPPORT PROGRAM

THE FOUNDATION THAT SUPPORTS CENSUS BUREAU DATA COLLECTION, ANALYSIS, AND DISSEMINATION

Expertise/Leadership

Expertise shared across international and domestic domains.

MAF/TIGER System

Integrated geospatial IT systems.

Partnerships

Outreach, collaboration, and data sharing.

Addresses

Addresses for the nation, geocoding services.

Frames

Established infrastructure and methodology to link enterprise frames.

Features

Roads for the nation, product integration.

Geospatial Reference Data

Sourced from federal, tribal, state, and local providers.


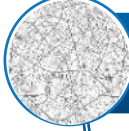



Boundaries

Government unit boundaries for the nation, statistical areas.



U.S. CENSUS BUREAU GEOSPATIAL FOUNDATION

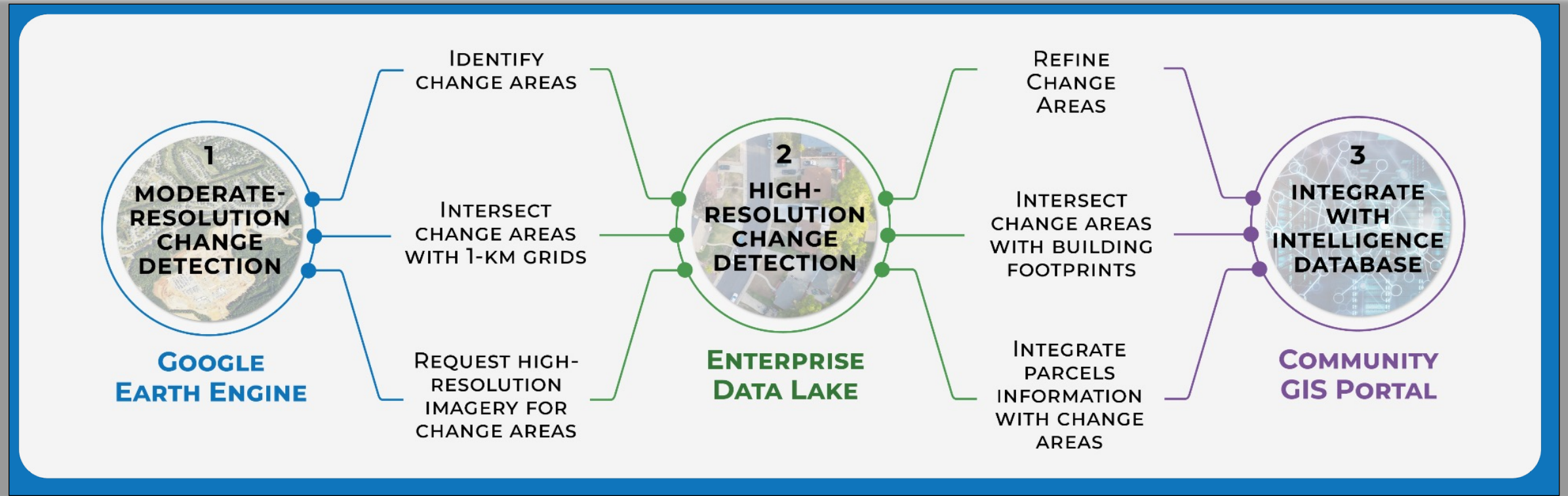
Geospatial
information in our
MAF/TIGER System
includes...

-  Over 14 million unique geographic areas, including legal, administrative, and statistical areas (e.g., census tracts, block groups, blocks)
-  Legal boundaries for approximately 40,000 units of government
-  Approximately 7 million miles of roads
-  More than 144.5 million housing units
-  Structure points for approximately 94% of those housing units



MAINTAINING THE GEOSPATIAL FOUNDATION

CHANGE DETECTION



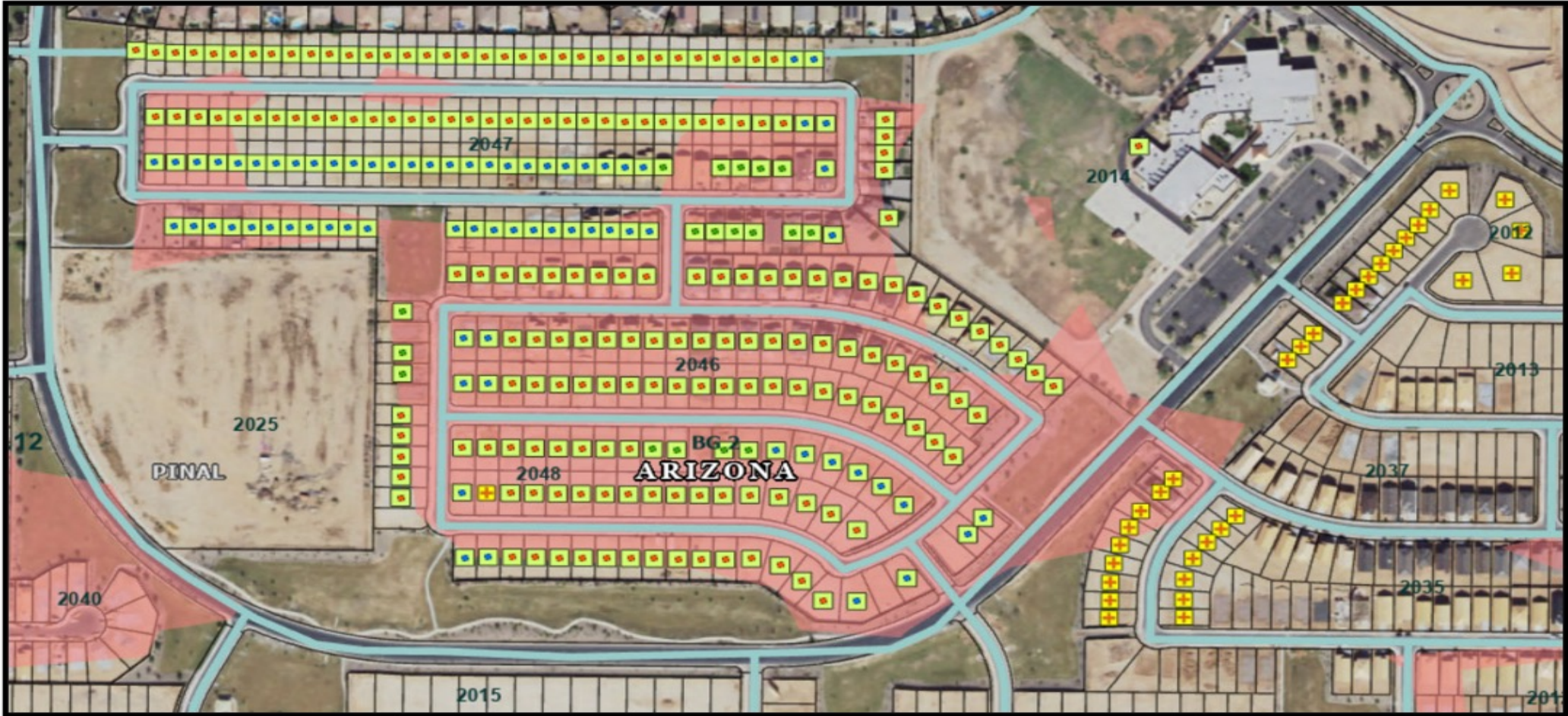
CHANGE DETECTION - MODERATE RESOLUTION



CHANGE DETECTION - HIGH RESOLUTION



CHANGE DETECTION - PARCEL MATCHING



The background features a stylized map with a grid of streets and winding paths. Several location pins are scattered across the map, and a network of lines connects some of them, suggesting a data collection or travel route. A central horizontal band is divided into a light green top section and a white bottom section, with the title text centered in the white section.

INFORMING DATA COLLECTION

Enterprise Fusion Center

Critical Times and Significant Events



Mission: *To continuously collect, curate, and analyze a range of risk indicators, and disseminate and report key information to the right stakeholders before a disruption escalates in severity, ultimately making the Census Bureau more resilient.*



Align



Centralize



Integrate



Establish



Build

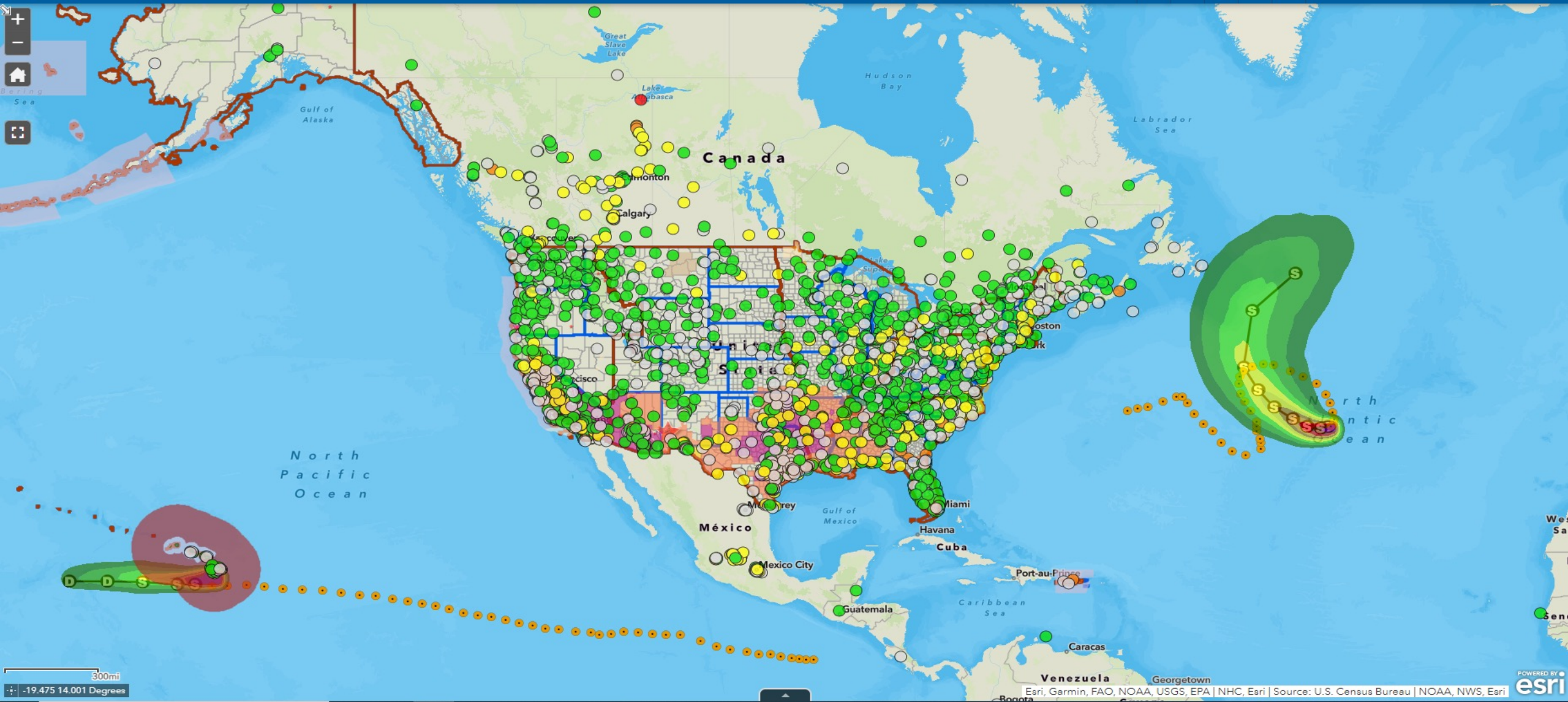


ENTERPRISE FUSION CENTER

Monitoring Dashboard – Live Incidents Tracker Map

Live Weather and Hazards

Enterprise Fusion Center

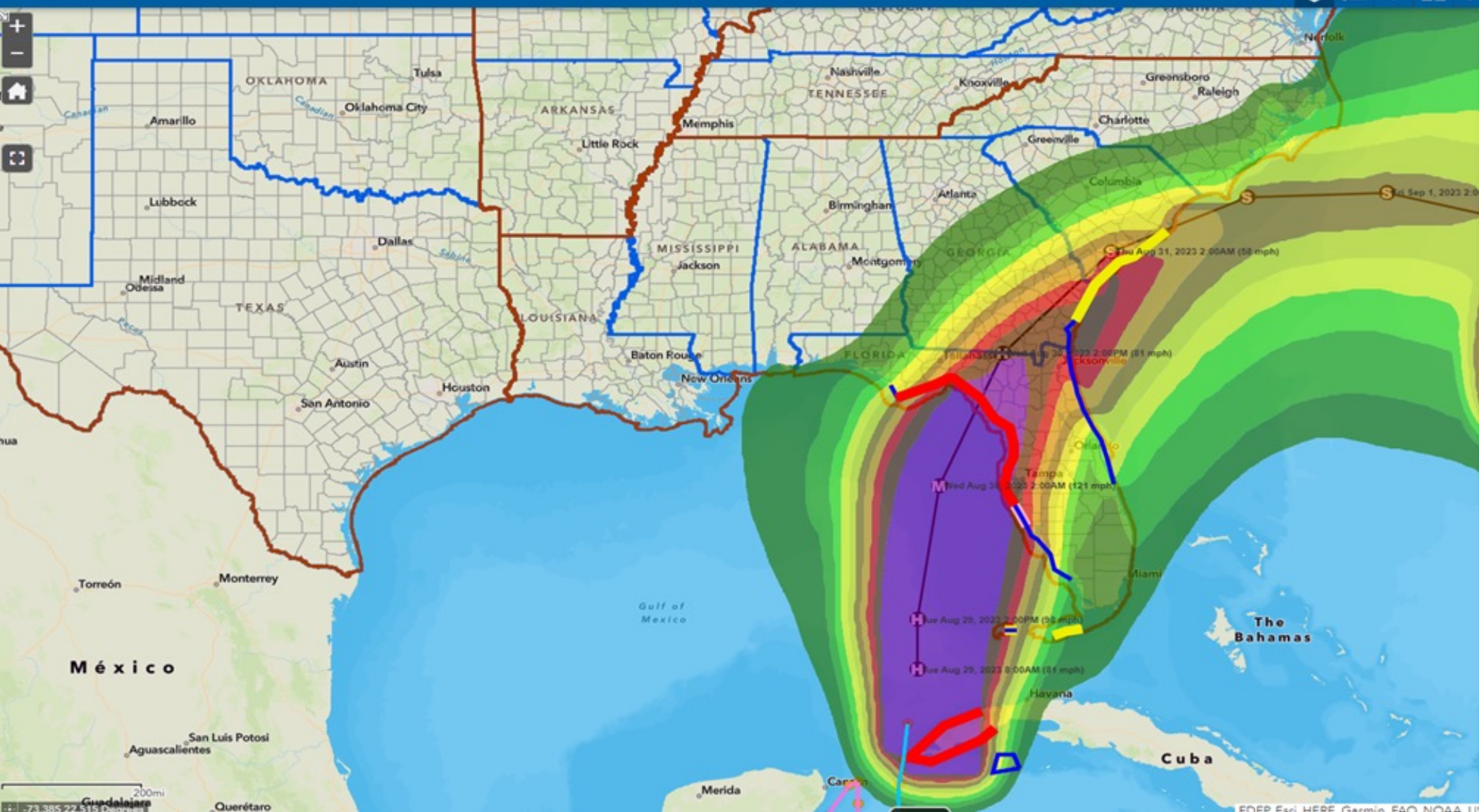


ENTERPRISE FUSION CENTER

Hurricane Related Support

Live Weather and Hazards

Enterprise Fusion Center

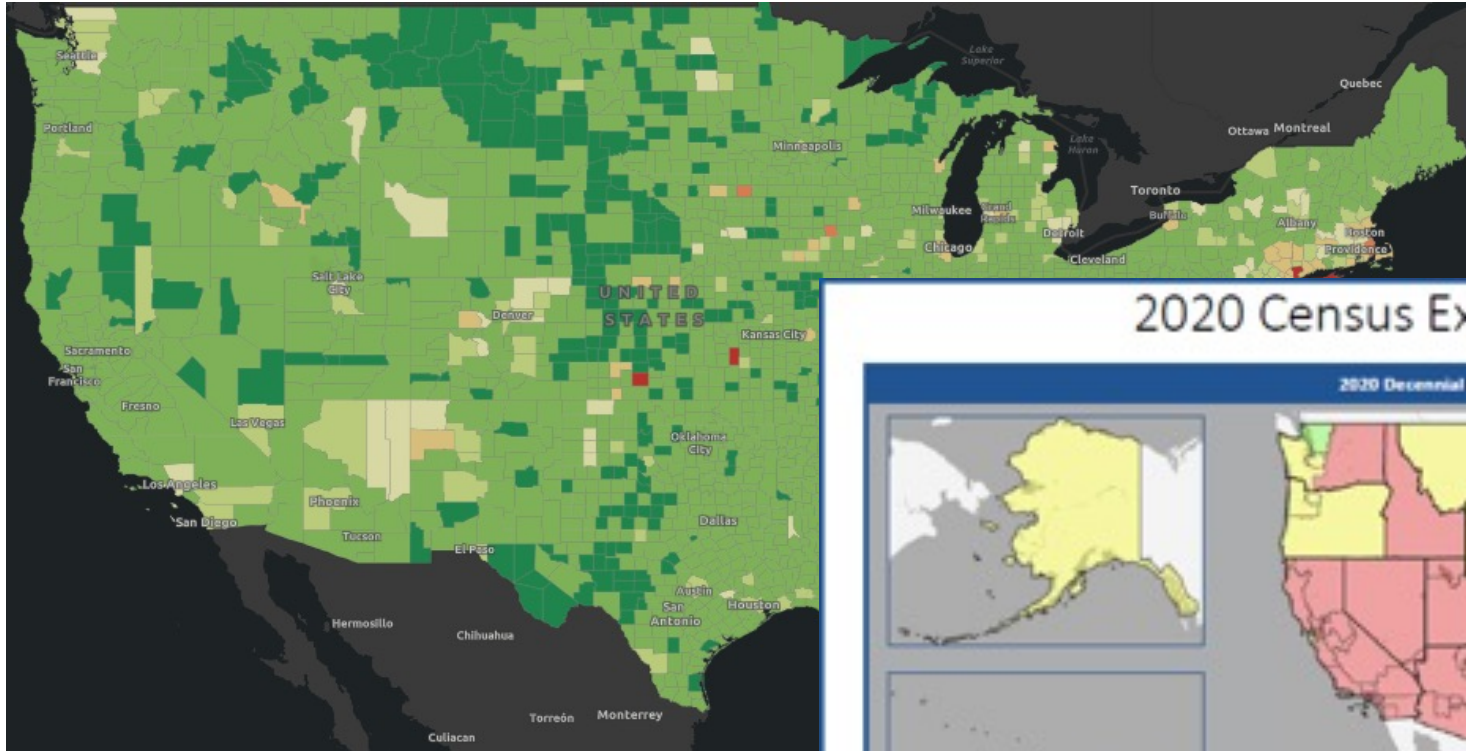


Layer List

- Active_Hurricanes_v1 - Observed Track
 - Low
 - Remnant Low
 - Disturbance
 - Subtropical Storm
 - Tropical Wave
 - Tropical Depression
 - Tropical Storm
 - Hurricane1
 - Hurricane2
 - Hurricane3
 - Hurricane4
 - Hurricane5
- Active_Hurricanes_v1 - Watches and Warnings
 - Hurricane Warning
 - Tropical Storm Warning
 - Hurricane Watch
 - Tropical Storm Watch
- Active_Hurricanes_v1 - Tropical Storm Force (34kts)
 - 5 to 10% Chance
 - 10 to 20% Chance
 - 20 to 30% Chance
 - 30 to 40% Chance
 - 40 to 50% Chance
 - 50 to 60% Chance
 - 60 to 70% Chance
 - 70 to 80% Chance

ENTERPRISE FUSION CENTER

COVID-19 Pandemic Support



2020 Census Executive Snapshot July 10, 2020

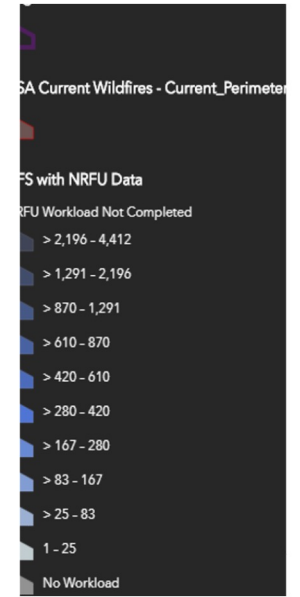
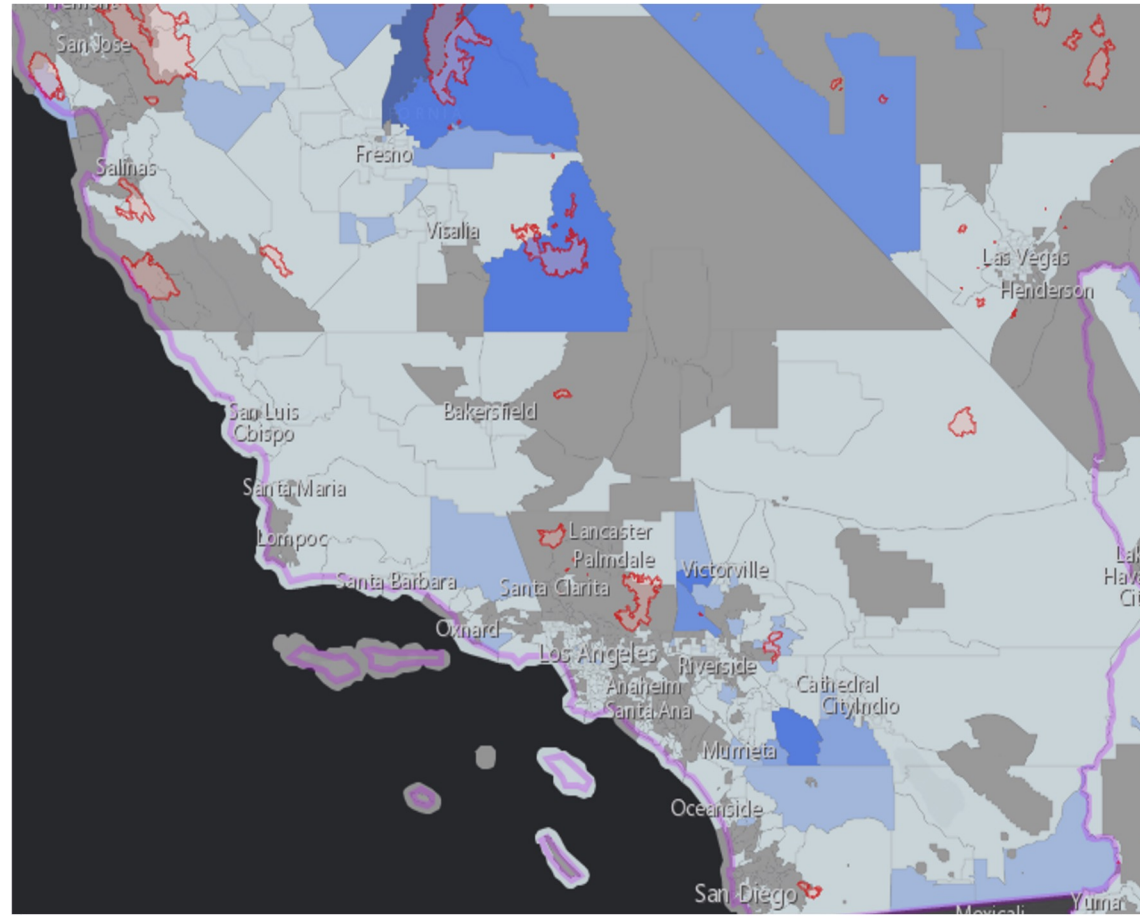
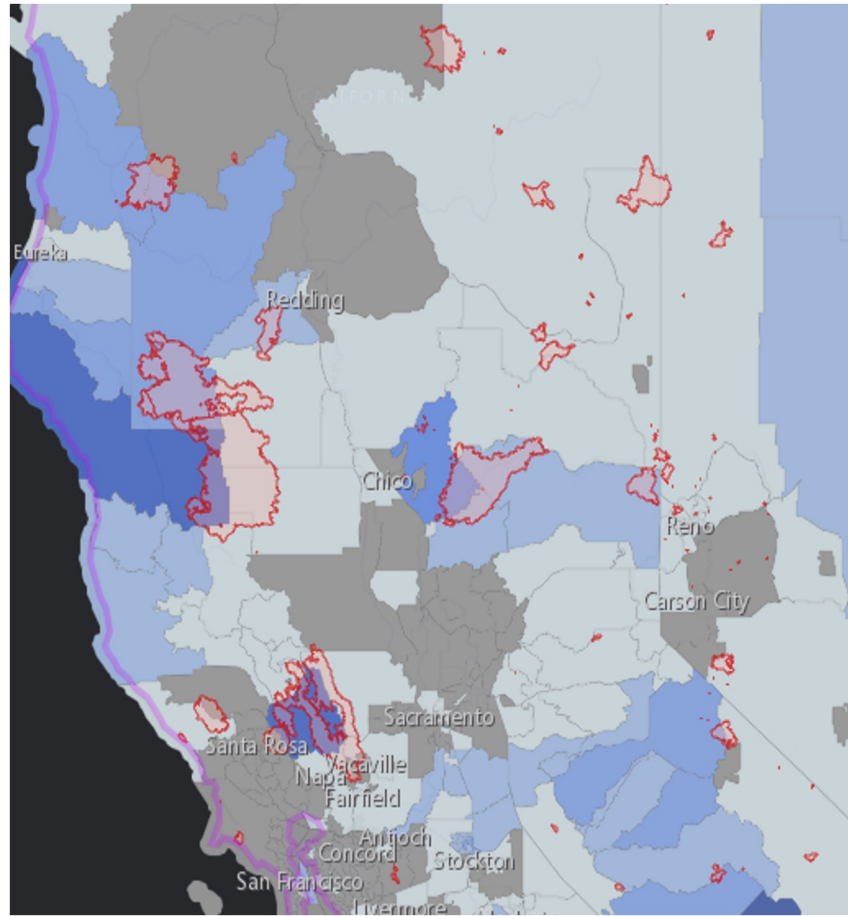


DHS Risk Categorization	
LOW	The growth in new cases through two successive weeks has to be less than 10% each week.
MEDIUM	The ACO is not low risk and the rate of new cases is <100 per 100K population.
HIGH	The ACO is not low risk and the rate of new cases is >=100 per 100K population.

COVID-19 by RCC counties	Total RCC Population	ACO Risk Score			Total ACOs	County Level Growth			Total Counties
		Low	Medium	High		Stable or Decreasing	Moderate	High	
ATL RCC	60,260,086	1	0	41	42	84	126	378	588
CHI RCC	53,393,891	18	6	8	32	260	332	56	648
DAL RCC	55,174,159	6	4	40	50	309	402	217	928
LA RCC	58,359,491	2	10	31	43	62	119	47	228
NY RCC	43,180,814	41	1	0	42	128	22	0	150
PHI RCC	57,871,082	18	6	12	36	179	362	59	600
Total for 7/10	328,239,523	86	27	132	245	1,022	1,363	757	3,142
Total for 7/09	328,239,523	89	25	131	245	1,053	1,376	713	3,142

ENTERPRISE FUSION CENTER

Wildfire Related Support

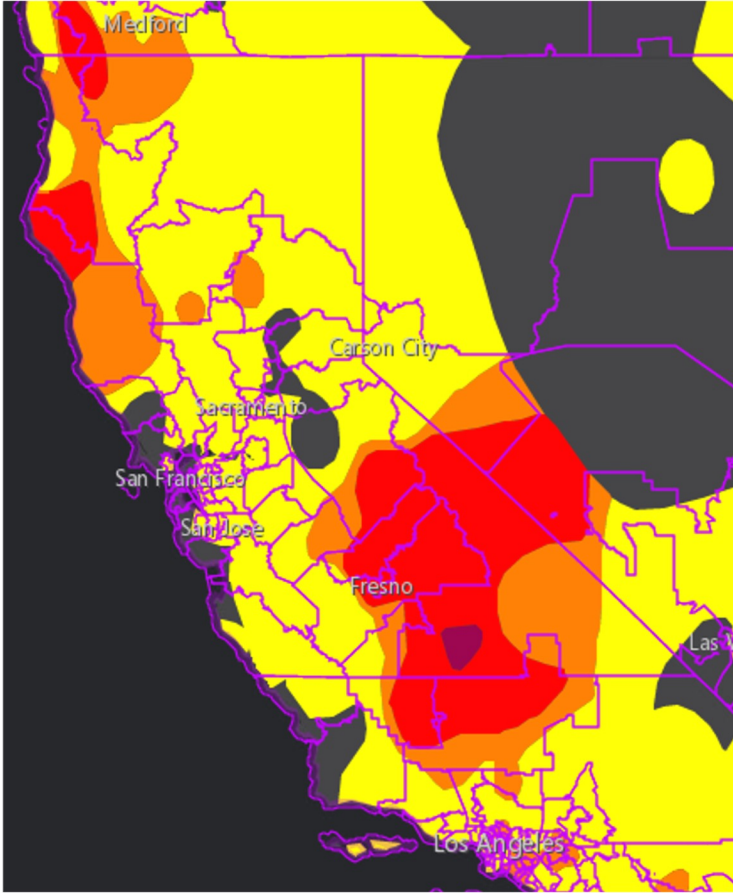


ENTERPRISE FUSION CENTER

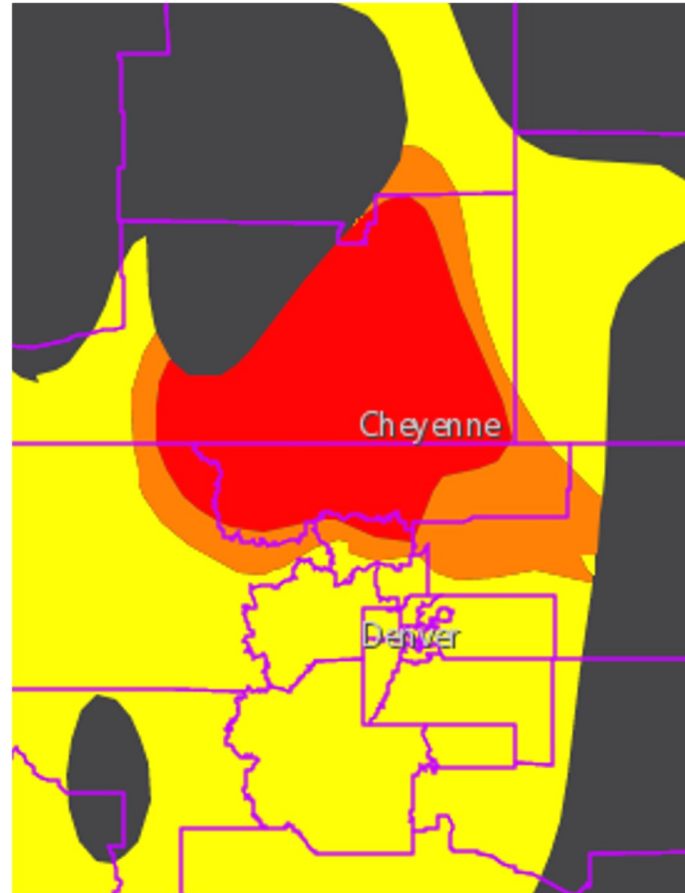
Air Quality Related Support



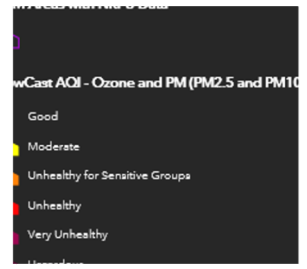
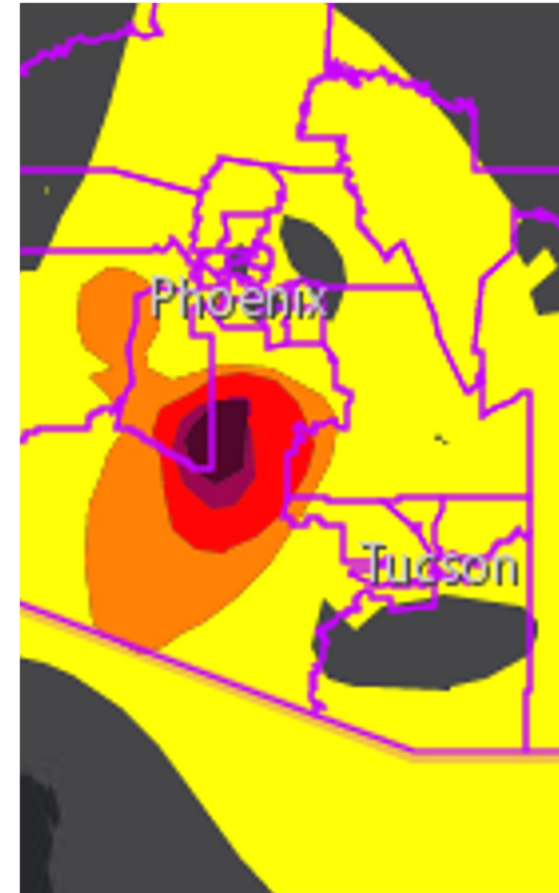
Oregon, California & Nevada



Wyoming & Colorado



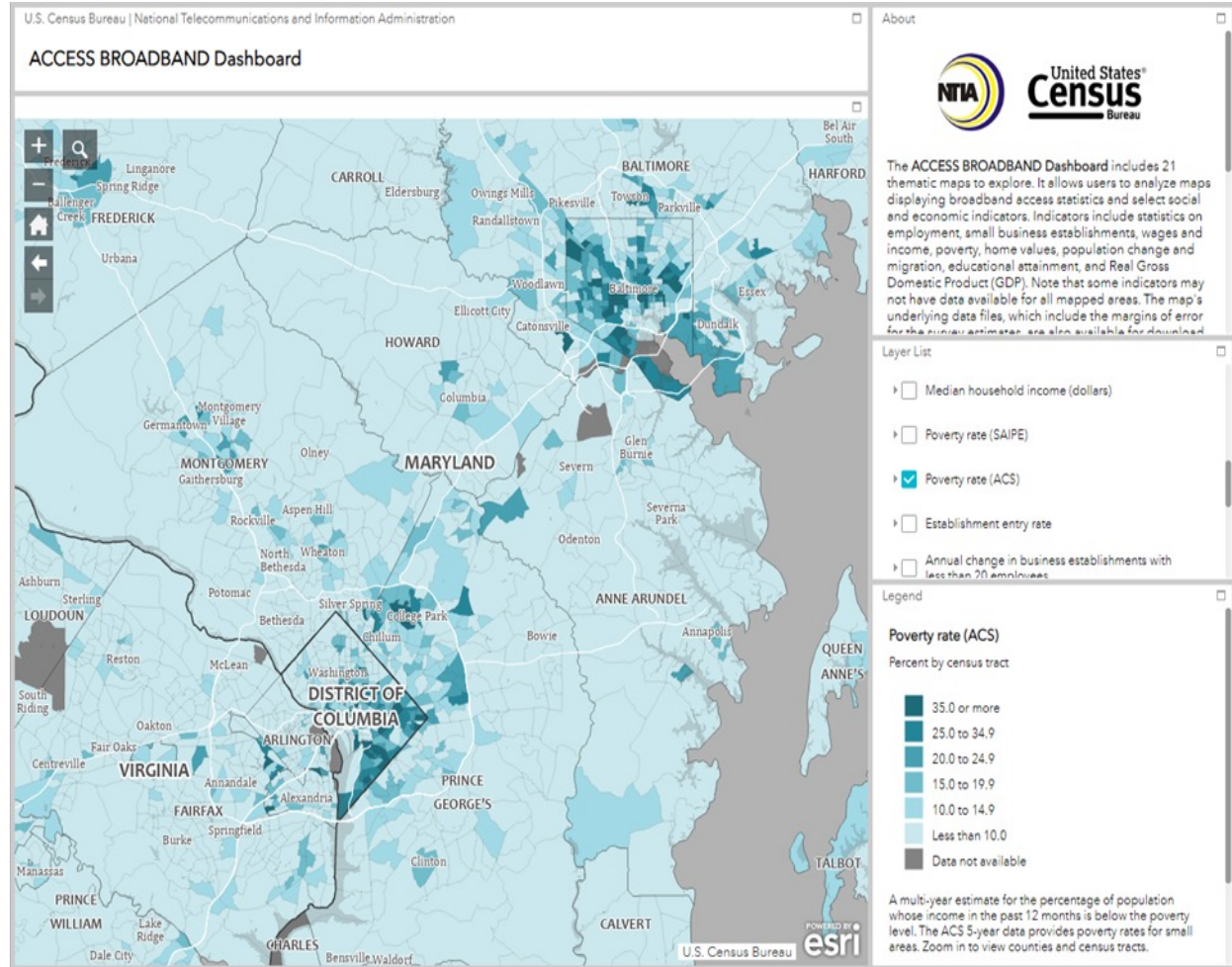
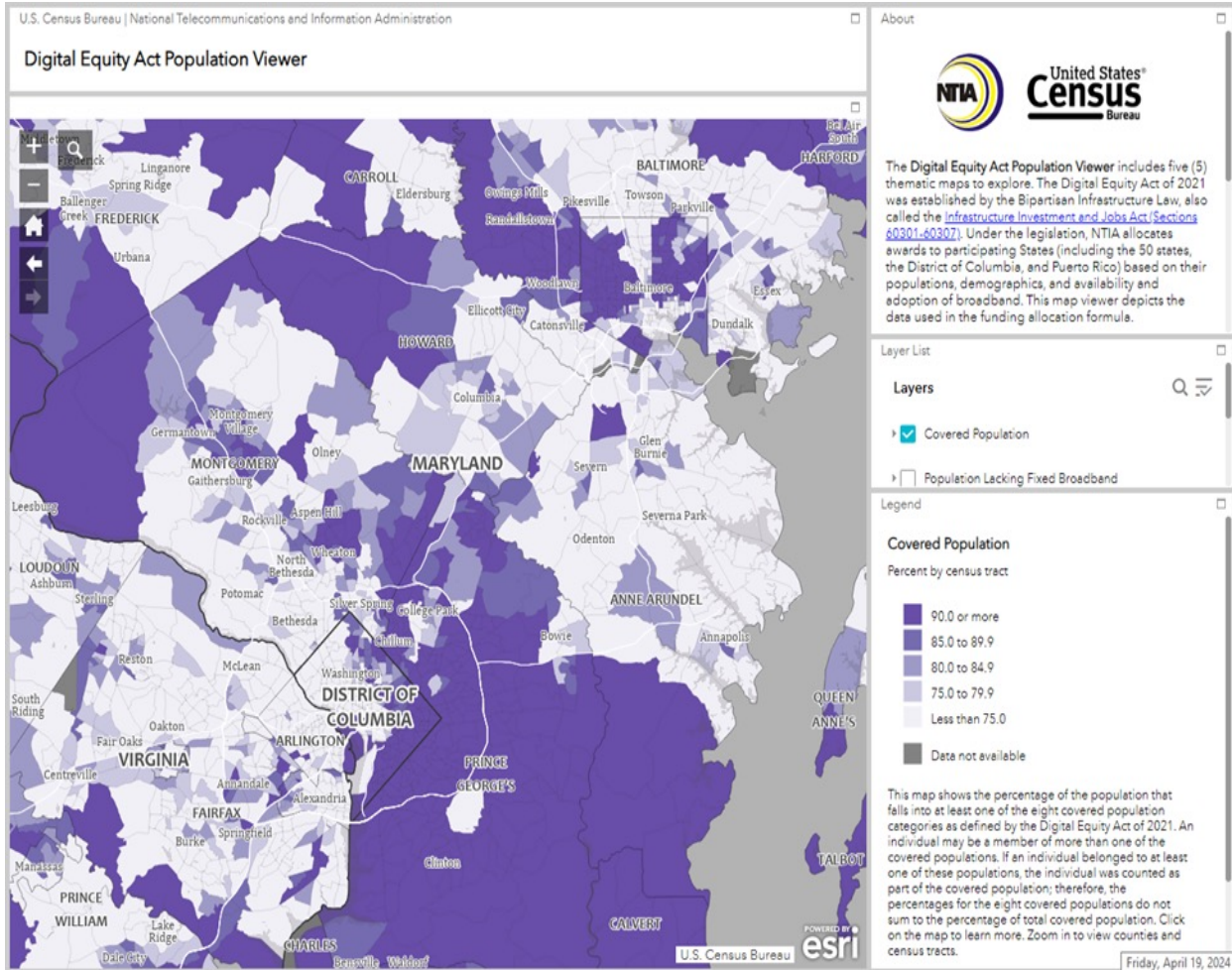
Arizona



The background is a stylized map with a grid of streets and winding paths. Several location pins are scattered across the map. A prominent horizontal banner in shades of green and white is centered on the page, containing the main title.

SUPPORTING NATIONAL POLICIES AND ISSUES

DIGITAL EQUITY



The background features a stylized map with a grid of streets and winding paths. Several location pins are scattered across the map, with some connected by dotted lines. A prominent path is highlighted in a light green color, crossing the central text area. The overall color palette is dominated by various shades of blue and green.

SUPPORTING COMMUNITY RESILIENCE

WHAT IS COMMUNITY RESILIENCE?

MEASURING COMMUNITY RESILIENCE

U.S. Census Bureau

Community Resilience Estimates

Select State:

Select County:



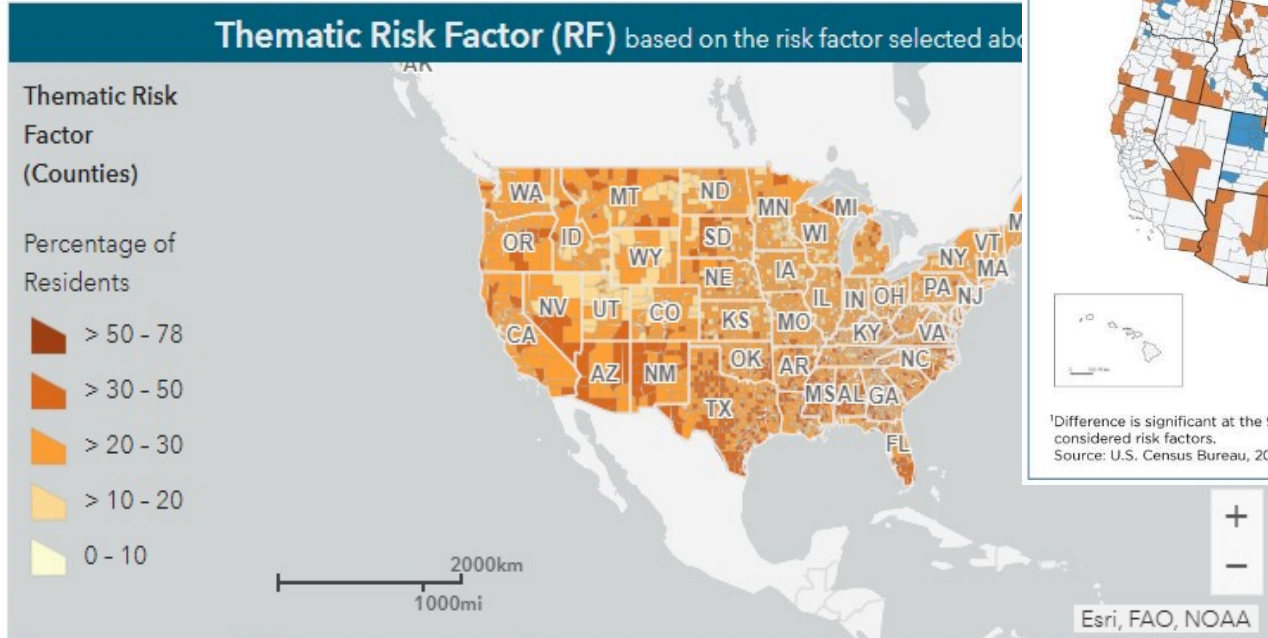
Community resilience is the capacity of individuals and households to absorb, endure, and recover from the health, social, and economic impacts of a disaster such as a hurricane or pandemic.

When disasters occur, recovery depends on the community's ability to withstand the effects of the event. In order to facilitate disaster preparedness, the Census Bureau has developed new small area estimates, identifying communities where resources and information may effectively mitigate the impact of disasters.

Variation in individual and household characteristics are determining factors in the differential impact of a disaster. Some groups are less likely to have the capacity and resources to overcome the obstacles presented during a hazardous event. Resilience estimates can aid stakeholders and public health officials in modeling these differential impacts and developing plans to reduce a disaster's potential effects.

Individual and household characteristics from the 2018 American Community Survey (ACS) were modeled, in combination with publicly-available data from the 2018 National Health Interview Survey (NHIS), to provide tract and county level estimates.

[More information on Census Bureau](#)

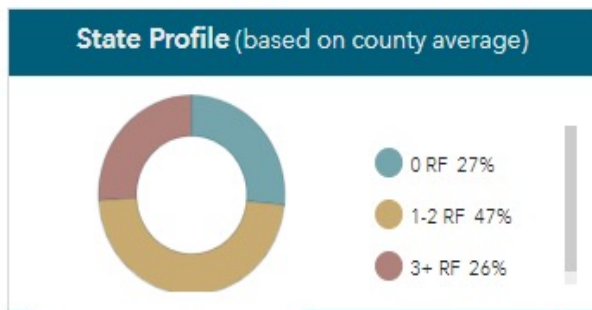


Thematic Risk map

Predominant Risk map

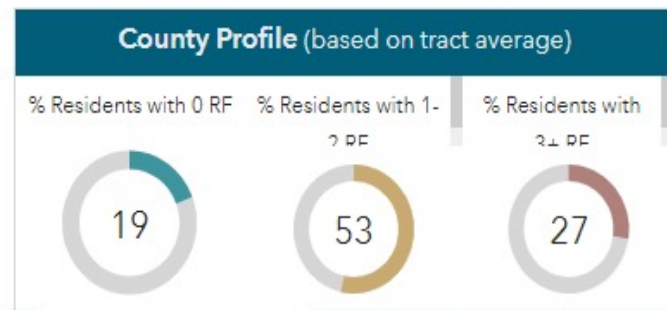
Thematic Risk w/Pop map

COVID-19 Impact Report



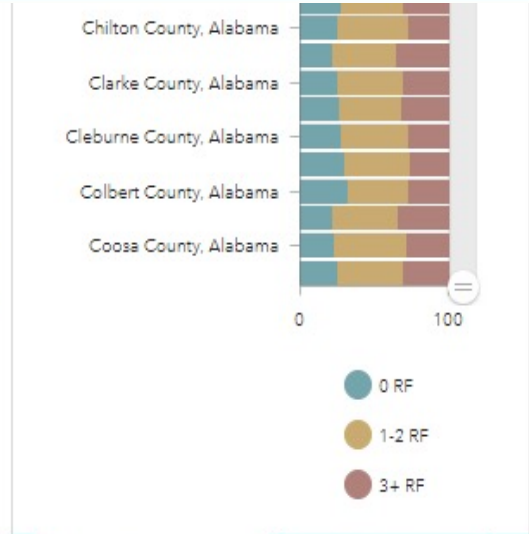
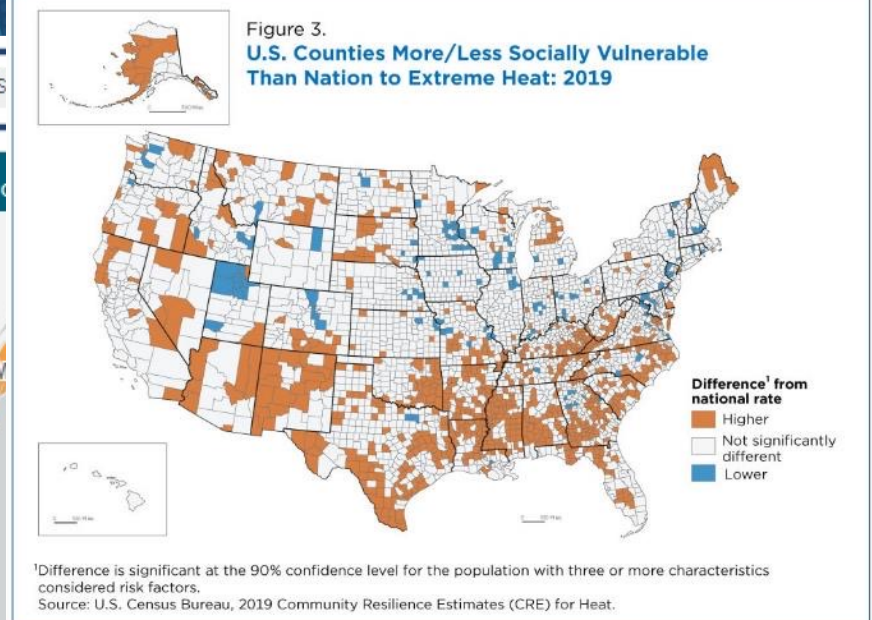
Percentage of Residents

Number of Residents



Percentage of Residents

Number of Residents



County Comparison

Tract Comparison

FRANCIS SCOTT KEY BRIDGE COLLAPSE



ROADMAP

Route Analysis for Disaster Management And Preparedness

Part of the broader Community Resilience Estimates program, this method uses **road network data** to plot driving, walking or other **transportation routes** to assist members of the public and government partners in emergency management.

Transportation routes



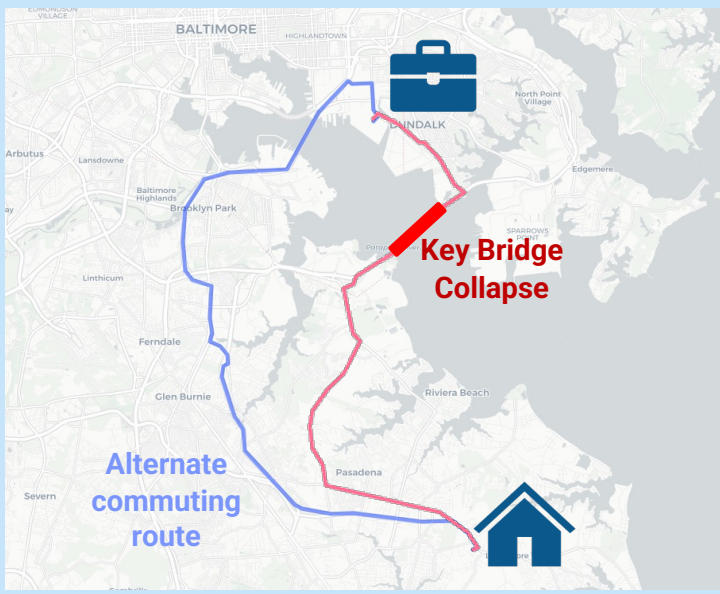
Census data



United States[®]
Census
Bureau

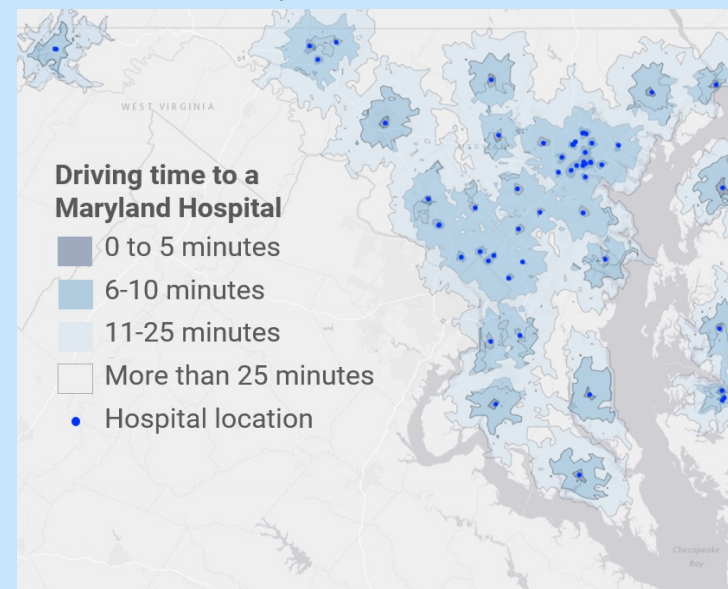
Transportation Routes

Following the collapse of the Key Bridge in Baltimore, analysts identified a subset of American Community Survey respondents who likely drove over the bridge as part of their regular commute to work. This was accomplished by **plotting the likely driving route to work for every car-commuting ACS respondent** who lived or worked in Baltimore city or County. This revealed distinct sociodemographic differences between bridge and non-bridge commuters.



Critical Infrastructure

This method can be used to identify catchment areas for critical infrastructure. In this analysis, shaded areas represent driving times to the nearest hospital in the state of Maryland. The same analysis could be applied to any set of geographic points such as shelters or community cooling centers during heat waves. For disaster route contingency planning, the underlying map data can be transformed to simulate when key road networks are altered.





THANK YOU!

