

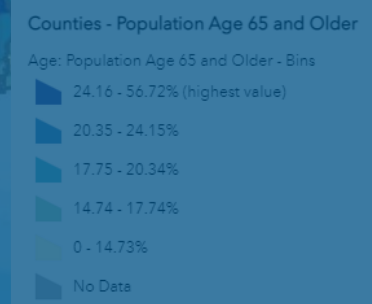
Resilience Analysis and Planning Tool (RAPT)

FEMA-Technical Assistance | 2023

Montana Emergency Management Forum



FEMA



Choose an Indicator*
Disability_Pct

Run

Population Summary of Selected Indicator

10,551

Legend

- Selected Census Tracts
- Nursing Homes
- Mobile Home Parks
- NFHL - Flood Hazard Zones
 - 1% Annual Chance Flood Hazard
 - Regulatory Floodway
 - Special Floodway
 - Area of Undetermined Flood Hazard
 - 0.2% Annual Chance Flood Hazard
 - Future Conditions 1% Annual Chance Flood Hazard
 - Area with Reduced Risk Due to Levee

RAPT helps you VISUALIZE and ANALYZE data for all phases of emergency management.



People and Community



Infrastructure



Hazards, Weather, Risk

- RAPT gives everyone a free, no-login required GIS capability.
- Over 100 pre-loaded GIS layers are easy to toggle on and off.
- Easy to use analysis tools: Incident Analysis, Population Counter, Filter.
- Add Data layers from ArcGIS Online, URLs or local files.
- Print or download results to spreadsheets.
- FEMA's Community Resilience Index and Indicators.

RAPT Community Demographics Data

* County data only; ** County and Tribal only; ^ County and Census Tract only; + Census Tract only



Population Characteristics

- Population without a High School Education
- Population 65 and Older
- Population with a Disability
- Population by Race and Hispanic Origin^

Household Characteristics

- Households without a Vehicle
- Households with Limited English
- Single-Parent Households
- Households without a Smartphone
- Households without Broadband Subscription+

Housing

- Mobile Homes as Percentage of Housing
- Owner-Occupied Housing
- Rental Housing Costs^
- Residential Structures in SHFA with Flood Insurance*



Healthcare

- Number of Hospitals*
- Medical Professional Capacity**
- Population without Health Insurance
- Medicare Recipients with Power-Dependent Devices*

Economic

- Population Below Poverty Level
- Median Household Income
- Unemployed Labor Force
- Unemployed Women Labor Force
- Income Inequality
- Workforce in Predominant Sector



Connection to Community

- Presence of Civic and Social Organizations*
- Population without Religious Affiliation*
- Percentage of Inactive Voters*
- Population Change*



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County and Census Tract Community Resilience Index (CRI) combining 22 indicators.

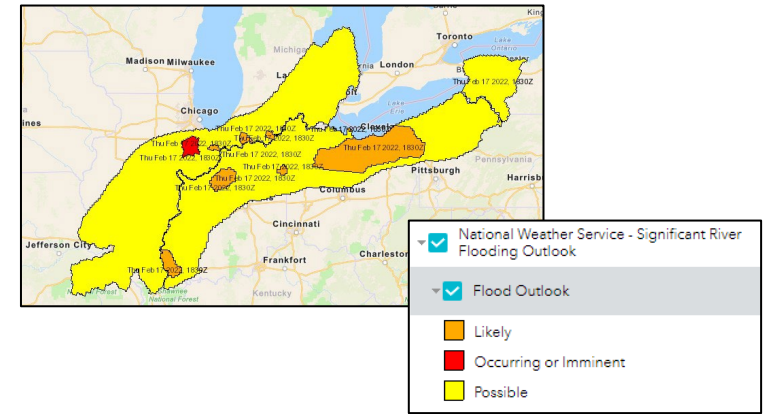
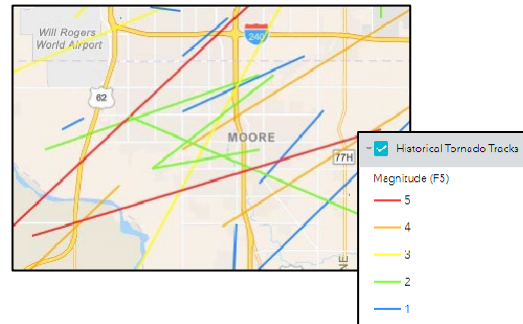
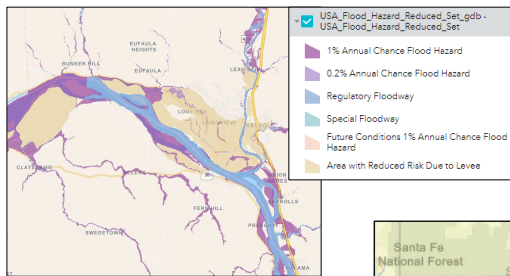
Infrastructure Data: Homeland Infrastructure Foundation-Level Data Open

- Hospitals
- Nursing Homes
- Pharmacies
- Urgent Care Facilities
- Dialysis Centers
- Mobile Home Parks
- Fire Stations
- Local Law Enforcement Locations
- Public Health Departments
- 911 Service Area Boundaries
- SNAP Authorized Retailers
- Places of Worship
- Colleges and Universities
- Private Schools
- Public Schools
- Prison Boundaries
- Power Plants
- Electric Transmission Lines
- Wastewater Treatment Plants
- Solid Waste Landfills
- High-Hazard Dams



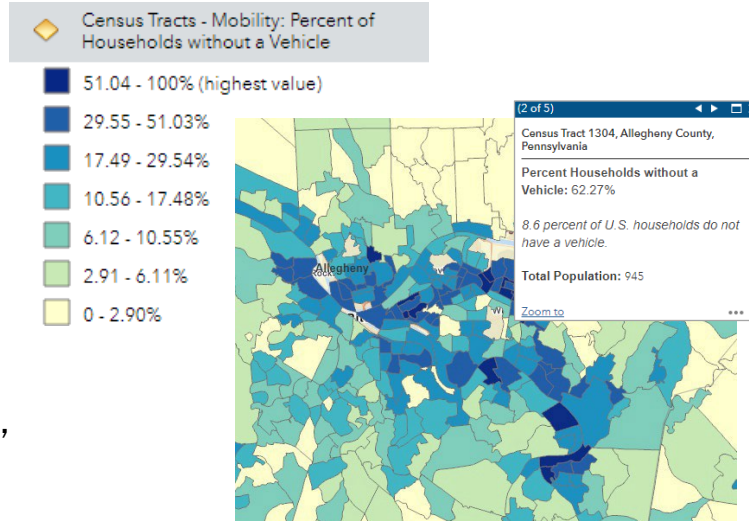
Hazards, Weather and Risk Data

- Live Stream Gauges
- Flood Hazard
- Hurricane Tracks (1990+)
- Historical Tornado Tracks
- Wildfires – Current Incidents (Points)
- Wildfires – Current incidents (Perimeters)
- Seismic Hazard
- National Risk Index Census Tracts
- NOAA Sea Level Rise (4-6 ft.)
- NWS Severe Weather Watches and Warnings
- NWS Severe Weather Outlook
- NWS Atlantic/Caribbean Tropical Cyclones
- NWS Eastern Pacific Tropical Cyclones
- NWS Excessive Rainfall Outlook
- NEXRAD Real-Time Weather Radar

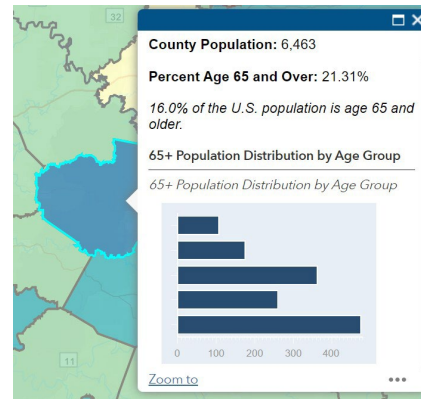


Visualizing Data in RAPT

- **Data Binning:**
 County = 5 bins
 Census Tract = 7 bins
 Tribal = 5 bins
- **Pop-up boxes:**
 Additional information for each data point: population, infrastructure, and hazards



- **Attribute tables:**
 - By map extent
 - By FEMA region, state, county, zip code
 - Select rows



age, disabilities, language, race

Resilience Analysis and Planning Tool (RAPT)

Find address or place

SILVER DOLLAR RESORT A: HILLSBOROUGH, FL

NAME	SILVER DOLLAR RESORT A
UNITS	225
SIZE	LARGE (>100)
ADDRESS	12609 SILVER DOLLAR ROAD
CITY	ODESSA
COUNTY	HILLSBOROUGH
STATE	FL
ZIP	33556
TELEPHONE	(813) 920-4185
TYPE	MOBILE HOME PARK
STATUS	OPEN
NAICS_CODE	531190

County Boundaries, Census-tract Boundaries, Tribal Territory Boundaries, Mobile Home Parks

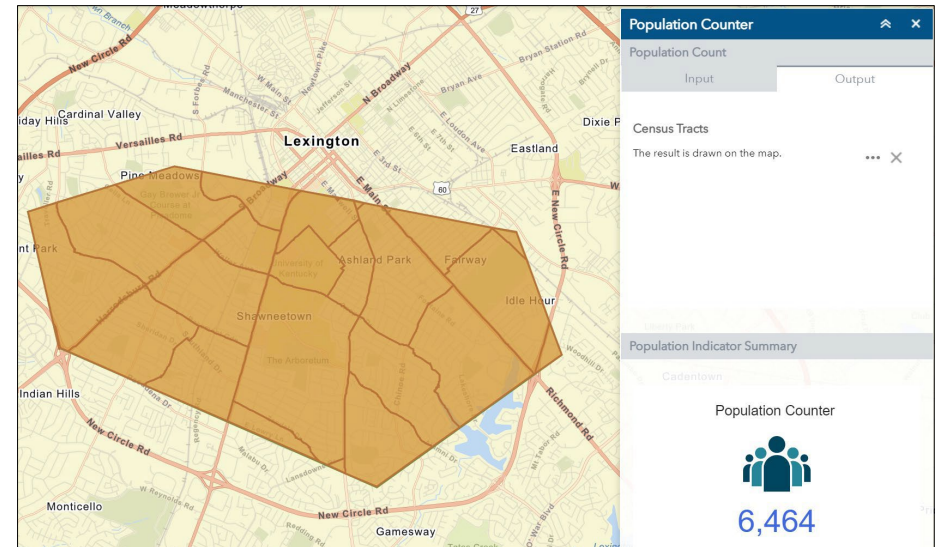
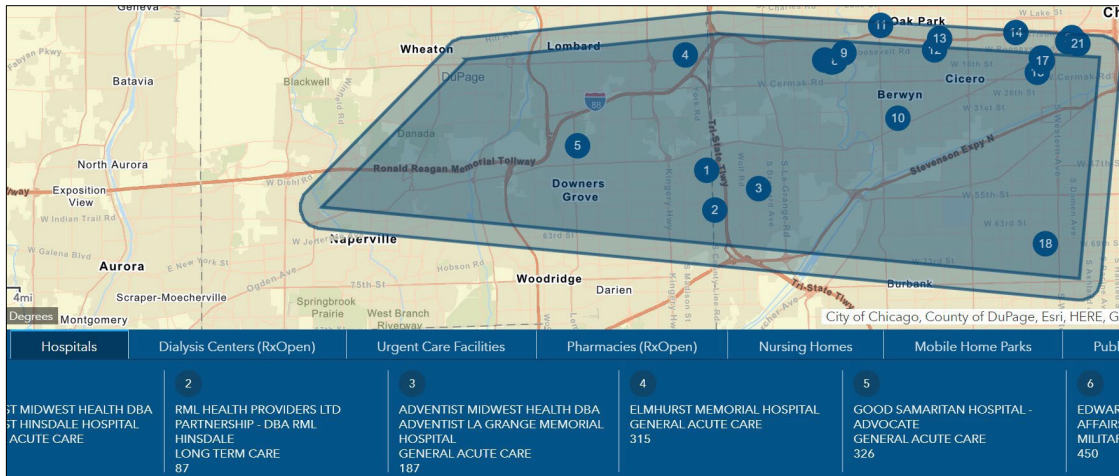
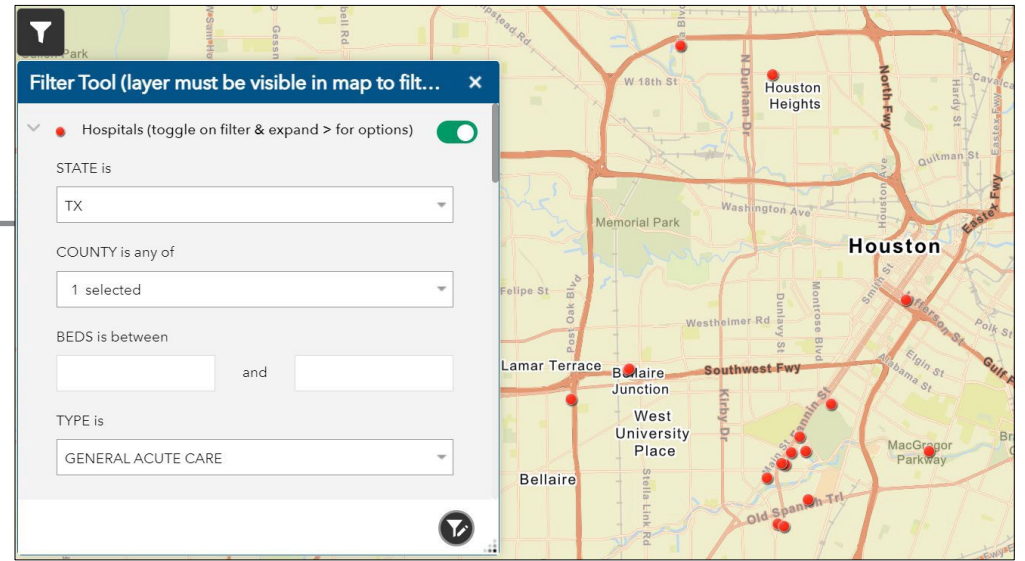
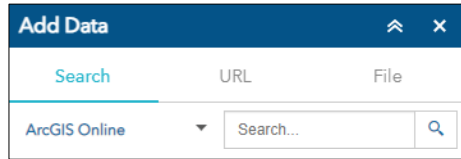
NAME	UNITS	SIZE	ADDRESS	CITY	COUNTY	STATE	ZIP	TELEPHONE	TYPE	STATUS	NAICS_CODE	NAICS_DESC	WEBSITE
GRAND BAY MOBILE HOME ESTATES	138	LARGE (>100)	3300 ALT 19 NORTH	PALM HARBOR	PINELLAS	FL	34683	(727) 784-1231	MOBILE HOME PARK	OPEN	531190	RESIDENTIAL TRAILER PARKS	NOT AVAILABLE
HICKORY POINT MH & RV PARK	999	SMALL (<50)	1181 ANCLOTE ROAD	TARPON SPRINGS	PINELLAS	FL	34689	(727) 937-7357	RECREATIONAL VEHICLE PARK	OPEN	721211	RECREATIONAL VEHICLE PARKS	NOT AVAILABLE
COUNTRYSIDE ESTATES	103	MEDIUM (51-100)	27466 US 19 N, LOT 1	CLEARWATER	PINELLAS	FL	33761	(727) 796-8934	MOBILE HOME PARK	OPEN	531190	RESIDENTIAL TRAILER PARKS	NOT AVAILABLE
SOUTHWIND MHP	213	LARGE (>100)	795 CR 1	PALM HARBOR	PINELLAS	FL	34683	(727) 786-6558	MOBILE HOME PARK	OPEN	531190	MOBILE (MANUFACTURED) HOME PARKS	NOT AVAILABLE
THE MEADOWS	329	LARGE (>100)	505 ANCLOTE PARKWAY	TARPON SPRINGS	PASCO	FL	34689	(727) 938-3788	MOBILE HOME PARK	OPEN	531190	MOBILE (MANUFACTURED) HOME PARKS	NOT AVAILABLE



Analyzing Data in RAPT

Analysis Tools

- Add Data
- Filter Tool
- Population Counter
- Incident Analysis Tool



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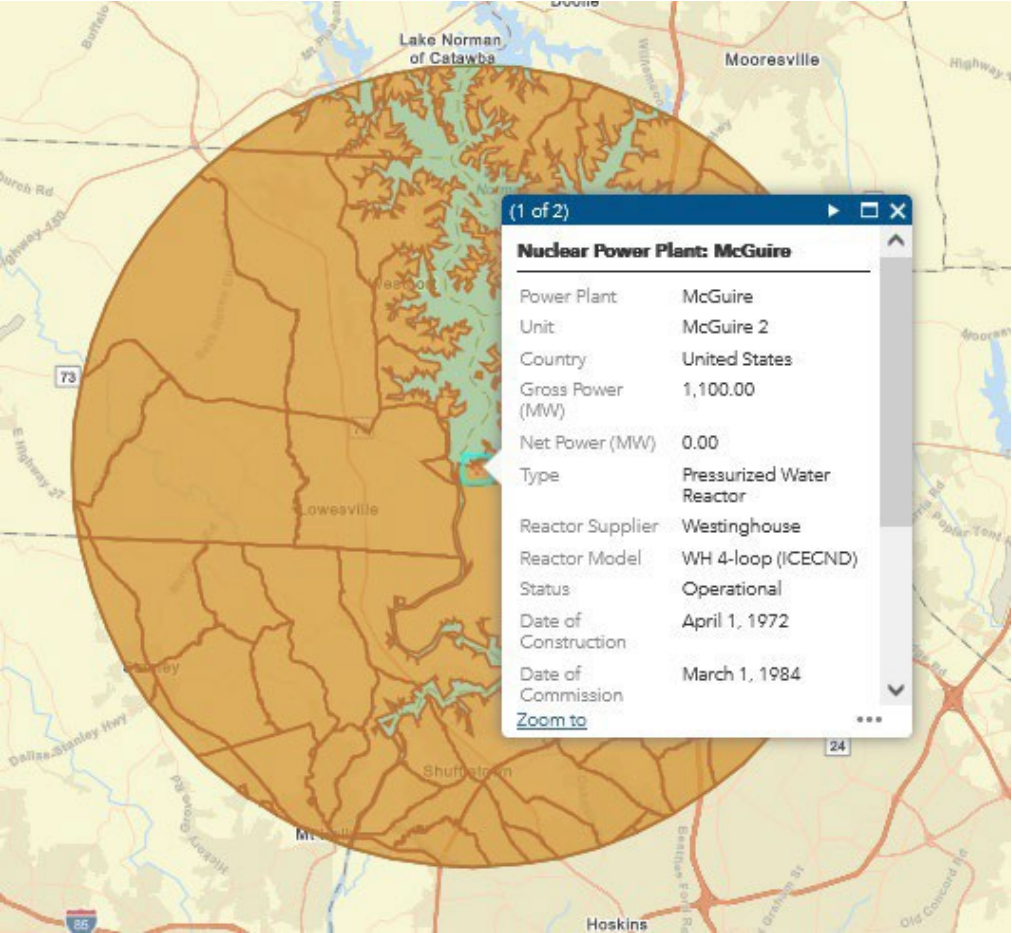
Add Data and Incident Analysis

Incident	Hospitals	Urgent Care Facilities	Pharmacies (Rx/Open)	Nursing Homes	Mobile Home Parks
1 5.28 Miles (approximate)	2 9.66 Miles (approximate)	3 12.56 Miles (approximate)	4 14.26 Miles (approximate)		
NOVANT HEALTH HUNTERSVILLE MEDICAL CENTER 10030 GLEAD RD HUNTERSVILLE	LAKE NORMAN REGIONAL MEDICAL CENTER 171 FAIRVIEW RD, PO BOX 3250 MOORESVILLE	CAROLINAS REHABILITATION MT. HOLLY 275 BEATTY DRIVE BELMONT	CAROLINAS CONTINUECARE HOSPITAL AT UNIVERSITY 6800 NORTH TRYON ST, 4TH FLOOR		



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Population Counter



Population Counter

Population Count

Input Output

Select and Count Specific Indicators*

Choose an Indicator to Count*

Total Population

Run

Population Indicator Summary

Population Counter

245,062

Population Counter

Population Count

Input Output

Select and Count Specific Indicators*

Choose an Indicator to Count*

Population with a Disability

Run

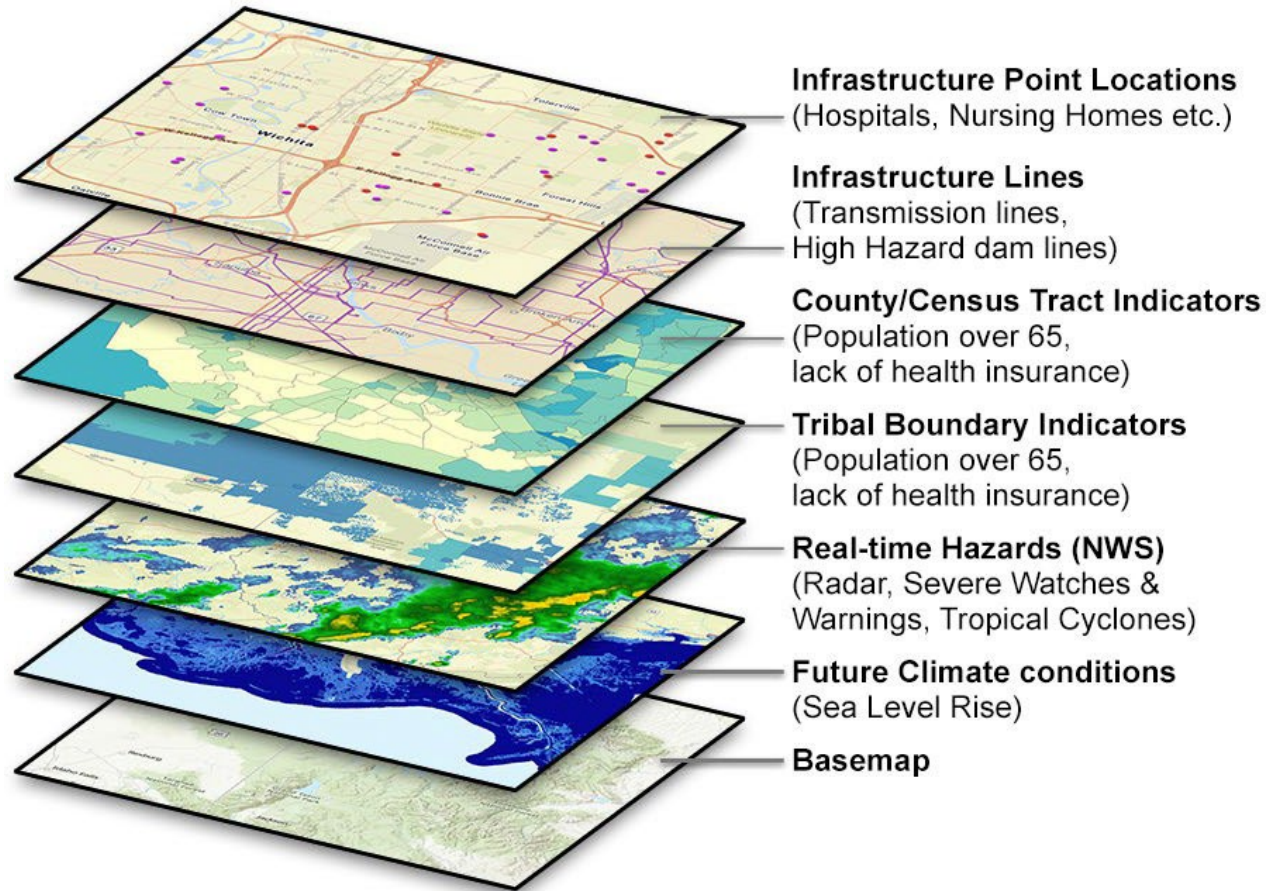
Population Indicator Summary

Population Counter

21,876

- Total Population
- Population without HS Diploma
- Population Unemployed
- Population with a Disability
- HH with Limited English
- HH without a Vehicle
- Population Age 65 and Over
- Population without Health Insurance
- Single Parent HH
- HH without Smartphone
- Population Living Below Poverty Level
- Population Living in Mobile Homes

Holistic Analysis of RAPT Data



RAPT combines multiple data sets and analysis tools to support situational awareness for all phases of emergency management.



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RAPT Resource Center

- RAPT overview
- Use Cases
- Indicator Analysis
- Data Sources
- User Guide and FAQs
- Instructional video
- [Contact us email: FEMA-TARequest@fema.dhs.gov](mailto:FEMA-TARequest@fema.dhs.gov)

Send Us Your Use Cases!!

A screenshot of the RAPT Resource Center website. The header includes a navigation menu with links for RAPT Overview, Use Cases, Indicator Analysis, Data Sources, User Guides & FAQs, Connect & Share, and About. The main content area features the title "Resilience Analysis & Planning Tool (RAPT)" and a sub-header "RAPT gives everyone easy access to important community data and analysis tools". A "Take Me to RAPT!" link is provided. Below this is a "Welcome to the RAPT Resource Center" section with introductory text and a list of features. To the right, a diagram shows the layers of the RAPT tool, including Infrastructure Point Locations, Infrastructure Lines, County/Census Tract Indicators, Tribal Boundary Indicators, Real-time Hazards (NWS), Future Climate conditions, and a Basemap. The FEMA logo is visible in the bottom right corner of the screenshot.

Resilience Analysis & Planning Tool (RAPT)

RAPT gives *everyone* easy access to important community data and analysis tools

[Take Me to RAPT!](#)

Welcome to the RAPT Resource Center

The RAPT Resource Center provides all the information you need to understand and use RAPT effectively.

With over 100 pre-loaded data layers and easy to use analysis tools, RAPT helps everyone understand and support their community before, during and after a disaster.

Think of RAPT as a GIS analyst in your pocket!

RAPT helps you:

- VISUALIZE and ANALYZE data for all phases of emergency management.
- Use data to support critical emergency management decisions.
- Support grant applications and presentations with key data that has a visual impact.
- Tailor outreach strategies for your community.
- Understand the population and infrastructure at risk for forecasted extreme weather.
- Inform capability targets for THIRA/SPR, exercises, and Emergency Operations Plans.
- Prioritize areas for evacuation, with estimates of nursing home and hospital beds.
- Identify at-risk infrastructure assets.
- Determine locations for Disaster Field Offices to best serve the community.
- Identify food deserts and areas in needs of critical lifeline support.
- And more...

Resilience Analysis and Planning Tool (RAPT)

www.fema.gov/rapt

- Infrastructure Point Locations (Hospitals, Nursing Homes etc.)
- Infrastructure Lines (Transmission lines, High Hazard dam lines)
- County/Census Tract Indicators (Population over 65, lack of health insurance)
- Tribal Boundary Indicators (Population over 65, lack of health insurance)
- Real-time Hazards (NWS) (Radar, Severe Watches & Warnings, Tropical Cyclones)
- Future Climate conditions (Sea Level Rise)
- Basemap

FEMA Geospatial Resource Center

FEMA Geospatial Resource Center Hazard Pages Resources About

FEMA Geospatial Resource Center


FEMA GIS supports the emergency management community with world-class geospatial information, services, and technologies to prepare for, protect against, respond to, recover from and mitigate against all hazards.


Jump to: [USA Structures Data](#) | [Indices](#) | [Data Catalog](#) | [About](#) | [Join the Community](#)


During activations we will use the [Coordination Call page](#) to coordinate GIS response activities.


View incident-specific resources on the ["Incident Pages and Data"](#) page.


Explore Hazard Specific Resources



Earthquakes



Flooding



Hurricanes


Pandemic



Radiological


Tornadoes



Wildfires

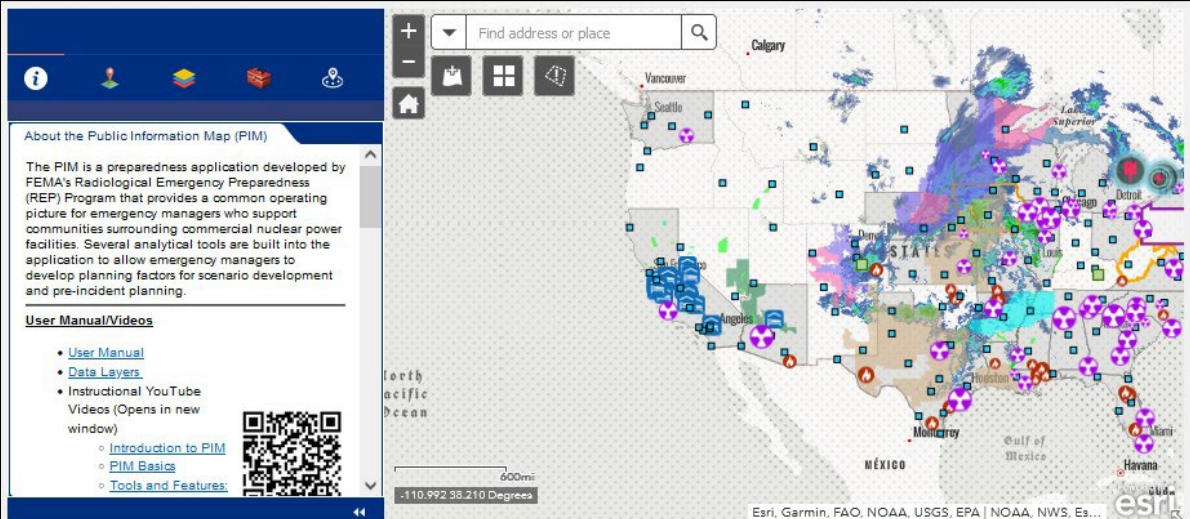

Winter Weather

Hurricane Warning:

 **0**

Current Fire Warnings:

 **0**



About the Public Information Map (PIM)

The PIM is a preparedness application developed by FEMA's Radiological Emergency Preparedness (REP) Program that provides a common operating picture for emergency managers who support communities surrounding commercial nuclear power facilities. Several analytical tools are built into the application to allow emergency managers to develop planning factors for scenario development and pre-incident planning.

User Manual/Videos

- [User Manual](#)
- [Data Layers](#)
- [Instructional YouTube Videos](#) (Opens in new window)
 - [Introduction to PIM](#)
 - [PIM Basics](#)
 - [Tools and Features](#)

Radiological Emergency Preparedness (REP) National Public Information Map

An open source national interactive mapping application that connects and informs users to State, Local, Tribal Territorial & Federal radiological preparedness resources (FEMA Public ArcGIS Online) overlay with hazard, demographic & specific REP information. The REPP PIM consolidates information and data from numerous public resources into one common picture and presents as a preparedness tool that can help strengthen our future community planning and decisions in emergency management.

RAPT Resilience Analysis and Planning Tool →

The Resilience Analysis and Planning Tool (RAPT) is a free GIS web map that allows federal, state, local, tribal and territorial emergency managers and other community leaders to examine the interplay of census data, infrastructure locations, and hazards, including real-time weather forecasts, historic disasters and estimated annualized frequency of hazard risk.

View the [Community Resilience Indicator Analysis \(CRIA\)](#), the underlying Indicator Analysis in RAPT.



Questions & Discussion

benjamin.rance@fema.dhs.gov

FEMA-TARrequest@fema.dhs.gov

fema.gov/rapt