RAPT Data Layers

Table 1 lists the data layers available in the Resilience Analysis and Planning Tool (RAPT), accessible at fema.gov/RAPT. Table 2–Table 5 on the following pages provide the data sources for each data layer category.

Table 1: Data Layers Available in RAPT

Population-Focused Indicators	Community-Focused Indicators	Infrastructure Data	Hazard Data	
CRIA Commonly Used Indicators	CRIA Commonly Used Indicators		Historic / Real-time	Estimated Frequency[d]
% Population without Health Insurance[a,b]	Connection to Civic/ Social Organizations	Nursing Homes	Historical Tornado Tracks	Coastal Flooding
% Population Unemployed[a,b]	Hospital Capacity	Hospitals	Flood Hazard Zones	Cold Wave
% Population without a High School Education[a,b]	Medical Professional Capacity	Urgent Care Facilities	Historical Hurricane Tracks	Drought
% Population with a Disability[a,b]	Affiliation with a Religion	Public Health Depts.		Earthquake
% Population without Access to a Vehicle[a,b]	Presence of Mobile Homes[a,b]	Local Law Enforcement		Hail
% Population with Home Ownership[a,b]	Public School Capacity	Emergency Medical Services (EMS)	NOAA Real-time Weather Layers	Heatwave
% Population over 65[a,b]	Population Change	Fire Stations	Watches/ Warnings	Hurricane
% Population Single-Parent Households[a,b]	Hotel/Motel Capacity	911 Service Area Boundaries	Hurricane Outlook: Atlantic and Pacific	Ice Storm
% Population with Limited English Proficiency[a,b]	Rental Property Capacity[a,b]	Mobile Home Parks	Severe Weather Outlook	Landslide
Median Household Income[a,b]		Places of Worship	Excessive Rainfall Outlook	Lightning
Gini Index: Income Inequality[b]		Public Schools	River Flood Outlook	Riverine Flooding
		Private Schools		Strong Wind
CRIA Aggregate Resilience Indicator[c]		Colleges and Universities		Tornado
		Prison Boundaries		Wildfire
		Transmission Lines		Winter Weather
		Electric Power Plants		
Other Population Indicators	Other Community Info	Solid Waste Landfills		
Households without Internet Subscriptions	National Flood Insurance Program Policy Penetration Rate (Residential)	Wastewater Treatment Plants		
At-risk electricity-dependent Medicare beneficiaries		Pharmacies (RX Open)		
		Dialysis Centers		
		High-Hazard Dams		

[a] Both U.S. Census Bureau county and census tract data available. [b] Tribal territory population data available.
[c] Community Resilience Indicator Analysis Report [d] Drawn from FEMA National Risk Index analysis.

Table 2: Population-Focused Indicator Data Sources

Population Data	Data Source
Lack of High School Diploma	U.S. Census American Community Survey (ACS) 2015–2019 five-year estimates, Table S1501
Unemployment Rate	ACS 2015–2019 five-year estimates, Table S2301
Disability	ACS 2015–2019 five-year estimates, Table S1810
Limited English Language Proficiency	ACS 2015–2019 five-year estimates, Table S1602
Home Ownership	ACS 2015–2019 five-year estimates, Table DP04
Lack of a Vehicle	ACS 2015–2019 five-year estimates, Table B08201
Age over 65	ACS 2015–2019 five-year estimates, Table S0101
Household Income	ACS 2015–2019 five-year estimates, Table S1903
Income Inequality	ACS 2015–2019 five-year estimates, Table B19083
Health Insurance	ACS 2015–2019 five-year estimates, Table S2701
Single-Parent Households	ACS 2015–2019 five-year estimates, Table DP02
Households without Internet Subscription	ACS 2015–2019 five-year estimates, Table S2801
EmPower at-risk Electricity Dependent Medicare Beneficiaries	https://empowermap.hhs.gov/
Tribal Populations[1]	ACS 2015–2019 five-year estimates, Table DP02

Table 3: Community-Focused Indicator Data Sources

Community Data	Data Source
Connection to Civic/Social Organizations	U.S. Census Bureau, 2017 County Business Patterns, Table 00A1, NAICS Code 8134
Hospital Capacity	U.S. Census Bureau, 2017 County Business Patterns, Table 00A1, NAICS code 622110
Medical Professional Capacity	ACS 2015–2019 five-year estimates, Table S2401
Affiliation with a Religion	Association of Statisticians of American Religious Bodies. 2010 U.S. Religion Census. http://www.usreligioncensus.org/index.php
Presence of Mobile Homes	ACS 2015–2019 five-year estimates, Table DP04
Public School Capacity	U.S. Department of Education. National Center for Education Statistics. Elementary/Secondary Information System. 2018-2019 school year. https://nces.ed.gov/ccd/elsi/
Population Change	U.S. Census Bureau, Population Division. Table: Population, Population Change, and Estimated Components of Population Change: (CO-EST2019-alldata): April 1, 2010, to July 1, 2019 https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-total.html#par_textimage
Hotel/Motel Capacity	U.S. Census Bureau, 2017 County Business Patterns, Table 00A1, NAICS Codes 72111 and 721120
Rental Property Capacity	ACS 2015–2019 five-year estimates, Table DP04
NFIP Policy Penetration Rate	National Flood Insurance Program Data on residential structures and NFIP contracts by county and within the Special Flood Hazard Area.

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[1] Tribal population data are based on American Indian and Alaska Native geographic areas. A glossary of tribal areas can be found at the census tool My Tribal Area available at https://www.census.gov/tribal/tribal_glossary.php.

Table 4: Infrastructure Data Sources

Infrastructure	Publication date	Data Source[2]
Nursing Homes	July 2020	https://services1.arcgis.com/Hp6G80Pky0om7QvQ/arcgis/rest/services/NursingHomes/FeatureServer/0
Hospitals	Dec. 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/hospitals
Urgent Care Facilities	April 2018	https://hifld-geoplatform.opendata.arcgis.com/datasets/urgent-care-facilities
Public Health Departments	Dec. 2019	https://hifld-geoplatform.opendata.arcgis.com/datasets/public-health-departments
Fire Stations	Sept. 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/fire-stations
Emergency Medical Services	July 2019	https://hifld-geoplatform.opendata.arcgis.com/datasets/emergency-medical-service-ems-stations
Local Law Enforcement	Feb. 2021	https://hifld-geoplatform.opendata.arcgis.com/datasets/local-law-enforcement-locations
911 Service Area Boundaries	June 2017	https://hifld-geoplatform.opendata.arcgis.com/datasets/psap-911-service-area-boundaries
Mobile Home Parks	Sept. 2018	https://hifld-geoplatform.opendata.arcgis.com/datasets/mobile-home-parks
Places of Worship	July 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/all-places-of-worship
Public Schools	Aug. 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/public-schools
Private Schools	Nov. 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/private-schools
Colleges/ Universities	Sept. 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/colleges-and-universities
Prison Boundaries	July 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/prison-boundaries
Transmission Lines	Nov. 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/electric-power-transmission-lines
Electric Power Plants	July 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/power-plants
Solid Waste Landfill Facilities	July 2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/solid-waste-landfill-facilities
Wastewater Treatment	Dynamically updated	https://hifld-geoplatform.opendata.arcgis.com/datasets/environmental-protection-agency-epa-facility-registry-service-frs-wastewater-treatment-plants[3]

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[2] Most RAPT infrastructure datapoints are drawn from the Homeland Infrastructure Foundation-Level Data (HIFLD) Open data portal. HIFLD contains national foundation-level geospatial critical infrastructure data in the public domain at https://hifld-geoplatform.opendata.arcgis.com/

[3] This GIS dataset is based on the Environmental Protection Agency's Facility Registry Service and National Pollutant Discharge Elimination System, along with Clean Watersheds Needs Survey and other data sources.

Infrastructure	Publication date	Data Source[2]
Pharmacies	Dynamically updated	www.healthcareready.org/rxopen[4]
Dialysis Centers	5/29/2020	https://hifld-geoplatform.opendata.arcgis.com/datasets/kidney-dialysis-centers
High-Hazard Dams	7/5/2017	https://services1.arcgis.com/Hp6G80Pky0om7QvQ/ArcGIS/rest/services/Dam_Lines/FeatureServer (filtered for High Hazard)

Table 5: Hazard Data Sources: Historic / Real-time

Hazard Data	Data Source
Flood Hazard Zones	National Flood Hazard Layer: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd
Tornado	https://www.spc.noaa.gov/gis/svrgis/
Seismic Zones	https://www.usgs.gov/natural-hazards/earthquake-hazards/science/2018-united-states-lower-48-seismic-hazard-long-term?qt-science_center_objects=0#qt-science_center_objects
Tropical Storm	https://www.spc.noaa.gov/gis/svrgis/
Wildfire	https://apps.fs.usda.gov/arcx/rest/services/RDW_Wildfire/RMRS_WildfireHazardPotential_2018/MapServer
Watches and Warnings	https://idpgis.ncep.noaa.gov/arcgis/rest/services/NWS_Forecasts_Guidance_Warnings/watch_warn_adv/MapServer
Hurricane Outlook: Atlantic	https://idpgis.ncep.noaa.gov/arcgis/rest/services/NWS_Forecasts_Guidance_Warnings/NHC_Atl_trop_cyclones_active/MapServer
Severe Weather Outlook	https://idpgis.ncep.noaa.gov/arcgis/rest/services/NWS_Forecasts_Guidance_Warnings/SPC_wx_outlks/MapServer
Excessive Rainfall Outlook	https://idpgis.ncep.noaa.gov/arcgis/rest/services/NWS_Forecasts_Guidance_Warnings/wpc_precip_hazards/MapServer
River Flood Outlook	https://idpgis.ncep.noaa.gov/arcgis/rest/services/NWS_Forecasts_Guidance_Warnings/sig_riv_fld_outlk/MapServer

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[4] Healthcare Ready supports the Rx Open Platform which provides information on the operating status of pharmacies. Healthcare Ready is a 501c3. More information is available at https://healthcareready.org/

Table 6: Hazard Data Sources: Estimated Frequency (FEMA National Risk Index analysis)

Hazard	Data Source
Coastal Flooding	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Cold Wave	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Drought	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Earthquake	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Hail	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Heatwave	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Hurricane	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Ice Storm	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Landslide	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Riverine Flooding	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Strong Wind	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Tornado	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Wildfire	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf
Winter Weather	https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf