

Hawai‘i – Hurricane ESF-6 playbook

Data as of 2026-10-27

County: Hawai‘i · Hazard: Hurricane

Planning aid. Supports, does not replace, county emergency plans. Not an official shelter list.

1. Summary

Calculated by open code from public data · see Sources (section 8)

People in the risk area 202,163	May need a public shelter (likely) 6,065	May need a public shelter (low – high) 4,043 – 10,108
Speak English less than well (C) 5,371	Use power-dependent medical equipment (estimate) (M) 1,450	People with a disability (I) 30,614
Age 65 and older (I) 44,910	People in households without a car (T) 9,876	Known 2026 shelter sites usable for this hazard 10

Source: CDC/ATSDR Social Vulnerability Index 2022 (ACS 2018–2022 estimates), HHS emPOWER, FEMA National Risk Index v1.20; shelter rates: section 8.

Share of people in the risk area who may need a public shelter: low 2%, likely 3%, high 5%. One person can be counted in more than one need. Page 2 explains how to read these numbers.

2. Scope: county total vs. one community

The county total is an upper bound. It counts every Census area in the county as hit at the same time. Real events usually hit fewer communities.

Largest single community (the Census areas with the most people who may need a shelter)

Hurricanes affect the whole county, so these are simply the most populous at-risk Census areas.

Community (Census area)	People in the risk area	May need a public shelter (low – likely – high)	Speak English less than well	Use power-dependent medical equipment (estimate)	People with a disability	Age 65 and older	People in households without a car
Hawaiian Paradise Park Census area 210.14	8,135	163 – 244 – 407	260	49	834	1,504	0
Hōnaunau-Nāpō‘opo‘o Census area 213	7,384	148 – 222 – 369	176	66	777	2,042	170
Hilo Census area 208.02	7,010	140 – 210 – 350	50	64	1,087	1,974	358

Source: people and needs – CDC/ATSDR Social Vulnerability Index 2022 (ACS 2018–2022 estimates), HHS emPOWER and FEMA National Risk Index v1.20; community names – 2020 Census blocks and places, spellings from USGS GNIS.

To plan for one community, use the first row.

How to read this playbook

Example row

Community (Census area)	People in the risk area	May need a public shelter (low – likely – high)
Hawaiian Paradise Park Census area 210.14	8,135	163 – 244 – 407

Read it as: about 8,135 people live in the risk area of Hawaiian Paradise Park. If this hazard hits, between 163 and 407 of them may need a public shelter; 244 is the likely number.

Census area

A neighborhood-sized area the U.S. Census uses, usually 1,200–8,000 people. The number (for example "Census area 308") is its Census ID. Each area is named after the Census place where most of its people live. "near" means no one in the area lives inside a named place; "rural near" means most people live outside named places.

Low – likely – high

The share of people in the risk area who may go to a public shelter: low 2%, likely 3%, high 5%. Where the rates come from: South Carolina Emergency Management Division hurricane shelter planning factors (2%, 3%, 5%).

Who has access and functional needs (CMIST)

- **C – Communication:** people who speak English less than well; they may need interpreters and translated messages.
- **M – Medical:** people who use power-dependent medical equipment (an estimate from HHS emPOWER).
- **I – Independence:** people with a disability and people age 65 and older.
- **S – Safety and support:** children and people living in group quarters (in the needs table).
- **T – Transportation:** people in households without a car.

County total vs. one community

The county total counts every Census area in the county as hit at the same time, so it is an upper bound. Use the "Largest single community" table to plan for an event that hits one community.

Map

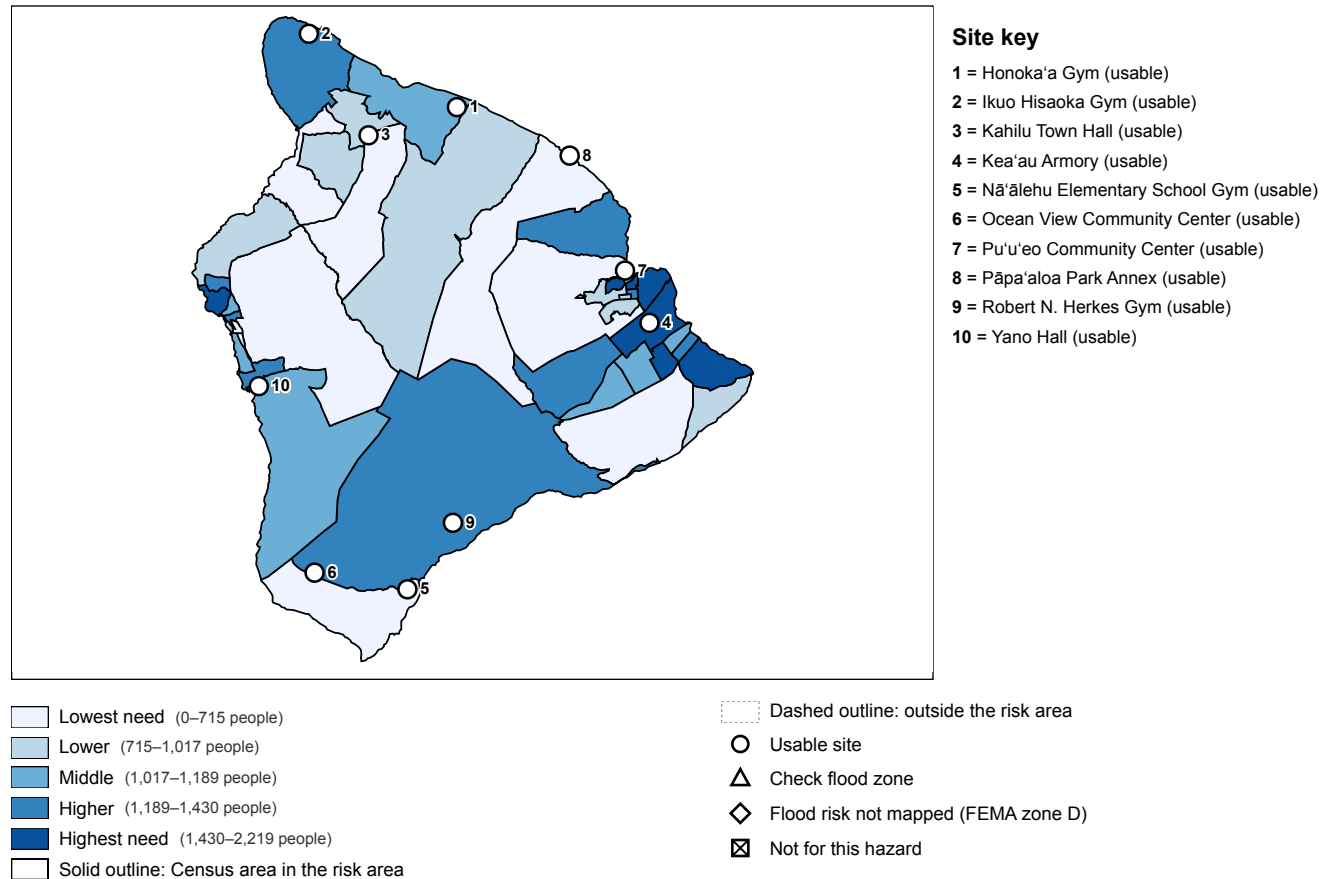
Darker blue means more people with needs, from "Lowest need" to "Highest need". A solid outline marks a Census area in the risk area; a dashed outline is outside it. Symbols: ○ usable site, △ check flood zone, ◇ flood risk not mapped, ☒ not for this hazard. Numbers on the map match the site key.

Why population numbers can differ

People in the risk area come from ACS 2018–2022 estimates (through the CDC Social Vulnerability Index 2022). Community names use 2020 Census counts. County totals in the plan use Census estimates for 2025. Each table names its source underneath.

Every number is a planning estimate. In an event, follow county announcements.

3. Map: people with needs and known sites



Color = people in the risk area who speak English less than well, use power-dependent medical equipment, have a disability, or live without a car (a person can be counted more than once). No street map: Census area outlines only.

Source: people and needs – CDC/ATSDR Social Vulnerability Index 2022 (ACS 2018–2022 estimates), HHS emPOWER and FEMA National Risk Index v1.20; community names – 2020 Census blocks and places, spellings from USGS GNIS.

4. Known sites (opened in 2026 events)

Compiled from official county releases · verified by team

#	Status for this hazard	Site	Address	Why	Times opened in 2026
1	✓ Usable	Honoka'a Gym	45-541 Lehua St., Honoka'a	No site check for this hazard	1
2	✓ Usable	Ikuo Hisaoka Gym	54-382 Kamehameha Park Road, Kapa'au	No site check for this hazard	1
3	✓ Usable	Kahilu Town Hall	67-1182 Lindsey Road, Waimea	No site check for this hazard	1
4	✓ Usable	Kea'au Armory	16-512 Volcano Road, Kea'au	No site check for this hazard	1
5	✓ Usable	Nā'ālehu Elementary School Gym	95-5545 Mamalahoa Highway, Nā'ālehu	No site check for this hazard	1
6	✓ Usable	Ocean View Community Center	92-8924 Leilani Circle, Ocean View	No site check for this hazard	1
7	✓ Usable	Pu'u'eo Community Center	145 Wainaku St., Hilo	No site check for this hazard	1
8	✓ Usable	Pāpa'aloa Park Annex	35-1994 Government Main Road, Pāpa'aloa	No site check for this hazard	1
9	✓ Usable	Robert N. Herkes Gym	96-1219 Kamani St., Pāhala	No site check for this hazard	1
10	✓ Usable	Yano Hall	82-6156 Māmalahoa Highway, Captain Cook	No site check for this hazard	1

Source: county announcements of sites opened in 2026; FEMA flood zones (Hawai'i Statewide GIS, State DFIRM); tsunami evacuation zones (Hawai'i Statewide GIS).

Candidate public schools in this county usable for this hazard: **56**. Sites are places a county has opened before; not every site opens in every event. Always follow current county announcements.

5. Needs and proposed partners

Likely estimate. Roles are **proposed – to be confirmed with partner**. The pledged column stays blank until a partner confirms it.

Need	How many	Unit	Proposed lead	Proposed support	Pledged by partner	Still needed
Cots / sleeping space	6,065	cots	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies	—	confirm with partner
Floor space (≤72 h)	121,298	sq ft	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies	—	confirm with partner
Floor space (≤2 weeks)	242,596	sq ft	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies	—	confirm with partner
Water	6,065	gal/day	American Red Cross	Hawai'i Department of Human Services (DHS), County Emergency Management, Hawai'i Department of Education (DOE) – schools, The Salvation Army, Hawai'i VOAD (Voluntary Organizations Active in Disaster), Faith-based organizations, Business community	—	confirm with partner
Meals	12,130	meals/day	American Red Cross	Hawai'i Department of Human Services (DHS), County Emergency Management, Hawai'i Department of Education (DOE) – schools, The Salvation Army, Hawai'i VOAD (Voluntary Organizations Active in Disaster), Faith-based organizations, Business community	—	confirm with partner
Toilets (≤72 h)	152	toilets	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies	—	confirm with partner
Toilets (≤2 weeks)	304	toilets	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies	—	confirm with partner
Shelter staff	410	staff per shift	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies, Hawai'i VOAD (Voluntary Organizations Active in Disaster), Office of Hawaiian Affairs (OHA), The Salvation Army, Philanthropy (foundations and donors), Business community	—	confirm with partner
Power outlets for power-dependent residents	44	outlets	Hawai'i Department of Health (DOH)	County Emergency Management, Health care organizations (incl. managed health care), Utilities	—	confirm with partner
Accessible transport	9,876	people in no-vehicle households at risk	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Transportation (DOT), Business community, Other state and county agencies	—	confirm with partner
Pet space – dog households	970	households with a dog	County Emergency Management	Hawai'i VOAD (Voluntary Organizations Active in Disaster)	—	confirm with partner
Pet space – cat households	566	households with a cat	County Emergency Management	Hawai'i VOAD (Voluntary Organizations Active in Disaster)	—	confirm with partner
Children's area	1,291	children in shelter	County Emergency Management	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), Hawai'i Department of Education (DOE) – schools, Hawai'i State Public Library System, American Red Cross, Faith-based organizations, Other state and county agencies, Hawai'i Department of Health (DOH), Health care organizations (incl. managed health care), Philanthropy (foundations and donors)	—	confirm with partner
Interpreters – Ilocano	41	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner

Need	How many	Unit	Proposed lead	Proposed support	Pledged by partner	Still needed
Interpreters – Pidgin (Hawai'i Creole English)	25	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner
Interpreters – Japanese	17	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner
Interpreters – Spanish	15	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner
Interpreters – Tagalog/Filipino	11	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner
Interpreters – Chinese	8	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner
Interpreters – Hawaiian	8	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner
Interpreters – Marshallese	6	people with limited English in shelter	Hawai'i Department of Human Services (DHS)	County Emergency Management, Hawai'i Emergency Management Agency (HI-EMA), Hawai'i State Public Library System, Hawai'i Department of Health (DOH), Office of Hawaiian Affairs (OHA), Faith-based organizations, Other state and county agencies	—	confirm with partner

Source: likely estimate × planning factors (section 8; Florida Division of Emergency Management 2010; AVMA (2020 data) for pets).

6. Decision points

Proposed – supports, does not replace, county plans.

When	Trigger	Action	Owner (proposed)	Support
BEFORE	Central Pacific hurricane season start (June 1) NOAA Central Pacific Hurricane Center	Confirm partner capacity pledges (cots, meals, generators, accessible vehicles, interpreters) and the list of sites usable for wind; refresh priority-outreach tracts.	County Emergency Management (each county)	Hawai'i Department of Human Services (DHS), Hawai'i Emergency Management Agency (HI-EMA), American Red Cross
BEFORE	Hurricane Watch NOAA NWS / Central Pacific Hurricane Center	Contact priority tracts (power-dependent, no-vehicle, limited English); confirm which shelters will open, generator power for medical devices, and accessible transport.	County Emergency Management (each county)	Hawai'i Department of Health (DOH), Utilities, Hawai'i Department of Transportation (DOT), Hawai'i Department of Human Services (DHS)
BEFORE	Hurricane Warning NOAA NWS / Central Pacific Hurricane Center	Open shelters including AFN-capable sites; start accessible transport for residents without vehicles; send pre-approved multilingual messages.	County Emergency Management (each county)	American Red Cross, Hawai'i Department of Human Services (DHS), Hawai'i Department of Education (DOE) – schools, Hawai'i Department of Transportation (DOT)
AFTER	Warning cancelled or all clear County / NWS / PTWC	Feeding, re-power for medical devices, recovery sheltering for displaced households; coordinate donations and volunteers.	American Red Cross	Hawai'i VOAD (Voluntary Organizations Active in Disaster), The Salvation Army, Faith-based organizations, Utilities

Source: National Weather Service, Central Pacific Hurricane Center and Pacific Tsunami Warning Center product definitions (links: section 8).

7. Priority outreach and languages

Top 10 Census areas by number of people with needs

#	Community (Census area)	People in the risk area	Use power-dependent medical equipment (estimate)	People with a disability	Speak English less than well	People in households without a car	Needs total (a person can be in more than one column)
1	Hilo Census area 205	5,552	31	836	149	1,203	2,219
2	Hawaiian Beaches / Nānāwale Estates Census area 211.08	6,155	43	1,497	56	486	2,082
3	‘Āinaloa / Orchidlands Estates Census area 210.03	7,009	35	1,593	101	259	1,989
4	Hilo Census area 206	6,802	45	1,261	67	387	1,760
5	Hilo Census area 203	4,167	32	670	31	991	1,725
6	Hilo Census area 208.02	7,010	64	1,087	50	358	1,558
7	Kailua Census area 215.04	6,416	28	801	263	463	1,555
8	Kurtistown Census area 210.13	5,059	41	955	207	286	1,488
9	Hāwī / Kapa‘au Census area 218	6,435	60	1,134	182	55	1,430
10	Kaiminani Census area 215.12	4,594	29	578	77	646	1,330

Source: people and needs – CDC/ATSDR Social Vulnerability Index 2022 (ACS 2018–2022 estimates), HHS emPOWER and FEMA National Risk Index v1.20; community names – 2020 Census blocks and places, spellings from USGS GNIS.

Languages: people age 5 and older who speak English less than "very well" (Hawai‘i)

Language	People	Margin of error (90%)
Ilocano	3,409	±869
Pidgin (Hawai‘i Creole English)	2,040	±740
Japanese	1,408	±504
Spanish	1,217	±499
Tagalog/Filipino	924	±368
Chinese	651	±326
Hawaiian	637	±264
Marshallese	538	±303

Source: ACS PUMS 2019–2023 5-year (validated against the DBEDT State of Hawai‘i Data Book 2024, Table 1.44).

Pre-approved message templates: none yet; no machine translation without human review.

8. Sources and assumptions

Planning factors

Factor	Value	Source or team assumption
Shelter-seeking rate – Hurricane	0.02 / 0.03 / 0.05	South Carolina EMD, 2026 Hurricane Response Annex G (planning factors 2%, 3%, 5%)
Shelter-seeking rate – Wildfire	0.02 / 0.05 / 0.112	high = observed Maui 2023: 1,418 people in shelters on Aug 11, 2023 (Maui Now) / Lahaina CDP population 12,702 (2020 Census) = 0.1116, rounded to 3 decimals = 0.112 (so the calibration event falls inside the band). low and central are team_assumption.
Shelter-seeking rate – Tsunami	0.02 / 0.05 / 0.11	team_assumption: central 5%; low 2% = hurricane planning factor (SCEMD); high 11% = observed Maui 2023 no-notice total-loss rate
Shelter-seeking rate – Inland flooding	0.02 / 0.05 / 0.11	team_assumption: central 5%; low 2% = hurricane planning factor (SCEMD); high 11% = observed Maui 2023 no-notice total-loss rate
Shelter-seeking rate – Coastal flooding	0.02 / 0.05 / 0.11	team_assumption: central 5%; low 2% = hurricane planning factor (SCEMD); high 11% = observed Maui 2023 no-notice total-loss rate
Footprint – Hurricane	all	Hurricanes affect whole islands (Lala, Lowell 2026).
Footprint – Tsunami	tsunami_zone_share	Population share inside the State standard tsunami evacuation zone. Extreme zone is reported separately.
Footprint – Wildfire	nri_top_share_by_county (25%)	Counties lead mass care, so each county plans for its own highest-risk tracts (team_assumption).
Footprint – Inland flooding	nri_top_share_by_county (25%)	Counties lead mass care, so each county plans for its own highest-risk tracts (team_assumption).
Footprint – Coastal flooding	nri_top_share_by_county (25%)	Counties lead mass care, so each county plans for its own highest-risk tracts (team_assumption).
floor sqft 72h	20	Florida DEM Sheltering Guidance Aid (2010): emergency evacuation shelter, <=72 h
floor sqft 2wk	40	Florida DEM (2010): short-term shelter, <=2 weeks
water gal per day	1	Florida DEM (2010)
meals per day	2	Florida DEM (2010): two hot meals a day plus snacks
persons per toilet short term	20	Florida DEM (2010): short-term shelter, <=2 weeks
power outlets per power dependent person	1	team_assumption
persons per toilet 72h	40	Florida DEM (2010): emergency evacuation shelter, <=72 h
Staffing ratios	client registration 1:165, dormitory management 1:100, meal service 1:110, mental health 1:250, public health medical 1:200, security 1:100, sanitation 1:200, children area 1:12	One staff member per N shelter residents, minimum 1 when the shelter is open. Florida DEM (2010) staffing metrics; the source marks them as recommendations.
dog owning household share	0.446	AVMA U.S. pet ownership statistics (2020 data). Verified in 2022 AVMA Pet Ownership and Demographics Sourcebook, p. 3: 'Dog ownership increased by 6% from 38.4% (2016) to 44.6% (2020)'. The first url did not resolve when checked 2026-10-27.
cat owning household share	0.26	AVMA (2020 data). Verified in 2022 AVMA Pet Ownership and Demographics Sourcebook, p. 3: 'Cat ownership increased slightly from 25% in 2016 to 26% in 2020'.

Data sources

Source	Fetchd	URL / file
CDC/ATSDR Social Vulnerability Index 2022, census tracts	2026-10-27	https://onemap.cdc.gov/onemapservices/rest/services/SVI/CDC_ATSDR_Social_Vulnerability_Index_2022_USA/FeatureServer/2
FEMA National Risk Index v1.20, census tracts – Hurricane	2026-10-27	https://services.arcgis.com/XG15cJAIne2vxtgt/arcgis/rest/services/National_Risk_Index_Census_Tract_Hurricane_Hazard_Type_Risk_Ind

Source	Fetches	URL / file
FEMA National Risk Index v1.20, census tracts – Wildfire	2026-10-27	https://services.arcgis.com/XG15cJAIne2vxtgt/arcgis/rest/services/National_Risk_Index_Census_Tract_Wildfire_Hazard_Type_Risk_Index
FEMA National Risk Index v1.20, census tracts – Tsunami	2026-10-27	https://services.arcgis.com/XG15cJAIne2vxtgt/arcgis/rest/services/National_Risk_Index_Census_Tract_Tsunami_Hazard_Type_Risk_Index
FEMA National Risk Index v1.20, census tracts – Inland Flooding	2026-10-27	https://services.arcgis.com/XG15cJAIne2vxtgt/arcgis/rest/services/National_Risk_Index_Census_Tract_Inland_Flooding_Hazard_Type_Risk_Index
FEMA National Risk Index v1.20, census tracts – Coastal Flooding	2026-10-27	https://services.arcgis.com/XG15cJAIne2vxtgt/arcgis/rest/services/National_Risk_Index_Census_Tract_Coastal_Flooding_Hazard_Type_Risk_Index
Tsunami Evacuation Zones (Statewide GIS)	2026-10-27	https://geodata.hawaii.gov/arcgis/rest/services/Hazards/MapServer/2
Extreme Tsunami Evacuation Zones (Statewide GIS)	2026-10-27	https://geodata.hawaii.gov/arcgis/rest/services/Hazards/MapServer/12
HHS emPOWER – electricity-dependent DME, county level	2026-10-27	https://services2.arcgis.com/ZQ4jTQn6k7VPXEwO/arcgis/rest/services/HHS_emPOWER_REST_Service_Public/FeatureServer/2
Hawai'i Statewide GIS – State DFIRM (FEMA flood hazard areas, 6/15/26)	2026-10-27	https://geodata.hawaii.gov/arcgis/rest/services/Hazards/MapServer/6
County shelter activations 2026 (official county releases)	see table	data/sources/county_shelter_activations.csv
2020 Census Block Assignment File, place/CDP (tract community labels)	2026-10-27	https://www2.census.gov/geo/docs/maps-data/data/baf2020/BlockAssign_ST15_HI.zip
2020 Census PL 94-171 block population P1_001N (tract community labels)	2026-10-27	https://www2.census.gov/programs-surveys/decennial/2020/data/01-Redistricting_File--PL_94-171/Hawaii/hi2020.pl.zip
ACS PUMS 2019-2023 5-year (detailed languages)	2026-10-27	https://www2.census.gov/programs-surveys/acs/data/pums/2023/5-Year/csv_phi.zip
DBEDT State of Hawai'i Data Book 2024, Table 1.44 (validation)	2026-10-27	https://files.hawaii.gov/dbedt/economic/databook/2024-individual/01/014424.pdf
Partner list: Hawai'i DHS – ESF-6 challenge statement (2026)	2026-10-15	Hawai'i DHS – ESF-6 challenge statement (2026)
pre season hurricane		https://www.nhc.noaa.gov/cphcmmission.php
hurricane watch		https://www.nhc.noaa.gov/aboutgloss.shtml

Source	Fetches	URL / file
hurricane warning		https://www.nhc.noaa.gov/aboutgloss.shtml
tsunami warning		https://www.tsunami.gov/?page=message_definitions
flash flood warning		https://www.weather.gov/safety/flood-watch-warning
red flag warning		https://www.weather.gov/safety/wildfire-ww
coastal flood warning		https://www.weather.gov/okx/marinedef

Privacy: aggregate census-tract and county data only. No individual records. Public facility names and addresses only.