



Grid Deployment Office

U.S. Department of Energy (DOE)

Fiscal Year 2025 Data Sources for DOE’s Allocation of Funds under the BIL Section 40101(d) – Formula Grants to States and Indian Tribes for Preventing Outages and Enhancing the Resilience of the Electric Grid

This document summarizes the data sources used to determine fiscal year 2025 (FY25) BIL Section 40101(d) allocations developed using the formula for the Grid Resilience State and Tribal Grants Program. The formula developed for this program used comprehensive data on statutorily required factors affecting States and Indian Tribes, including population, area, probability of disruptive events estimated from federally declared disasters, and impact of disruptive events estimated from U.S. Federal Emergency Management Agency (FEMA) National Risk Index (NRI) data.

Data Sources

Population Data Sources

*U.S. States + D.C. + Puerto Rico*¹: Population estimates for U.S. States, D.C., and Puerto Rico were obtained from U.S. Census Bureau July 2023 Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico – <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html#v2023> (last accessed November 2024).

U.S. Territories (except Puerto Rico): Population estimates for U.S. Territories—excluding Puerto Rico—were obtained from U.S. Census Bureau 2020 Island Areas Censuses.²

¹ State populations were adjusted by federally recognized tribal and eligible tribal band enrollment estimates to minimize double counting in the allocation formula. For federally recognized tribes and eligible tribal bands that cross state lines, DOE primarily used 2020 Decennial Census (DEC) Geography Estimates to estimate tribal population in each State – https://data.census.gov/map?layer=VT_2020_250_00_PY_D1&mode=thematic&loc=36.3964,-116.9126,z5.2299 (last accessed November 2024).

² U.S Census Bureau data sources listed were last accessed November 2024.

- American Samoa – <https://www2.census.gov/programs-surveys/decennial/2020/data/island-areas/american-samoa/population-and-housing-unit-counts/american-samoa-phc-table01.pdf>.
- Guam – <https://www2.census.gov/programs-surveys/decennial/2020/data/island-areas/guam/population-and-housing-unit-counts/guam-phc-table01.pdf>.
- Northern Mariana Islands – <https://www2.census.gov/programs-surveys/decennial/2020/data/island-areas/commonwealth-of-the-northern-mariana-islands/population-and-housing-unit-counts/commonwealth-northern-mariana-islands-phc-table01.pdf>.
- U.S. Virgin Islands – <https://www2.census.gov/programs-surveys/decennial/2020/data/island-areas/us-virgin-islands/population-and-housing-unit-counts/us-virgin-islands-phc-table01.pdf>.

Indian Tribes:

- **Federally Recognized Tribes/Eligible Tribal Bands** – Population estimates for federally recognized tribes and eligible tribal bands were obtained from U.S. Bureau of Indian Affairs (BIA) 2024 tribal enrollment data. BIA 2023 or 2021 enrollment data were used if 2024 enrollment data were not submitted by the federally recognized tribe or eligible tribal band.³ FY25 enrollment data from the U.S. Department of Housing and Urban Development (HUD) Indian Housing Block Grant (IHBG) Program were used in place of any federally recognized tribes that did not wish to disclose their self-certified enrollment data to BIA – https://www.hud.gov/sites/dfiles/PIH/documents/FY25_Estimate_Grant_Summary.pdf (last accessed November 2024).
- **Alaska Native Village Corporations (ANVCs)** – For 108 of the 182 eligible ANVCs, shareholder estimates were obtained from ANVC websites, direct outreach, or publicly-available sources found through additional research. For the remaining ANVCs with no shareholder information available, ANVC populations were estimated by summing the enrollment of their associated federally recognized tribes, if applicable. For ANVCs not associated with a federally recognized tribe, DOE estimated population from its associated non-federally recognized tribal community, village, or region from additional research.
- **Alaska Native Regional Corporations (ANRCs)** – ANRC shareholder estimates were obtained from ANRC websites or direct outreach.

Area Data Sources

*U.S. States + D.C. + U.S. Territories:*⁴ Area estimates for U.S. States, D.C., and U.S. Territories were obtained from U.S. Census Bureau 2023 American Community Survey (ACS) Master

³ BIA tribal enrollment data is confidential and therefore not linked in this source document.

⁴ State total area estimates were reduced by Indian Tribe land area estimates (including federally recognized tribes, eligible tribal bands, and Alaska Native Corporations) to eliminate double counting in the allocation formula. For Indian Tribes that cross State lines, DOE utilized TIGERweb and LAR shapefiles to estimate the amount of tribal land area in each State.

Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER®) database –

https://tigerweb.geo.census.gov/tigerwebmain/Files/bas24/tigerweb_bas24_state_2023_acs23_us.html (last accessed November 2024).

Indian Tribes:

- **Federally Recognized Tribes/Eligible Tribal Bands** – Land area estimates for federally recognized tribes and eligible tribal bands were obtained from U.S. Census Bureau 2023 TIGERweb Representational State Transfer (REST) Services American Indian, Alaska Native, and Native Hawaiian Areas – https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_restmapservice.html. For federally recognized tribes with their tribal area not listed in Census’ TIGERweb database, BIA provided total area estimates for Land Area Representations (LARs).⁵ DOE primarily identified jurisdictions associated with each federally recognized tribe or eligible tribal band using information from FEMA’s NRI Tribal – County Relationships Table – <https://hazards.fema.gov/nri/data-resources>. For federally recognized tribes with no area information from Census or BIA, DOE conducted additional research to determine the best available area data.
- **Alaska Native Village Corporations** – Surface land ownership was collected via direct outreach to Alaska Native Corporations. If unavailable, DOE used acreage amounts for ANVC land entitlements provided by the U.S. Bureau of Land Management (BLM) in April 2024.
- **Alaska Native Regional Corporations** – Surface land ownership was collected from direct outreach to ANRCs or from ANRC websites.

Disaster Declaration Data Sources

U.S. States + D.C. + U.S. Territories + Indian Tribes: FEMA’s Disaster Declaration Summaries dataset was used to identify federally declared disasters that affected U.S. States, D.C., U.S. Territories, and Indian Tribes – <https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2> (last accessed November 2024).

- To estimate federally declared disasters or emergencies that may have impacted federally recognized tribes and eligible tribal bands but were not officially requested by the tribe or band, DOE utilized FEMA’s NRI Tribal-County Relationships Table (<https://hazards.fema.gov/nri/data-resources>) to map federally recognized tribes and eligible tribal bands to FEMA designated areas.⁶ Additional research was conducted to identify the designated areas of federally recognized tribes not listed in the Tribal – County Relationships Table. Designated areas for ANRCs were estimated using GIS maps available on ANRC websites or from a map of ANRC conveyed lands, made available by

⁵ LAR is a GIS dataset that contains land areas for federally recognized tribes. BIA shared 2019 LAR data directly with DOE in July 2023.

⁶ A designated area is a geographic area authorized for assistance under the Stafford Act for a particular disaster declaration.

the State of Alaska Geoportal.⁷ Disasters that may have impacted ANVCs were estimated based on disasters mapped to their associated federally recognized tribe(s). Additional research was conducted for those ANVCs not associated with a federally recognized tribe to determine the location of the ANVC or associated tribal community.

Risk Index Data Sources

U.S. States + D.C. + U.S. Territories: Composite risk scores for various natural hazards affecting U.S. States, D.C., and U.S. Territories were acquired from FEMA’s NRI All Census Tracts – Tract-level detail table – <https://hazards.fema.gov/nri/data-resources> (last accessed November 2024).

- Note that FEMA does not have NRI risk scores for U.S. Territories. For Puerto Rico and the U.S. Virgin Islands, DOE used census tract-level risk scores in Palm Beach County, Florida (weighted by each territory’s population share) as proxies for disaster risk. For Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, DOE used census tract-level risk scores in Maui County (weighted by each territory’s population share) as proxies for disaster risk.

Indian Tribes:

- **Federally Recognized Tribes/Eligible Tribal Bands** – Risk scores for federally recognized tribes and eligible tribal bands were acquired from FEMA’s NRI Tribal-Tract Relationships Table – <https://hazards.fema.gov/nri/data-resources> (last accessed November 2024). For federally recognized tribal jurisdictions not listed in the Tribal-Tract Relationships table, DOE conducted additional research to approximate the general location and corresponding census tract(s) of the federally recognized tribe.
- **Alaska Native Village Corporations** – ANVC NRI risk scores were estimated by averaging risk scores of the federally recognized tribe(s) associated with the ANVC, since ANVCs typically operate in the same region as their associated federally recognized tribe(s). For ANVCs associated with a non-federally recognized tribe or community, DOE conducted additional research to determine the general location and corresponding census tract(s) of the ANVC or associated community to estimate risk scores.
- **Alaska Native Regional Corporations** – ANRC NRI risk scores were estimated by overlaying the census tract-level NRI map with ANRC conveyed lands to identify which tracts overlap with the majority of each ANRC’s area – <https://gis.data.alaska.gov/maps/BLM-EGIS::blm-ak-conveyed-lands/about> (last accessed November 2024).

⁷ See <https://gis.data.alaska.gov/maps/BLM-EGIS::blm-ak-conveyed-lands/about> (last accessed November 2024).