



Advancing American Indian & Alaska Native Data Equity

Representation in Federal Data Collections

GWYNNE EVANS-LOMAYESVA, JAE JUNE LEE,
& CARA BRUMFIELD

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Georgetown Center on Poverty and Inequality

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Abbreviations, Acronyms, & Initializations

AI/AN	American Indian and Alaska Native	NIJ	National Institute of Justice
ACS	American Community Survey	NISVS	National Intimate Partner and Sexual Violence Survey
CDC	Center for Disease Control	OMB	Office of Management and Budget
GAO	U.S. Government Accountability Office	SNAP	Supplemental Nutrition Assistance Program
IHBG	Indian Housing Block Grant	TANF	Temporary Assistance for Needy Families
MMIW	Missing and Murdered Indigenous Women	WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
NCAI	National Congress of American Indians		
NHPI	Native Hawaiian and Pacific Islander		



Introduction

Accurate, timely, and sufficiently detailed government statistics are critical. From guiding the fair allocation of federal funding, to upholding the enforcement of civil rights laws and regulations, to informing national research agendas and studies, federal statistics play a crucial role in the nation's democracy, economy, and society. However, statistics are not available with the same level of quality and detail for all populations and characteristics. Notably, greater effort is required to improve the equitable representation of American Indian and Alaska Native (AI/AN) populations in federal data collection efforts. Inequitable data have deep and pervasive impacts on American social, political, and economic systems; the lack of accurate, reliable, and sufficiently detailed data risks making AI/AN peoples invisible to policymakers and reinforcing existing dynamics of marginalization.

To ensure equitable representation, government statistical agencies should collect information on AI/AN populations at a high enough quality to be included in analyses with the other racial categories. However, AI/AN populations and people living on tribal lands are often undercounted in federal datasets, and the estimates for the populations are often not reliable enough for statistical use. While federal surveys have improved the representation of the AI/AN populations in data collection over time, greater efforts are needed for equitable representation in the data.

It is important to note that the “AI/AN” category does not reflect a single, cohesive unit but includes varying populations depending on how the population category is defined. AI/AN is one of the five Office of Management and Budget (OMB) racial categories used in federal data collections; however, the AI/AN OMB racial category is not the only way to measure or disaggregate tribal populations in the United States. In addition to the OMB racial category, AI/AN populations are also defined as political and legal status populations (tribal citizenship) and tribal land populations (those residing on tribal lands). For the purposes of this report, any deviation from the term “AI/AN” in the report is used deliberately and to indicate a distinct population or a historical term (e.g., “Indian” was used as a racial category for federal data collections in the 1800s).

This report is divided into four sections:

- **Section 1** introduces key background information and historical context on AI/AN data.
- **Section 2** provides an explanation of the main categories for measuring AI/AN populations and examples of use cases for AI/AN data that require accurate, reliable, and sufficiently detailed data.
- **Section 3** describes how AI/AN populations and residents on tribal lands are often significantly undercounted and underrepresented in federal data, creating data inequity for AI/AN populations in national studies, analyses, and statistics.
- **Section 4** recommends proposed changes to survey sampling methods, the establishment of transparent and consistent population categories and definitions, and greater consultation around the use of administrative data. Any changes made to increase equitable representation for the AI/AN populations in federal data collections must be done in consultation with the Tribal Nations in accordance with tribal sovereignty.



Key Background & History

Al/AN populations are diverse, and there is no single “correct” approach for measuring AI/AN populations. Important, widely-used population categories include definitions based on racial identification, tribal citizenship and membership, and geographic residence. These categories are distinct and are a reflection of the varying statistical needs of Tribal Nations, federal and state governments, and civil society. Regardless of the specific measure, however, AI/AN populations are distinct and sizable in the United States.

Since the first federal data collection efforts two centuries ago, how federal governments, tribal governments, and civil society groups have defined and counted AI/AN populations has evolved. The changing AI/AN data definitions and goals for AI/AN data collection in federal statistical operations cannot be understood separately from the complex history of colonialism and long-standing Tribal Sovereignty. As a result, AI/AN data categories are not always consistent over periods of time and cover comparable populations.

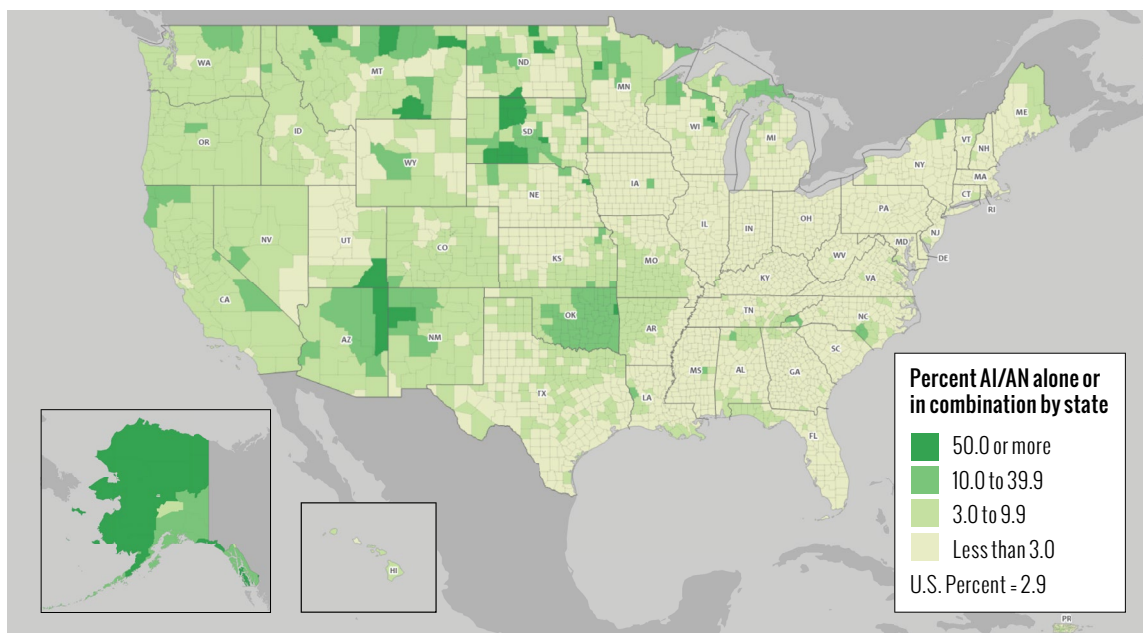
AI/AN Populations

OMB defines the race and ethnicity questions used in federal data collection, including the decennial census and the American Community Survey (ACS).¹ As of August 2022, the five racial categories are American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and white. Respondents can also identify as “some other race.” OMB standards also include a separate ethnicity question on Hispanic or Latinx origin.

Nearly 10 million people in the United States identified as AI/AN alone or in combination with at least one other OMB racial category in 2020, according to decennial census data.² Those 9.7 million people represented 2.9 percent of the total U.S. population.³ The geographically diverse AI/AN populations are spread across the United States (See Figure 1).

FIGURE 1. Counties in the United States vary significantly by the share of American Indian or Alaskan Native populations

Percentage share of AI/AN alone or in combination populations by county, 2020



Note: This figure identifies the AI/AN populations by race (alone or in combination with another race) and county geography. However, race is neither the only way to measure the AI/AN populations nor is it the only useful data about the AI/AN populations for federal, state, and tribal governments. Population data on tribal lands and tribal citizenship provide additional ways to measure and analyze AI/AN data.

Source: Georgetown Center on Poverty and Inequality, 2022. “2020 Census Demographic Data Map Viewer.” Census Bureau, 2022. Available at <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=2566121a73de463995ed2b2fd7ff6eb7>.

Tribal Nations & Lands

There are 574 Federally Recognized Tribal Nations in the United States with formal government-to-government relationships with U.S. federal and state governments.⁴ As sovereign nations, Tribal Nations have the authority to self-govern. The 574 Federally Recognized Tribal Nations determine their citizens through a process called “enrollment,” which varies from tribe to tribe. Tribal Nations may refer to enrolled individuals using different terms, including—but not limited to—citizens, members, and enrollees. Each Tribal Nation has different data needs and distinct jurisdictions.⁵ In addition to the 574 Federally Recognized Tribal Nations, there are numerous state-recognized and unrecognized tribes throughout the United States.⁶ These Tribal Nations do not hold the same government-to-government relationship with the federal government as the Federally Recognized Tribal Nations. Nonetheless, state-recognized and unrecognized Tribal Nations still require data on their populations.⁷

For some Tribal Nations, tribal lands are a part of their tribal self-governance and sovereignty. There are approximately 326 tribal land areas administered as federal Indian reservations.⁸ The established boundaries of reservations are recognized and held in trust by the United States and may or may not include the traditional lands of the Tribal Nations.⁹ The tribal lands are equivalent to around 2 percent of the total geography of the United States.^{10, i}

i For more information about tribal lands and white settler colonialism, see “Land Tenure Issues.” Indian Land Tenure Foundation”, retrieved September 2022. Available at <https://iltf.org/land-issues/issues/>.

AI/AN in Historical Federal Data Collections

Over the past two centuries, the U.S. federal government has made numerous iterations to how it defines the AI/AN racial category for censuses, surveys, and other data collection efforts.ⁱⁱ These changes make it difficult to compare AI/AN race data collected at different times throughout history. The federal data collections evolved from counting only “Indians taxed” to the OMB AI/AN racial category counting Indigenous peoples of North, South, and Central America. The terminology used to define the AI/AN racial category is inconsistent between data collections, and the populations are not directly comparable between years.

Over the past two centuries, the U.S. federal government has made numerous iterations to how it defines the AI/AN racial category for censuses, surveys, & other data collection efforts

The history of federal AI/AN data collection is marked by exclusion and is intertwined with the expansion of colonialism.ⁱⁱ Although the first U.S. Decennial Census occurred in 1790, “Indians” were first counted in the 1860 Census with several provisions; only “Indians taxed” who had renounced tribal affiliation and assimilated into white settler communities were counted.¹² “Indians taxed” and “Indians not taxed” refers to specific language in the U.S. Constitution which resulted in a decision to only enumerate those American Indians who historically paid taxes at the time. This is no longer the case; people who identify as AI/AN pay state and federal taxes based on where they live, like all other people who identify with other racial categories.¹³

The second half of the 20th century saw many changes to the American Indian racial category and data collection. These changes included but were not limited to the evolving changes to the name and definition of the AI/AN racial category and a shift to allow respondents to self-identify with racial and ethnic categories.

ⁱⁱ For a more detailed history on the U.S. Census Bureau counting the American Indian/ Alaska Native populations, visit: “Censuses of American Indians.” U.S. Census Bureau, March 2022. Available at https://www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html

BOX 1.

EVOLVING CHANGES

Evolving Name Changes & Definitions

The 1940 Census aimed to fully count “Indians” in the normal population schedules for the first time.¹⁴ To reduce confusion with individuals originating from India, the 1950 Census changed the racial category from Indian to American Indian.¹⁵ The 1970 Census changed the American Indian racial category once more to “Indian (American).” This was done to reduce responses of individuals identifying with the term “American.”¹⁶ The Census Bureau first introduced the Alaska Native racial category starting with the 1960 Census.¹⁷

OMB established the foundation for racial and ethnic classifications in 1977 by issuing Statistical Policy Directive No. 15.¹⁸ Once more, the race data collection categories changed, this time to keep data collections standard. The original definition for the American Indian and Alaska Native populations included “persons having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.”¹⁹ OMB amended the definition in 1997 to include Indigenous peoples of North, Central, and South America, significantly expanding the AI/AN racial category for the 2000 Decennial Census.²⁰

In addition to the changes made by OMB for the racial category, the U.S. Census Bureau allowed for multiple races to be chosen for the 2000 Decennial Census. This change reduced the need for individuals to choose between only one racial identity and allowed for more responses in all racial categories.²¹

Self-Identification

Starting with the 1960 Census, people could self-identify their race for the first time.²² This marked a significant change in census-taking. Before the 1960s, census enumerators mostly relied on their personal opinion to identify the race of respondents.²³ Research showed that information gathered through self-response methods reduced census errors²⁴ and a steady increase in the reported number of AI/AN populations in subsequent censuses.²⁵

The widespread use of mail-in census questionnaires starting in the 1970 Census and online questionnaires in the 2020 Census may have impacted how much and how accurately people provided information about themselves. For example, respondents may feel more comfortable with providing potentially sensitive information about themselves (such as their race) through a mail-in or online survey as opposed to sharing information about themselves face-to-face with an enumerator. The introduction of self-response methods may have allowed individuals to more accurately report information about themselves and their household.²⁶

Federal government surveys and censuses have changed significantly over the course of 150 years, but concerns about data quality and appropriate representation within federal data remain for AI/AN populations. The changing racial category for the AI/AN populations in federal data collections throughout U.S. history prevents clear and consistent comparisons of AI/AN data across the years. Consistent definitions and data crosswalks (reference tables that can map equivalent elements in different databases onto one another) between data collections could help with improved accuracy in AI/AN representation and analyses of AI/AN race population data.



AI/AN Population Measures Vary

Understanding the AI/AN populations represented in a given dataset or analysis is critical to appropriately interpret the data. Main categories for measuring AI/AN populations include the following:

1. Identification with the AI/AN racial category as defined by OMB (racial category);
2. Tribal citizenship, membership, and enrollment (political and legal category); and
3. Residence on tribal lands (geographic category).

These categories are valuable measures for different use casesⁱⁱⁱ but cannot be used interchangeably or directly compared against each other, as they do not measure the same population. Each of these categorizations—racial identity, political and legal status, and geographic residence—specifies a type of measurement for a population, captures different aspects of the AI/AN populations, and is important for different purposes and uses.

For example, not everyone residing on tribal lands is enrolled as a tribal citizen or identifies with the AI/AN racial category. However, the tribal governments require total population data for statistical purposes in guiding local governance, informing service delivery, and building infrastructure. Tribal Nations may require datasets with AI/AN population data and other disaggregated data within a specific tribal geographic unit for more informed governance and federal funding formulas.

ⁱⁱⁱ In this context, a “use case” refers to potential real-world applications of statistical datasets, such as to guide decision-making, allocate funds, or inform research.

This section provides an overview of some of the various ways the AI/AN populations are defined in datasets. Figure 2 provides a guide to the different AI/AN populations data categories discussed in this section, general definitions of each category, explanations of how the data are collected, information about who collects the available data, and a data use example for each overarching category. The section is intended as an introductory guide that simplifies complicated categories and legal statuses. (It expands on each AI/AN data category as an introduction to AI/AN populations data and should not be used as legal advice or guidance.)

FIGURE 2. AI/AN population measurements differ by category

Definitions, data collection descriptions, & examples by data categories

AI/AN Data Category	Definitions	Data Collections	Example of a Data Use Case
Race The Office of Management and Budget (OMB) Standards	"A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment."	The OMB racial categories are the minimum standards required for collecting and presenting data for all federal reporting.	States use the OMB racial categories, including AI/AN, when redrawing congressional districts after the decennial census.
Political/Legal Status	Tribal Nations determine their own enrollment requirements and procedures for tribal citizenship. Enrolled individuals are citizens not only of their individual sovereign Tribal Nation, which is a political and legal status, but also U.S. citizens and citizens of their respective states.	Enrollment data are defined, collected, and owned only by the Federally Recognized Tribal Nations.	The political and legal status of an individual is important for voter eligibility for tribal elections. Occasionally, enrollment data have been used in federal funding formulas, such as the American Rescue Plan Act of 2021.
Tribal Lands	Tribal lands or tribal geographies in this report refer to the defined areas in the Census Bureau's legal and statistical geographies: Alaska Native Regional Corporations, Alaska Native Village Statistical Areas, American Indian Joint Use Areas, American Indian Reservations and Off-Reservation Trust Lands, Oklahoma Tribal Statistical Areas, State Designated Tribal Statistical Areas, Tribal Designated Statistical Areas, Tribal Subdivisions.*	Data collections on tribal lands and in Indian Country can be restricted by the Tribal Nations based on their research laws. Federal data collections, like the decennial census and the American Community Survey, do collect data on tribal lands.	Tribal Nations use the total population counts for their tribal geographies for governance, planning for things like infrastructure and roads, and emergency services.

Note: *Hawaiian Homelands, although in the AI/AN and Native Hawaiian geographies, are not included in this report due to the Native Hawaiians holding a different relationship with the federal government than the AI/AN Tribal Nations.

Source: Georgetown Center on Poverty and Inequality, 2022. "About the Topic of Race." U.S. Census Bureau, last updated 1 March 1, 2022. Available at <https://www.census.gov/topics/population/race/about.html>; "Office of Management and Budget (OMB) Standards." National Institutes of Health, retrieved 7 October 2022. Available at <https://orwh.od.nih.gov/toolkit/other-relevant-federal-policies/OMB-standards>; Tribal Nations and the United States: An Introduction." National Congress of American Indians, February 2020. Available at https://www.ncai.org/tribalnations/introduction/Indian-Country_101_Updated_February_2019.pdf.

Racial Population Data

As mentioned previously, AI/AN is a diverse racial category, and the U.S. government has worked to refine and expand which individuals fit into this group. More comprehensive survey questions have allowed researchers, Tribal Nations, and the federal government to work with data that paint a more complete and nuanced picture of AI/AN identity.

The Census Bureau organizes data on race into three categories:

- “Alone”: people who report one race as their only entry in the race question.
- “In combination with at least one other race”: people who report two or more races in their responses.
- “Alone or in combination”: this category includes all the individuals who identified either as a given race alone or in combination, i.e., this category incorporates both of the prior categories into one.

While researchers and tribal communities increasingly use the “AI/AN alone or in combination variable,” the “AI/AN alone” category remains important. For example, federal funding formulas and congressional redistricting rely primarily on the total number of people who identified as one particular race—such as AI/AN alone or Black alone—rather than using the more inclusive category of “alone or in combination with at least one other race.”²⁷ Unfortunately, such practices dramatically understate the prevalence of people who identify as AI/AN.

Tribal Nations and the federal government engage through formal government-to-government processes and procedures to determine and discuss the disaggregation of AI/AN populations data and use cases. These formal government-to-government procedures are a required part of the federal trust responsibility and the right of Tribal Nations as sovereign nations.

Political Status Population Data

Although federal data collections use the OMB AI/AN racial category, AI/AN can also refer to political and legal status.²⁸ Federally Recognized Tribal Nations have a formal government-to-government relationship with the U.S. federal and state governments “that does not derive from race or ethnicity.”²⁹ Enrolled AI/AN tribal citizens may or may not identify racially as AI/AN, and the racial identification is distinct from the political and legal status of an enrolled tribal citizen. This distinction is important for Tribal Nation jurisdictions and the government-to-government relationships between Tribal Nations and the federal and state governments.

Each of the Federally Recognized Tribal Nations has their own eligibility requirements and procedures for enrolling as a legal citizen. The citizenship data are called enrollment data. Only the Tribal Nation determines who is legally recognized as a citizen of the nation. Enrollment data are created and collected by each Tribal Nation and are not uniform between nations. Each Tribal Nation owns their enrollment data and determines if and when to share the data with anyone, including the federal government. To use or define this data, federal agencies and researchers must request access directly from the Tribal Nation of interest. However, Tribal Nations are not required to grant data access to anyone.

Some federal censuses and surveys ask respondents about their identified OMB racial category and tribal affiliation to create more detailed data collections and analysis. Self-identified tribal affiliation must not be confused with tribal citizenship.³⁰ AI/AN respondents may indicate tribal affiliation to identify the Tribal Nations from which they descend. While descendancy can be a requirement for some Tribal Nation enrollment criteria, it is not always and does not mean the individual is an enrolled tribal citizen. AI/AN respondents who are enrolled tribal citizens might indicate tribal affiliations to Tribal Nations of which the respondent is not an enrolled citizen but from which they descend. Most Tribal Nations do not allow “dual enrollment” in more than one Tribal Nation.³¹ In contrast, the 2020 Decennial Census allowed respondents to list up to six tribal affiliations in their response.³² An individual in that circumstance might be enrolled in one Tribal Nation, and could list their enrolled Tribal Nation and five additional Tribal Nations from which they are descended but not enrolled. Although not enrollment data, tribal affiliation is useful data for Tribal Nations, the federal government, and researchers.

Tribal Lands Population Data

As noted earlier in this report, there are approximately 326 federal Indian reservations, which are areas of land reserved for Tribal Nations under legal agreements with the United States.³³ The federal reservation boundaries provide valuable geographic measures for Tribal Nations, but there are more types of tribal geographies than federal Indian reservations, and the smaller geographic areas—such as blocks or block groups—within the tribal lands can provide valuable detailed information.^{iv} Census tribal geographies often follow federal Indian reservation borders, but tribal geographies can also include geographic units like Off-Reservation Trust Lands, State reservations, American Indian Joint-use Areas, Alaska Native Village Statistical Areas, Oklahoma Tribal Statistical Areas, Tribal Designated Statistical Areas, and state designated statistical areas.³⁴ Federally Recognized Tribal Nations without Federal Indian Reservations and State Recognized Tribal Nations may rely on those other measures of geography to specify their data. The geographic categorization identifies specific area population data for tribal, state, and federal governance, funding, and research.

Tribal Nations have the right to govern & control the data collection, ownership, & future usage

iv For detailed information on the different tribal geographic units, read Appendix A: NCAI Policy Research Center (2021). 2020 Census Results: Regional Tribal Land Data Summary. Washington DC: National Congress of American Indians, September 2021

BOX 2.

AI/AN DATA USE CASES

Tribal land population data are used for cases such as planning services, guiding local governance, and building infrastructure. Quality disaggregated AI/AN populations data at small geographic levels remains pivotal for the diverse use cases. This section provides specific examples for three different AI/AN populations data use cases that require data from federal data collections. These examples are not the only use cases or data needs for AI/AN data users, but rather a snapshot to provide examples to illustrate the importance of quality AI/AN data.

Federal Funding Formulas

Accurate and disaggregated data on AI/AN populations is needed to determine the funding formulas to allocate appropriate levels of federal funding to the various governments. For example, the Indian Housing Block Grant (IHBG) program is a formula grant intended to provide funding for a variety of affordable housing initiatives on federal reservations and AI/AN geographic areas.³⁵ The formula for the IHBG relies on detailed quality data from the decennial census and the American Community Survey.³⁶ The data must be disaggregated to geographic units such as the federal Indian Reservation and Off-reservation Trust Lands, State Reservations, and the Alaska Native Tribal Formula Areas. Tribal Nations need to further disaggregate accurate data on housing occupancy, overcrowding, household income, housing shortages, and household race.³⁷

Governance

Federal, tribal, and state governments utilize disaggregated AI/AN race population and tribal land population data for governance, policy decisions, and government-to-government relations. Government services require population data for accurate government planning and funding. The federal, tribal, and state governments all require detailed data to plan for, fund, and provide services, such as emergency services. For example, oftentimes as the closest or only law enforcement authority and emergency responders for rural and isolated areas, Tribal Nations respond to emergencies for hundreds of tribal and non-tribal communities in the United States.³⁸ Detailed data about the population on and around the tribal lands facilitate more efficient emergency management, better planning for populations in need of emergency services, and the adequate funding of these services.

Research

High-quality and sufficiently disaggregated AI/AN populations data are necessary for research, which can be an important tool for tribal sovereignty and self-determination.³⁹ With accurate data and research, federal, tribal, and state governments can make informed decisions on policies and best practices. Data analyses provide a greater understanding of populations or a geographic area, which allows elected officials to make informed decisions for governance.

For example, the U.S. Government Accountability Office (GAO) utilized AI/AN race population data and detailed age data at small geographic units to determine the overall decline in AI/AN youth involvement in “justice systems,”^v and identify areas of the nation with over- and under-representation of AI/AN youth in the state justice systems. These analyses aid federal, tribal, and state policymakers in prioritizing areas and identifying areas that were worth examining further to discover what resulted in over- or under-representation in different states. There could be many reasons for the observed statistical under-representation of Native youth in justice systems that do not support a successful reduction to the degree indicated by the GAO report.⁴⁰ Some of these possible explanations are flawed reporting, variation in representation at different stages of involvement, and identification errors by law enforcement.⁴¹

Data Collections & Privacy

Although AI/AN data users require quality, detailed data for use cases like funding, governance, and research, privacy remains an important consideration for protecting communities. Native organizations have requested finding a balance between data quality and privacy.⁴² As research can be used to help or harm communities, research and data collections need to be done in collaboration with Tribal Nations, with the recognition that Tribal Nations have the right to govern and control the data collection, ownership, and future usage.⁴³ The federal government and Tribal Nations continue to work towards solutions to improve AI/AN data quality, usability, and representation.

v The GAO uses the term “justice system” to describe broad and varied federal, state, local, and tribal systems—including juvenile criminal legal systems and carceral systems—that exist across processes of “arrest, prosecution, and confinement.”



AI/AN Populations Are Underrepresented in Federal Data

AI/AN populations and residents on tribal lands are often significantly undercounted and underrepresented in federal data, creating data inequity for AI/AN populations in national studies, analyses, and statistics. Undercounting and underrepresentation render AI/AN populations invisible to policymakers by only representing AI/AN populations data with an asterisk in federal statistical analyses. The asterisk in data analysis signifies that statistical estimates are not of high enough quality to be considered reliable; such data are often removed from the analysis or data visualization.^{vi} AI/AN data could also be combined with other small population data into an “other” category, similarly erasing AI/AN populations from the research story. Underrepresentation can result from a number of factors, including small sample sizes, difficulty collecting data, cost, and data processing, including privacy algorithms.^{44, vii}

Equitable representation of the AI/AN and tribal populations in federal surveys and censuses are vital to Tribal Nations, especially as those federal surveys and censuses may be the only data the Tribal Nation has available to use. Many Tribal Nations rely on federal data collections and surveys because of challenges with funding, capacity, and limited expertise in large-scale surveys and data collections.⁴⁵ Tribal Nations require data at granular geographic levels and for that data to be disaggregated accurately for use cases related to governance, policy, funding, and research.

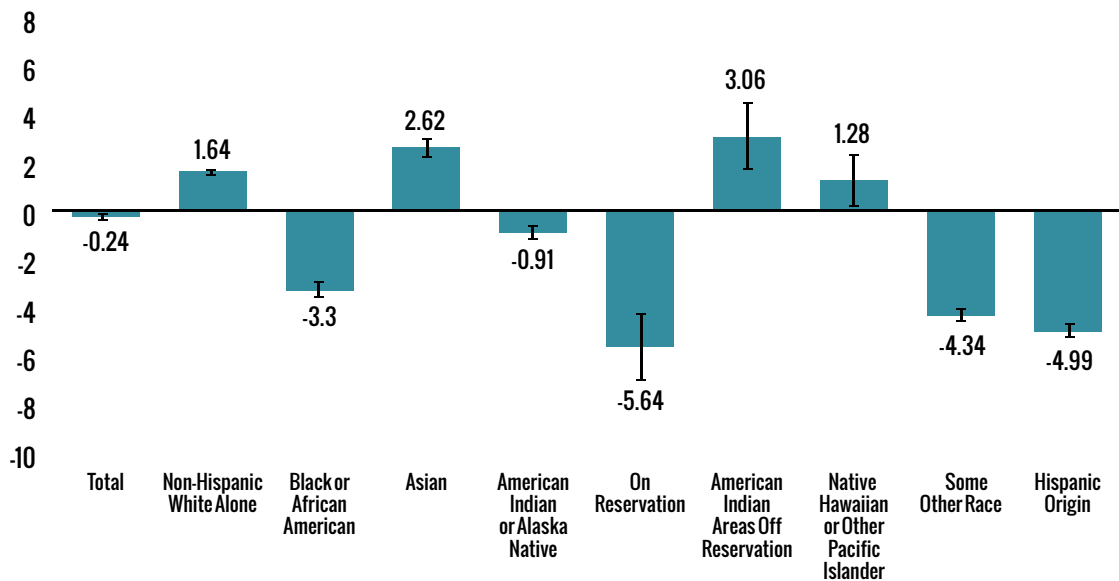
vi For more information, see: “Data Disaggregation.” NCAI Research Center, retrieved September 2022. Available at <https://www.ncai.org/policy-research-center/research-data/data>.

vii For additional learning on in-depth examples of the impacts of data processing and privacy algorithms on AI/AN data, visit: “Differential Privacy and the 2020 U.S. Decennial: Impact on American Indian and Alaska Native Data” National Congress of American Indians, September 2019. Available at https://www.ncai.org/prc/2020_Census_and_AIAN_data_FINAL_9_11_2019.pdf.

Federal, tribal, and state governments rely on federal data sources to understand the AI/AN populations trends. The changing categories and small sample sizes mean the detailed data are limited, and accuracy is compromised. Figure 3 provides an example of undercounting the AI/AN populations in the 2020 Decennial Census undercount results, which is intended to be a complete count of the United States. The undercount for the AI/AN On Reservations population in the 2020 Census showed a statistically significant undercount and experienced a greater undercount than the other racial group with a standard error of -5.64 percent (see Figure 3). Supplemental data collections and alternative data sources help fill the gap of underrepresented AI/AN populations in federal data collections.

FIGURE 3. The Census undercount for AI/AN populations on reservations is larger than any OMB racial group

Net coverage error by race, ethnicity, & tribal land occupancy, 2020 census



Note: The coverage estimate for Native Hawaiian or Pacific Islander (NHPI) populations and the total U.S. population are not statistically significant from 0. The standard error for “AI/AN On Reservation” and “American Indian Areas Off Reservation” groups are notably higher than estimates for all other groups, with the exception of NHPI populations.

Source: Georgetown Center on Poverty and Inequality, 2022. U.S. Census Bureau. “Net Coverage Error for the Household Population in the United States by Race and Hispanic Origin.” Available at https://data.census.gov/cedsci/table?y=2020&d=DEC%20Decennial%20Post-Enumeration%20Survey&tid=DECENNIALPES2020.C_RACEHISUS.

Insufficient Sample Sizes Contribute to Limited AI/AN Representation in Data

Equitable representation within data would ensure that AI/AN populations were sufficiently sampled so that the AI/AN category could be regularly a part of federal statistics—without the asterisk of limited data. Federal data collections continue to underrepresent the AI/AN and Tribal Nation populations.⁴⁶ Small sample sizes for tribal geographies limit the data quality and usage but often are the only data available. This can be particularly damaging and misrepresent the AI/AN and Tribal Nation populations.

Researchers question the accuracy and usability of AI/AN data in surveys like the ACS due to the small sample sizes for tribal geographies, large margins of error compared to other small levels of geography, and the weighting system applied to those small sample sizes.^{47, 48} The ACS sample sizes of the AI/AN race population and tribal land populations are so small that estimates for tribal lands with a population below 20,000 individuals, which is most tribal reservations, can only be calculated for the five-year ACS estimates to be considered reliable by the Census Bureau.⁴⁹ The benefit of the one-year ACS estimates is one that the Tribal Nations lose out on and highlights inequity in access. Although there are accuracy concerns with ACS data for Tribal Nations, the data produced are still crucial, as they are used to determine funding allocations from federal and state funds every year.⁵⁰

For example, participation in federal, state, and local elections is central to the democratic process. However, the AI/AN racial population data remains absent in analyses about this core piece of the democratic process due to the lack of sampling and data collection of AI/AN

voter data.⁵¹ In a report on the changing racial and ethnic composition of the U.S. Electorate, the Pew Research Center removed the AI/AN racial category from their analyses and data visuals due to small sampling size.⁵² In a report on voting rate, the Census Bureau similarly removed the AI/AN racial category from their analyses.⁵³ Erasing the AI/AN racial population from voter data is a clear example of inequality in data representation that results in deep inequities in the broader democratic process. Limited sampling and limited ability to collect AI/AN race data could explain some of the limited representation in the data.

Some federal data collections and surveys aim to overcome small sample sizes with oversampling and supplemental surveys. Oversampling is a process where more individuals from a specific population are surveyed than are represented in the general population. This process allows for a particular population to have sufficient representation to be included in analyses.⁵⁴ Supplemental Surveys are often a tool to collect more data on a targeted demographic or a targeted question.

Box 2 describes two different surveys conducted by the Centers for Disease Control (CDC) and the National Institute of Justice (NIJ), one with an AI/AN oversample and one without. The oversample had a larger sample size that facilitated the ability to analyze questions and was able to target the respondents' demographics more specifically. Oversampling with supplemental surveys can be costly, but oversampling can also be the difference between statistical analyses representing AI/AN populations as an asterisk and the ability to provide statistics about AI/AN populations and provide equitable representation alongside the other OMB racial categories.

Equitable representation within data would ensure that AI/AN populations were sufficiently sampled so that the AI/AN category could be regularly a part of federal statistics—without the asterisk of limited data

BOX 3:

**AI/AN REPRESENTATION IN SURVEYS:
IMPROVING REPRESENTATION IN DATA**

National surveys measuring violence against women and men are valuable for passing legislation to protect vulnerable members of society. Tribal Nations rely on accurate and quality data about AI/AN populations to defend and pass protective legislation. The high rates of Missing and Murdered Indigenous Women (MMIW) emphasize the importance of victimization data to support legislation that prevents further victimizations.

The National Institute of Justice (NIJ) and the Centers for Disease Control (CDC) conducted a survey in 1995-1996 to determine the frequency of violence from victimizations. The AI/AN representation in this national survey was limited to 88 female respondents and 105 male respondents. Some estimates were not completed for AI/AN populations due to receiving fewer than five responses for questions. Results from this report—including that “[AI/AN] women [are] almost two times as likely to have experienced rape as non-Hispanic white women”—are widely used, despite the limited data collection. This estimate could be accurate. Although, with a sample size of 88 AI/AN women and 105 men representing nearly two million AI/AN in 1990, more data are needed.

The CDC and NIJ launched the National Intimate Partner and Sexual Violence Survey (NISVS) in 2010, this time with an AI/AN Oversample. The AI/AN oversample was an additional survey conducted to target AI/AN populations. The combined samples included 2,473 AI/AN women and 1,505 AI/AN men (alone or in combination); 83 percent of women and 79 percent of men were affiliated or enrolled with a Tribal Nation or village. Over 50 percent of the respondents had lived on a reservation or Alaska Native village within the last year. The CDC and NIJ expanded their data collection to better represent AI/AN populations within their data collection, seeking to include the political state and the tribal geography categorization in addition to the racial categorization. The study found that more than half of AI/AN women experience sexual violence and more than four in five AI/AN women experience violence in their lifetime. The NISVS and the AI/AN oversample demonstrate an example of correcting under-sampling and increasing representation with an oversample of AI/AN populations in federal surveys.

Sources: Rosay, André B. “Violence Against American Indian and Alaska Native Women and Men: 2010 Findings from the National Intimate Partner and Sexual Violence Survey.” National Institute of Justice. May 2016. <https://www.ncjrs.gov/pdffiles1/nij/249736.pdf>; Paisano, Edna L. “We the... First Americans.” U.S. Census Bureau. September 1993. <https://www2.census.gov/library/publications/decennial/1990/we-the-americans/we-05.pdf>.

Federal & State Administrative Data May Inadequately Cover AI/AN Populations

Administrative data are data collected by federal, state, and local governments or commercial sources, typically as a byproduct of nonstatistical activities, such as record keeping, employment records, education records, taxation, and more.⁵⁵ Administrative data can be a valuable way to supplement gaps in data, as administrative data can be combined with information collected from federal data surveys and censuses to provide a wider understanding of the population examined.⁵⁶ Additionally, administrative datasets may be more readily available, and the costs of acquiring administrative datasets may be lower than additional oversamples.

Federal government agencies acquire administrative datasets from a variety of sources, such as from state and tribal governments, other federal agencies, and commercial entities. Notably, the Census Bureau is authorized and required by law—U.S. Code Title 13, Section 6—to acquire and use administrative data to minimize respondent burden while remaining consistent with the bureau’s mission to produce high-quality data.⁵⁷ To acquire and use an administrative dataset, statistical agencies such as the Census Bureau must negotiate access and data sharing agreements, including with tribal governments who are sovereign owners of their data.

Administrative data held by tribal governments can be a valuable source of information for federal data collections. The Census Bureau has routinely undercounted and underrepresented AI/AN populations—especially people living on tribal lands—by significant margins.⁵⁸ While administrative data may be helpful for filling in missing information and gaps in responses, the existing administrative datasets held by the Census Bureau may inadequately cover and represent AI/AN populations.⁵⁹ As a result, the Census Bureau may need to make additional efforts to negotiate access to administrative datasets that better cover and represent AI/AN populations.^{viii}

The 2020 Census provides a good example of the potential of administrative data and challenges in acquiring the appropriate datasets to accurately enumerate populations, including AI/AN populations. The 2020 Census faced several challenges in data collection, including pandemic closures, changing timelines, natural disasters, misinformation, and missing or incomplete addresses.^{ix} Internet access—the primary form of response for the 2020 Census—was limited across the different Tribal Nations. Due to the pandemic, some Tribal Nations chose to close their borders to reduce the spread of the COVID-19 virus, but this also prevented enumerators from entering tribal lands to conduct in-person enumeration. To fill the gaps in the 2020 Census response, the Census Bureau utilized administrative records from responses to past censuses and surveys, state-collected data, Indian Health Services, and more.⁶⁰ However, the Census Bureau had also sought to access administrative record data from tribal governments, such as the program data held by tribal governments from Temporary Assistance for Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) programs.⁶¹ The process to improve AI/AN representation in administrative data from Tribal Nation data sources requires the government-to-government processes and agreements and is ongoing.

viii Tribal Nation enrollment data has been discussed as a possible source of tribal data to include in administrative datasets. However, Tribal Nations own tribal enrollment data, and due to the history of Tribal Nations with the United States, many tribes may be unwilling to share such sensitive information on their tribal citizens. To find an alternative to using sensitive enrollment data, the U.S. Census Bureau conducted the 2017 Census Test - Tribal Enrollment to compare self-identified enrollment responses to official tribal enrollment data, but the analysis was not possible. The test aimed to emphasize the distinction between the AI/AN racial classification and the political and legal status classification and determine the feasibility of adding an enrollment question to the survey. Enrollment data are sensitive, however, and the National Advisory Committee, National Congress of American Indians (NCAI), and tribal leaders expressed concerns about accuracy, privacy, and data ownership. Due to those concerns, the Census Bureau did not include an enrollment question in the 2020 Census. See Orozco, Kimberly, et al. “2020 Research and Testing: 2017 Census Test Report – Tribal Enrollment.” U.S. Census Bureau, December 2019. Available at https://www2.census.gov/programs-surveys/decennial/2020/program-management/census-tests/2017/2017-census-test-report_tribal-enrollment.pdf.

ix For additional learning on the challenges the U.S. Census Bureau faced in data collection during the 2020 Census and the impacts on the AI/AN population and tribal lands, visit: “2020 Census Results: Regional Tribal Land Data Summary.” National Congress of American Indians, September 2021. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/2020_Census_Tribal_Lands_Region_Summary_9_14_2021_FINAL.pdf



Recommendations

The following recommendations are from researchers and allies to the Tribal Nations and AI/AN populations. However, **any changes to policy or data collections should engage in formal Tribal Consultation first.**

Implementation of these recommendations should improve data quality and equitable AI/AN representation in federal data collections for research purposes. Tribal Nation input through the government-to-government processes is necessary before any change is made, and deferment to the sovereign nations for desired changes is required.

Defining the Data

Federal statistical agencies could consider the following actions:

- Be clear in defining which AI/AN population is reflected in a given dataset and consistent over time.
- Create a crosswalk or detailed guidance for comparing data for future analyses when AI/AN populations are represented in the dataset changes from one year to the next.
- Clearly define the AI/AN population categories within data collection surveys or questionnaires so that respondents know how to best respond.

Equitable Representation in of Data Collections

Federal statistical agencies could consider the following actions:

- Improve sampling of AI/AN populations in federal data collections, so AI/AN populations can regularly be reported in federal data with the other OMB racial categories.
- Allocate more funding for AI/AN oversamples to achieve better data quality for the small populations. Tribal consultation and input should be used to determine data products and surveys that require oversampling.
- Consult with Tribal Nations to identify ways to improve AI/AN representation in administrative data.

Endnotes

- 1 “About the Topic of Race.” U.S. Census Bureau, 1 March 2022. Available at <https://www.census.gov/topics/population/race/about.html>
- 2 Jones, Nicholas, et al. “2020 Census Illuminates Racial and Ethnic Composition of the Country.” U.S. Census Bureau, August 2021. Available at <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html>
- 3 “A First Look at the 2020 American Indian/Alaska Native Redistricting Data.” NCAI Policy Research Center, August 2021. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/Overview_of_2020_AIAN_Redistricting_Data_FINAL_8_13_2021.pdf.
- 4 “Bureau of Indian Affairs (BIA).” U.S. Department of the Interior, Indian Affairs, retrieved 25 July 2022. Available at <https://www.bia.gov/bia>.
- 5 “Tribal Nations and the United States: An Introduction.” National Congress of American Indians, February 2020. Available at <https://www.ncai.org/about-tribes>.
- 6 “Guide to Working with Non-federally Recognized Tribes in the Section 106 Process.” Advisory Council on Historic Preservation, February 2018. Available at <https://www.achp.gov/sites/default/files/whitepapers/2018-06/GuidetoWorkingwithNon-FederallyRecognizedTribesintheSection106Process.pdf>.
- 7 “Guide to Working with Non-federally Recognized Tribes in the Section 106 Process.” Advisory Council on Historic Preservation, February 2018. Available at <https://www.achp.gov/sites/default/files/whitepapers/2018-06/GuidetoWorkingwithNon-FederallyRecognizedTribesintheSection106Process.pdf>.
- 8 “What is a Federal Indian Reservation?” U.S. Department of the Interior, Indian Affairs, August 2017. Available at <https://www.bia.gov/faqs/what-federal-indian-reservation>.
- 9 “Tribal Nations and the United States: An Introduction.” National Congress of American Indians, February 2020. Available at <https://www.ncai.org/about-tribes>.
- 10 “Tribal Nations and the United States: An Introduction.” National Congress of American Indians, February 2020. Available at <https://www.ncai.org/about-tribes>.
- 11 “Censuses of American Indians.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html.
- 12 Pratt, Beverly, Lindsay Hixson and Nicolas Jones. “Measuring Race and Ethnicity Across the Decades: 1790–2010.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/data-tools/demo/race/MREAD_1790_2010.html.
- 13 Connolly, Michele and Bette Jacobs. “Counting Indigenous American Indians and Alaska Natives in the US Census.” Statistical Journal of the IAOS, 36(1): 201-210, 2020. Available at <https://content.iospress.com/articles/statistical-journal-of-the-iaos/sji200615>.
- 14 “Censuses of American Indians.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html.
- 15 Pratt, Beverly, Lindsay Hixson and Nicolas Jones. “Measuring Race and Ethnicity Across the Decades: 1790–2010.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/data-tools/demo/race/MREAD_1790_2010.html.
- 16 Pratt, Beverly, Lindsay Hixson and Nicolas Jones. “Measuring Race and Ethnicity Across the Decades: 1790–2010.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/data-tools/demo/race/MREAD_1790_2010.html.
- 17 Pratt, Beverly, Lindsay Hixson and Nicolas Jones. “Measuring Race and Ethnicity Across the Decades: 1790–2010.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/data-tools/demo/race/MREAD_1790_2010.html.
- 18 Hattam, Victoria. “Ethnicity & the boundaries of race: rereading Directive 15.” Daedalus, Winter 2005. Available at <https://www.amacad.org/publication/ethnicity-boundaries-race-rereading-directive-15>.
- 19 “Directive No. 15, Race and Ethnic Standards for Federal Statistics and Administrative Reporting,” 48 FR 19269–1927 (May 4, 1978). Available at <https://wonder.cdc.gov/wonder/help/populations/bridged-race/directive15.html>.
- 20 Liebler, Carolyn A., Renuka Bhaskar and Sonya Rastogi. “Dynamics of Race: Joining, Leaving, and Staying in the American Indian/Alaska Native Race Category between 2000 and 2010.” Center for Administrative Records Research and Applications, August 2014. Available at <https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-10.pdf>.
- 21 Pratt, Beverly, Lindsay Hixson and Nicolas Jones. “Measuring Race and Ethnicity Across the Decades: 1790–2010.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/data-tools/demo/race/MREAD_1790_2010.html.
- 22 Humes, Karen and Howard Hogan. “Measurement of Race and Ethnicity in a Changing, Multicultural America.” Race and Social Problems, 1:117, 17 September 2009. Available at <https://cblpi.org/wp-content/uploads/2015/10/Census-HispanicOrigin-backgroundHumes%20%20Hogan%20-%202009.pdf>
- 23 “Censuses of American Indians.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html.
- 24 Humes, Karen and Howard Hogan. “Measurement of Race and Ethnicity in a Changing, Multicultural America.” Race and Social Problems, 1:117, 17 September 2009. Available at <https://cblpi.org/wp-content/uploads/2015/10/Census-HispanicOrigin-backgroundHumes%20%20Hogan%20-%202009.pdf>
- 25 “Censuses of American Indians.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html.
- 26 “Censuses of American Indians.” U.S. Census Bureau, retrieved 28 July 2022. Available at https://www.census.gov/history/www/genealogy/decennial_census_records/censuses_of_american_indians.html.

- 27 "A First Look at the 2020 American Indian/Alaska Native Redistricting Data." NCAI Policy Research Center, August 2021. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/Overview_of_2020_AIAN_Redistricting_Data_FINAL_8_13_2021.pdf.
- 28 "Tribal Nations and the United States: An Introduction." National Congress of American Indians, February 2020. Available at https://www.ncai.org/tribalnations/introduction/Indian_Country_101_Updated_February_2019.pdf.
- 29 "Tribal Nations and the United States: An Introduction." National Congress of American Indians, February 2020. Available at https://www.ncai.org/tribalnations/introduction/Indian_Country_101_Updated_February_2019.pdf.
- 30 "A First Look at the 2020 American Indian/Alaska Native Redistricting Data." NCAI Policy Research Center, August 2021. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/Overview_of_2020_AIAN_Redistricting_Data_FINAL_8_13_2021.pdf.
- 31 "2020 Census Includes Tribal Affiliations." National Indian Council on Aging, Inc., January 2020. Available at [https://www.nicoa.org/2020-census-includes-tribal-affiliations/#:~:text=closest%20population%20group,-ln%20the%202020%20Census%2C%20individuals%20and%20households%20will%20have%20the,tribe\(s\)%20if%20applicable](https://www.nicoa.org/2020-census-includes-tribal-affiliations/#:~:text=closest%20population%20group,-ln%20the%202020%20Census%2C%20individuals%20and%20households%20will%20have%20the,tribe(s)%20if%20applicable).
- 32 "2020 Census Includes Tribal Affiliations." National Indian Council on Aging, Inc., January 2020. Available at [https://www.nicoa.org/2020-census-includes-tribal-affiliations/#:~:text=closest%20population%20group,-ln%20the%202020%20Census%2C%20individuals%20and%20households%20will%20have%20the,tribe\(s\)%20if%20applicable](https://www.nicoa.org/2020-census-includes-tribal-affiliations/#:~:text=closest%20population%20group,-ln%20the%202020%20Census%2C%20individuals%20and%20households%20will%20have%20the,tribe(s)%20if%20applicable).
- 33 "What is a Federal Indian Reservation?" U.S. Department of the Interior, Indian Affairs, August 2017. Available at <https://www.bia.gov/faqs/what-federal-indian-reservation>.
- 34 "A First Look at the 2020 American Indian/Alaska Native Redistricting Data." NCAI Policy Research Center, August 2021. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/Overview_of_2020_AIAN_Redistricting_Data_FINAL_8_13_2021.pdf.
- 35 "Indian Housing Block Grant Program." U.S. Department of Housing and Urban Development, retrieved 02 August 2022. Available at https://www.hud.gov/program_offices/public_indian_housing/ih/grants/ihbg.
- 36 "NAHASDA at 25." PD&R Edge, October 2021. Available at <https://www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-101221.html>.
- 37 Changes to the Indian Housing Block Grant (IHBG) Formula Regulations." U.S. Department of Housing and Urban Development, 17 August 2017. Available at <https://www.hud.gov/sites/documents/PIH2017-16.PDF>.
- 38 "Emergency Management." National Congress of American Indians, retrieved September 2022. Available at <https://www.ncai.org/policy-issues/tribal-governance/emergency-management>.
- 39 Lucero, Julie E, et al. "The Holding Space: A Guide for Partners in Tribal Research." NCAI Policy Research Center and UNR-CHS, October 2019. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/Holding_Space_paper_2020.pdf.
- 40 NCAI Policy Research Center (2019). American Indian and Alaska Native Youth in the Juvenile Justice System: A Guide to the Data. Washington DC: National Congress of American Indians, January 2020.
- 41 "American Indian and Alaska Native Youth in the Juvenile Justice System: A Guide to the Data." National Congress of American Indians Policy Research Center, January 2020. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/NCAI_Policy_Research_Center_AIAN_Juvenile_Justice_Data_FINAL_1_2020.pdf.
- 42 Letter from National Congress of American Indians Dante Desiderio, CEO, NCAI to Dr. Robert Santos, Director, U.S. Census Bureau. December 16, 2021. Available at https://www.ncai.org/policy-research-center/research-data/recommendations/20211216_Signed_US_Census_Bureau_2020_Census_DHC_input_12_16_2021_FINAL.pdf.
- 43 "Walk softly and listen carefully": Building research relationships with tribal communities." NCAI Policy Research Center and MSU Center for Native Health Partnerships, 2012. Available at https://www.ncai.org/attachments/PolicyPaper_SpMCHTcixRRjMEjDnPmesENPzjHTwhOIOWxiWOIWdSrykJuQggG_NCAI-WalkSoftly.pdf.
- 44 Villegas, Malia, et al. "Disaggregating American Indian & Alaska Native data: A review of literature." NCAI Policy Research Center, July 2016. Available at https://www.ncai.org/DataDisaggregationAIAN-report_5_2018.pdf.
- 45 NCAI Policy Research Center (2017). Meeting the Reporting Requirements of Federal Agencies. Washington, DC: National Congress of American Indians. Available at https://www.ncai.org/policy-research-center/initiatives/Federal_Reporting_Requirements_FINAL_10_31_2017.pdf.
- 46 "American Indians and Alaska Natives Living on Reservations Have the Highest 2020 Census Undercount." NCAI Policy Research Center, March 2022. Available at <https://www.ncai.org/news/articles/2022/03/10/american-indians-and-alaska-natives-living-on-reservations-have-the-highest-2020-census-undercount>.
- 47 Deweaver, Norm. "Comments on Census Bureau Evaluation Report on ACS Coverage Measured by Comparison with the 2010 Decennial Census." NCAI Policy Research Center, retrieved 01 August 2022. Available at https://www.ncai.org/policy-research-center/initiatives/Census_Evaluation_of_ACS_coverage_-_DeW_comments.docx.
- 48 Ong, Jonathan and Paul Ong. "Los Angeles American Indian and Alaska Native Project Technical Memo 5: AIAN Underrepresentation in the ACS." UCLA American Indian Studies Center, November 2012. Available at <https://www.aisc.ucla.edu/research/Memo-5.pdf>.
- 49 "When to Use 1-year or 5-year Estimates." U.S. Census Bureau, retrieved 2 October 2022. Available at <https://www.census.gov/programs-surveys/acs/guidance/estimates.html>.
- 50 Villegas, Malia, et al. "Disaggregating American Indian & Alaska Native data: A review of literature." NCAI Policy Research Center, July 2016. Available at https://www.ncai.org/DataDisaggregationAIAN-report_5_2018.pdf.
- 51 "Native Vote Report: 2020 AI/AN Turnout and Registration Data." National Congress of American Indians Policy Research Center, June 2022. Available at https://www.ncai.org/policy-research-center/research-data/prc-publications/20220607_Native_Vote_Report_-_AIAN_Turnout_and_Registration_Data_FINAL.pdf.
- 52 Igielnik, Ruth and Abby Budiman. "The Changing Racial and Ethnic Composition of the U.S. Electorate." Pew Research Center, September 2020. Available at <https://www.pewresearch.org/2020/09/23/the-changing-racial-and-ethnic-composition-of-the-u-s-electorate>.

- 53 “Voting Rates by Race and Hispanic Origin.” U.S. Census Bureau, May 2017. Available at <https://www.census.gov/library/visualizations/2017/comm/voting-rates-race-hispanic.html>.
- 54 Mercer, Andrew. “Oversampling is used to study small groups, not bias poll results.” Pew Research Center, October 2016. Available at <https://www.pewresearch.org/fact-tank/2016/10/25/oversampling-is-used-to-study-small-groups-not-bias-poll-results/>.
- 55 Lee, Jae June, Cara Brumfield, and Irma Sandoval. “Administrative Data in the 2020 Census: Considerations for Civil Rights Groups.” Georgetown Center on Poverty and Inequality, Economic Security and Opportunity Initiative, March 2022. Available at <https://www.georgetownpoverty.org/issues/administrative-data-in-the-2020-census/>.
- 56 “Combining Data - A General Overview.” U.S. Census Bureau, retrieved September 2022. Available at <https://www.census.gov/about/what/admin-data.html>.
- 57 Lee, Jae June, Cara Brumfield, and Irma Sandoval. “Administrative Data in the 2020 Census: Considerations for Civil Rights Groups.” Georgetown Center on Poverty and Inequality, Economic Security and Opportunity Initiative, March 2022. Available at <https://www.georgetownpoverty.org/issues/administrative-data-in-the-2020-census/>.
- 58 O’Hare, William and Jae June Lee. “Understanding the 2020 PES & DA Results.” 16 March 2021. Available at https://docs.google.com/presentation/d/1PQw4LC5XJc6ne8QKRbPN6t2yeSSPU2w9/edit#slide=id.g11a027e365c_0_150.
- 59 Liebler, Carolyn, et al. “America’s Churning Races: Race and Ethnic Response Changes between Census 2000 and the 2010 Census.” *Demography*, 4 (1): 259-284, 2017. Available at <https://read.dukeupress.edu/demography/article/54/1/259/167674/America-s-Churning-Races-Race-and-Ethnicity>.
- 60 Mule, Thomas. “Administrative Records and the 2020 Census.” U.S. Census Bureau, April 2021. Available at https://www.census.gov/newsroom/blogs/random-samplings/2021/04/administrative_recor.html.
- 61 “Administrative Records Data Acquisitions FAQ.” U.S. Census Bureau, retrieved 1 August 20, 2022. Available at <https://www.census.gov/content/dam/Census/about/about-the-bureau/adrm/data-linkage/Data%20Acquisitions%20Frequently%20Asked%20Questions.pdf>.



