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A Civil Rights Agenda for the Next Quarter Century



American Indian and Alaska Native Populations: Envisioning the Future

NOVEMBER 2023

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About the Series

A Civil Rights Agenda for the Next Quarter Century

The Civil Rights Project was founded in 1996 at Harvard University, during a period of increasingly conservative courts and political movements that were limiting, and sometimes reversing, major civil rights reforms. In 2007 the Project moved to UCLA. Its goal was – and still is – to bring together researchers, lawyers, civil rights advocates and governmental and educational leaders to create a new generation of civil rights research and communicate what is learned to those who could use it to address the problems of inequality and discrimination. Created a generation after the civil rights revolution of the 1960s, CRP's vision was to produce new understandings of challenges and research-based evidence on solutions. The Project has always maintained a strong, central focus on equal education and racial change.

We are celebrating our first quarter century by taking a serious look forward – not at the history of the issues, not at the debates over older policies, not at celebrating prior victories but at the needs of the next quarter century. Since the work of civil rights advocates and leaders of color in recent decades has often been about defending threatened, existing rights, we need innovative thinking to address the challenges facing our rapidly changing society. Political leaders often see policy in short two- and four-year election cycles but we decided to look at the upcoming generation. Because researchers are uniquely qualified to think systematically, this series is an attempt to harness the skills of several disciplines, to think deeply about how our society has changed since the civil rights revolution and what the implications are for the future of racial justice.

This effort includes two very large sets of newly commissioned work. This paper is the sixth in the series on the potential for social change and equity policies in the nation. The second set of studies focuses on California, a vast state whose astonishing diversity foretells the future of the U.S. and whose profound inequality warns that there is much work to be done. All these studies will

initially be issued as working papers. They will be brought together in statewide conferences and in

the U.S. Capitol and, eventually, as two major books, which we hope will help light the way in the

coming decades. At each of the major events, scholars will exchange ideas and address questions

from each other, from leaders and from the public.

The Civil Rights Project, like the country, is in a period of transition, identifying leadership

for its next chapter. We are fortunate to have collaborated with a remarkable network of important

scholars across the U.S., who contributed to our work in the last quarter century and continue to do

so in this new work. We are also inspired by the nation's many young people who understand that

our future depends on overcoming division. They are committed to constructing new paths to racial

justice. We hope these studies open avenues for this critical work, stimulate future scholars and

lawyers, and inform policymaking in a society with the unlimited potential of diversity, if it can only

figure out how to achieve genuine equality.

Gary Orfield

Patricia Gándara

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Foreword

Since the creation of the Civil Rights Project in 1996 we have commissioned several hundred studies of racial inequality and possible solutions but have been repeatedly frustrated by the lack of basic data on Native people and communities and the absence of serious research and policy discussion of needed changes. With more than 500 federally recognized tribes and other Native communities seeking recognition, these are important and complex issues. This report describes the current population and projects its future changes.

Native people are often simply left out in national studies and reports and ignored in policymaking. In basic surveys the national samples usually have far too few Native American respondents to provide statistically valid conclusions, so they are ignored. My first work in civil rights was on issues of Native American rights, and I have been frustrated for many years by the lack of data and inconsistent statements about even the most basic issues. When I lived on the Nett Lake Chippewa reservation, running a student project in the far North of Minnesota sixty years ago, there was poor data and profound inequality. There still is. As we set out in this series to describe the civil rights issues for the next 25 years, we are determined to include issues of American Indian and Alaska Native (AIAN) peoples. This report first asks a basic question. How many Native people are there and what is the population likely to be in the mid-21st century? We commissioned a leading expert in American Indian demographics, Carolyn Liebler, of the University of Minnesota, to answer those questions. We did not understand the rules for classifying the data or the confusion inherent in poorly designed Census questions. We hoped for a clear picture. Understanding the data and the differing results, produced by using varying definitions of the Census findings, is a critical step in thinking about Native rights.

The situation is a very complex reality. In some parts of the U.S. there are large areas set aside for reservations and active communities of people from particular tribal backgrounds, but

number of Native residents but they are widely scattered with no large concentration. Some are official members of individual tribes and live on reservations. Some can still speak one of the many tribal languages. Some attend tribal or Bureau of Indian Affairs schools, but the great majority of students are in public schools not located on tribal land and not controlled by tribal governments. They often experience discrimination. Others are virtually invisible in communities and schools of another racial or ethnic group, often miscounted or misclassified. Others have ancestry but no current connection with Native communities. Many are intermarried with people from other racial backgrounds. People often change the way they report their racial identity from one Census to the next. Some have had genetic tests and know they have some percent of Native American ancestry. Because there is a very high intermarriage rate amongst this population, there are often mixed identities. American Indian identity in such circumstances can be a matter of choice. The counts depend upon how you analyze and classify the data.

Obviously, figuring out how to describe these varied conditions, get valid statistics and analyze present and projected future Native populations have implications for civil rights policies. The careful work presented here provides essential data for thinking about those issues and their implications. It provides an important perspective that the Native population, far from shrinking as a share of the U.S., is actually multiplying at an extraordinary rate. But the story is far from simple and the numbers have to be understood as government makes policy. Liebler's analysis shows that, depending on your assumptions and how you use various datasets, the population can vary by orders of magnitude. In federal educational and birth statistics, American Indian and Alaskan Natives number about one percent of U.S. population. By the broadest definition, Liebler reports, the number could be several times higher, as much as 7 percent of the national population, a population

growing rapidly to 2050 and beyond. A community often described as very small could be a far larger share. It depends on the definition of Native identity and the data source used.

This study relies primarily on data collected by the U.S. Census Bureau, the standard for U.S. demographics. It is based on responses to questions that are sometimes confusing. The numbers are affected by the Bureau's methods of classification. This data relies primarily on self-identification, but the Census does not ask mixed race residents if they have a basic identity; it had been changed in 2000 to allow claims of multiple racial identities. Successive changes in data collection and classification by the Census Bureau have deepened the uncertainties. Should the AIAN (American Indian and Alaska Native) population include people who also define their race as white, Black, Asian, or who say they are Latinos? Should it include people, like the great majority of Mexicans and Central Americans, who come from mixed race (mestizo) societies but do not identify as "Indios" in their country of origin, where the difference is often much more a cultural, linguistic, and economic division than a racial one?

The fact that the largest community of color in the U.S. now is the Latino or Hispanic community has made racial identity far more complex. This is especially since the Census Bureau does not list "Latino" or "Hispanic" as a racial category and has decided that Latinos, both U.S. and foreign-born, can claim American Indian racial ancestry, even if they have no connection to U.S.-based tribes or to native communities in Latin America. Many Latinos are from societies without a tradition of rigid racial definitions or strong color segregation like that in the U.S.

This report shows that 61 percent of those identifying as AIAN in the 2020 Census report more than one racial identity, some from two different historically victimized groups that each claim separate civil rights. Only about one-fifth of American Indian and Alaska Native people are presently married to other people reporting AIAN as a race. Millions of Latinos have mixed ancestry but identify primarily as Latino in the U.S. context. "Latino" has not been included as a racial

background by the Census (though that may change in 2030), so they usually choose "White," "American Indian/Alaska Native" or "some other race" on the Census race question, among others. Many people change their reported racial identity from one Census to another. The Census does not ask what the respondent considers his or her primary identity. In other words, any Latino can claim Native American identity even without any primary identification as Native in either country. Millions of Latinos choose "American Indian or Alaska Native" on the race question, either intentionally or inadvertently. Clearly, the Census questions and methods affect the numbers.

Aided by Census decisions on classifications, the number of Census respondents claiming Native American background has grown immensely in recent decades, and this study indicates that the number will probably continue to expand rapidly. There is massive multiracialism within the American Indian category. Should all people who include AIAN in their list of two or more races be considered Native American? Should they be double counted if they also claim one or more other racial identities?

In thinking about the possible implication of these numbers for civil rights, a great complexity comes from the historic legal identification of American Indian status and rights in U.S. law. As the Supreme Court has said, it has often been about the "political status" of tribes not the racial characteristics of individuals. In a landmark decision 49 years ago, *Morton v. Mancari*, 417 U.S. 535 (1974), the Supreme Court held that preference policies for employment and other issues were not racial discrimination but were permitted because the preference "is granted to Indians not as a discrete racial group, but rather, as members of quasi-sovereign tribal entities...." The rights

¹ Author Carolyn Liebler recently explained the Census Bureau's coding strategy: "Many of the people who are coded as AIAN did not actually mark the box. They wrote something in the fill-in-the-blank area that caused the Census Bureau to recode them into AIAN race. For example, a person might have marked Hispanic and in the 'some other race' (SOR) box reported Nahua--a Central American tribe--which was then recoded to Hispanic multiple race SOR & AIAN, or they might have marked White and in the detail box also reported 'English, Irish, German, French, Cherokee, Icelandic,' which was then recoded to White and AIAN."

attached to the tribes as political, not racial, institutions. They were independent societies and cultures with differing languages, customs, religions and organizations. The rights operated especially on lands set aside for the tribe. Reform legislation in recent decades has emphasized the role of tribes and turned over more authority to them. So have some key court decisions.² Tribal rights are embodied in treaties and other agreements and laws. Often these rights, which were stated in sweeping terms in the original documents, have been ignored or interpreted away by U.S. and state officials, but they retain great power when enforced. In a number of decisions, the Supreme Court has supported various rights including taxation authority, criminal justice powers, and control of residence on tribal lands.³ "The Court further held that Indian treaty rights remain extant unless Congress expressly abrogates them ...and even then only if the government pays just compensation." Who is entitled to these rights depends on definitions, both by tribes and various authorities. Tribal membership was initially, of course, determined by the tribes. The federal government introduced the requirement of "blood quantum" or percentage of Native ancestors (usually 1/4) in the 1930s to determine eligibility for federal programs, and it is used in various ways by many tribes. Tribes now control the definition of tribal membership and use widely different definitions. They can admit members with much less Native ancestors in their background and varying skin colors.

² In a very important 2020 decision, *McGirt v. Oklahoma*,140 S. Ct. 2452 (2020) the Supreme Court upheld treaties made with Oklahoma tribes in the l830s holding that a huge reservation still existed in spite of state policies. The decision changed the administration of criminal law in about half of the state. Even through the decision was limited to some extent two years later in *Oklahoma v. Castro-Huerta*, the idea that there were permanent enforceable rights granted to tribal groups continued to have broad impact. These important rights were based on tribal rights and they gave major power to tribal institutions.

³ Washington v. Colville Confederated Tribes, 447 U.S. 134 (1980); United States v. Wheeler, 435 U.S. 313 (1978)); Merrion v. Jicarilla Apache Tribe, 445 U.S. 130 (1982).

⁴ Fletcher, Matthew L.M., "A Short History of Indian Law in the Supreme Court," American Bar Association, Oct. 1, 2014.

The data we get from non-Census sources gives a very different picture than the Census data, and the implications for civil rights will require a great deal of further analysis. This non-Census data is primarily about those with a clearly dominant or exclusive identity. The U.S.

Department of Education, which collects data from every school, reports that less than 1 percent of U.S. students are Native Americans and that those numbers are declining. Since this is based largely on self-identification by families, it may be an important indication of what one might call a core Native population. Many reservations show declining populations. The various counts can all be accurate but it is very important in future research to understand why the numbers are so different and how they relate to discrimination, opportunities, and rights.

Liebler's analysis of Census statistics shows the rapid growth of those claiming American Indian racial identity. The vast expansion of this identity in recent Censuses has been among people not living in tribal communities or areas. Among those who live in reservations or tribally defined areas, the numbers are far smaller and there is no significant growth, as this study shows. Many of these communities, where Indian identity is often strong, are shrinking and intermarrying at high rates, threatening the future of the tribes. A separate 2022 study by Liebler of the largest Indian area in Minnesota, the Red Lake Nation, for example, shows the consequences of different definitions of tribal membership. The Red Lake community's constitution limited membership to those who had at least ¼ tribal ancestry. Population projections showed that because of the high intermarriage rate and low birth rates, the tribe was on a path of continuous decline, projected to fall by more than 90 percent in a century. Even if the tribal government changed the rules to count children from marriages with Native people from any other tribe, there would be huge declines. The only feasible way to maintain a relatively steady or growing tribal population over time was to make major

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⁵ U.S. Dept. of Education, *The Condition of Education 2023* reports that nine tenths of one percent of public-school students are American Indian or Alaskan Natives.

changes, lowering the amount of "blood" needed for membership. In other words, the survival of the tribe as a viable entity probably required decisions that make the tribe more overwhelmingly multiracial. The tribal council could, in effect, declare more and more people with less and less tribal connection to be members.

In addition to the Supreme Court decisions already mentioned, there is a large body of law and policies about the rights of Native Americans. They are, of course, protected by general laws forbidding racial and national origin discrimination. The U.S. government made (and often violated) treaties with independent tribal communities as white settlement expanded and the government pressed to take tribal land for homesteading and economic development. These treaties were made with independent societies, which were much weaker, at least in armament, than the rapidly expanding society created by European immigration and Black slavery. The treaties promised important tribal rights, often permanent rights. The government often ignored obligations as the tribes were conquered. Treaties were also widely ignored or violated by public officials. Yet they still exist and are sometimes the basis of successful claims.

Various theories and policies were imposed on Native communities: religious conversion,
American Indian agents, boarding schools, relocation, turning tribes into corporations, moving
people from tribal lands. There was for many years, an expectation that the American Indian
population would vanish as it was decimated by violence, poverty and disease. There were later
theories of cultural preservation, tribal rule, reliance on casinos or contracts for sale of resources,
usually with only sporadic attention from Congress and the Courts. Policies and practices were often
dominated by regional prejudices. After the Civil War, when the Constitution was altered to create
citizenship rights for ex-slaves, Native Americans were excluded from the 14th Amendment and
many were left in limbo or dependent on state governments, until citizenship of all of the original

residents was finally assured in the l920s. Often tribes faced racist policies embraced at the very highest levels of government, even in otherwise highly respected administrations.⁶

The treaties can create rights that other nonwhite groups do not have, since they are based on agreements with tribes, not general laws, and the agreements often do not speak of race but of rights of the tribes as sovereign political entities. Tribal land in "trust" to the U.S. government is protected in some key ways from the market. In a society based largely on individual rights, some tribal communities have distinctive group rights and often share community ownership of some key resources.⁷ This area of law still creates regular controversies. Legislation has expanded tribal control over a number of schools and colleges.

Formal tribal membership is under the control of tribal governments and may or may not be linked to a formal genetic or family background or "blood quantum." Decisions on membership can relate to shares of tribal proceeds from businesses, including natural resources and casinos that are permitted because of exemptions from state laws, and rights to reside on tribal land and receive tribal services. Needless to say, these decisions over membership can produce intense conflicts.

This study is about demographic trends and has data that will surprise many readers, but it is not a policy study or a study of Native American rights. It is a professional demographic projection about the growth of the Native population using a variety of definitions, providing essential raw material for policy and planning in the future. It tells us that we will have a substantial population that falls within traditional understandings of American Indian rights, and vastly larger and rapidly growing populations that have a different, more attenuated or even nonexistent relationships with established Native communities but claim the AIAN identity as at least part of their racial

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⁶ President Theodore Roosevelt was particularly identified with racist views and determination to crush Indian traditions and break up Indian lands.

⁷ Reservation land usually cannot be sold and cannot be taxed by state and local governments, being held in trust by the U.S. Department of the Interior.

background. The expanding numbers may greatly expand the constituencies interested in American Indian rights and opportunity. The author does not reach judgments about who should have what rights or what the priorities should be. That will, of course, be up to the communities themselves, to Native organizations, national and state policy makers, and the courts.

We have commissioned a policy brief of these issues, focusing on educational equity for Native American students (Faircloth, forthcoming 2023). The additional research will involve analysis of a number of basic statistical datasets for presentation of trends in educational opportunity and attainment, and include a discussion of policies that could create more equity and better outcomes for Native students, who are lagging very far behind on too many dimensions.

This paper by Liebler, and a great deal of the writing on Native American affairs, ends with the idea of relying heavily on tribal leaders and tribal elders for ideas about the future. For example, the National Academy of Science consultation with American Indian leaders and experts in 2023 gave strong attention to the need for tribal leadership, and pointed out that this was a basic goal of Congress in the 1975 Indian Self-Determination and Educational Assistance Act, the leading legislation that transferred much power over education and other functions from the federal government to the tribes, who now run two thirds of the reservation schools, formerly operated by the Bureau of Indian Affairs, as well as 33 tribal colleges. Similarly, the 2019 National Indian Education Study gave central focus to tribal culture and language. These studies and the data they used focused on students identified as American Indian or Alaska Native and were primarily concerned with tribally connected people, though the data shows that a large majority of those

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⁸ National Academy of Sciences, Engineering and Medicine, 2023, *Intergeneratonal Poverty and Mobility Among Native Americans in the United States*. Washington: National Academy Press, 2023.

⁹ Rampey, B.D., Faircloth, S.C., Whorton, R.P., and Deaton, J. (2021). *National Indian Education Study* (NCES 2021-018). U.S. Department of Education. Washington, DC: Institute of Education Sciences, National Center for Education Statistics, 2019

identified are not located on reservations and a third are in metropolitan areas. The great majority of American Indian students attend public schools with relatively small percentages of other Native students, however, both policy and law tend to rely on tribal identity and tribal leadership.

The number of people who identified their race as American Indian or Alaska Native in the 2020 Census was 9.7 million, an increase of more than a fourth since the 2010 count, yet constituting only 1.1 percent of the U.S. population. This report shows that a great many of these people actually had mixed-race backgrounds. Perhaps Indian identity was more an aspiration than a genetic or historical fact. For many immigrants from Latin America, the absence of "Latino" as a race option meant that American Indian could have been the most plausible racial identity for those who did not report themselves as whites or "others." The 1 percent figure was quite close to an even lower percent counted in U.S. public school statistics and federal birth statistics for students registered in public schools and new babies, respectively. If we had actual genetic information or accurate family tree information and wanted to identify "pure-blooded" American Indians, the number would, in other words, be much lower. This analysis also shows almost no growth in tribal areas, even though the counts also included non-Natives who lived there. What we see is a low share of the nation's total in terms of traditional definitions of the Indigenous population and major questions about whether those numbers have much relationship with any traditional definition of race. Although this is not a policy paper, these numbers must be considered in terms of claims for services, education, voting rights policies, access to Indigenous health services and housing, and other issues. They show that Native identity is soaring.

On June 29, 2023, in the Supreme Court's decision in *Students for Fair Admissions Inc. v.*President & Fellows of Harvard College, it struck down affirmative action plans, finding them to be racial discrimination against white and Asian students. It ordered colleges to stop giving any consideration to race in college admissions. The Court ruled that the Fourteenth Amendment's

requirement of "equal protection of the laws" meant that admissions must ignore race because any use of race was illegitimate, even if to expand opportunity. The Constitution was colorblind and policy must act as if race did not exist. The Court's majority rejected major precedents and the arguments of dissenters, who said that the 14th Amendment's basic purpose was not to institute colorblindness, but to foster equality for freed slaves in a society that was deeply divided by race. The 6-3 decision meant that race-based affirmative action must stop.

Native American civil rights policy has, however, not been about race. If race is about genetic ancestry, the original tribes that occupied the land when European settlement began were, of course, a race in the conventional sense, internally connected and separated from the settlers. When the government made treaties, however, they were agreements between leaders of independent tribal groups and the U.S. government, not racially defined.

The recent affirmative action decision was about race, the Constitution and civil rights law. There was no mention of American Indian tribes or Native rights. History shows that action on behalf of tribal members is not carried out on the basis of race but on membership in a tribe. The data in this study also strengthens the argument for Native American rights in situations where race-specific policy is forbidden. In law there are good precedents to say that policies for American Indians are about tribal membership. That is why, for instance, the University of California could set up special financial aid for members of recognized tribes without violating the state's constitutional prohibition on "racial preference." In other words, college admissions preferences for Native Americans would not be racial preferences. I believe that affirmative action for members of tribes

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¹⁰ The University of California announced the Native American Opportunity Plan on April 28, 2022 and said that it "ensures that in-state systemwide tuition and student services fees are fully covered for California students who are also enrolled in federally recognized Native American, American Indian, and Alaska Native tribes. This plan applies to undergraduate and graduate students." https://www.universityofcalifornia.edu/news/uc-announces-native-american-opportunity-plan

will remain legal, in spite of the Supreme Court's decision which restricts no admissions criteria except for race.

American Indians are not, of course, the only group becoming less racially exclusive. The number of people identifying as multiracial has increased across U.S. society. Both Latinos and Asians have substantial levels of intermarriage, even among recent immigrant families. For that reason, we commissioned a broader study on mixed-race identity and civil rights (Gregory Leslie & Natalie Masuoka, 2023, forthcoming). Race is a very important reality in American society; it is linked to discrimination and impacts people's lives, but, as is often noted, it is basically a social construction not a set of genetic boundaries. For Americans with multiple racial backgrounds, racial identity becomes more subjective and more a matter of choice than a fixed permanent identity. U.S. society has for many generations been blurring the once-intense national-origin, ethnic definitions of the very different European societies that have populated the continent. This is now happening across some racial lines.

The extreme differences in the number of Indigenous projected by the different methods used in this analysis suggest a need for more and better questions by the Census. A sorting out, in civil rights policy terms, of the strength of claims made by the historic tribal groups, and others identifying as at least partly Indigenous somewhere in their background, would also be helpful. The fact that the data is complex should not dissuade policy makers and Native leaders from pressing for action on what are clearly deep and serious inequalities. This study should lead us to dig deeper, create clearer categories, and, of course, ask for advice from and provide assistance to our Native American tribes.

-Gary Orfield

Table of Contents

About the Series	3
Acknowledgements	5
Foreword	6
Table of Contents	18
Carolyn A. Liebler	20
Executive Summary	20
Introduction	24
Definitions	26
Past and Present Data on AIAN People	28
Past and present American Indian populations in the US, as seen through the US Census	28
American Indian population change – 1890 to 1950	28
American Indian population change – 1960 to 2020	31
American Indians and Alaska Native sub-populations in 2000, 2010, and 2020	39
Past and present American Indian populations in the US, as seen through other data	42
Tribal data	42
National Vital Statistics System data	43
Common Core / Education data	44
AIAN Future Populations	45
Sources of potential growth	45
People with connections to a Central or South American Indigenous group	45
People with an AIAN parent	46
Descendants of North American Indigenous people who were subject to assimilation programs	47
Census Bureau projections, circa 2017	48
Cohort component model projections that include response change	52
Methods	53
Starting population	53

Fertility rates	54
Survival rates	55
Net international migration	55
Race response change	56
Results	57
Totals	57
Distribution across age group, races, Hispanic origin, and geography	61
Conclusions and Recommendations	65
References	68
Appendix	73

American Indian and Alaska Native Populations: Envisioning the Future

Carolyn A. Liebler

Executive Summary

American Indian and Alaska Native (AIAN) people continue to face disproportionate challenges in the US. Health, education, employment, housing, and wealth statistics show the disastrous results of policies and programs. Some policies and programs were meant to improve the lives of AIAN people, but many were aimed directly at dispossession, despite the extreme hardship they caused. Historically-based structural disadvantages impinge on AIAN people's civil rights, and redressing these issues requires plausible information about the future size, age structure, and locational distribution of the population. AIAN people and Tribal Nations are also subject to statistical racism, in which their data (and thus their successes and needs) are ignored because they are relatively small populations.

Work toward equal access to resources for all Americans, including Indigenous people, has made it clear that we need to know how many AIAN people there will be in the future. Tribal Leaders require quality information about their people to effectively exercise tribal sovereignty. Data collection challenges impact AIAN people more than other groups, so traditional demographic methods of estimating a future population fall short with AIANs. To provide a basis for a forward-looking civil rights agenda, especially one focused on minor children and on people living in Tribal Areas such as reservations, this report presents population projections of the racially-identified AIAN population from the present to 2050 using a traditional demographic method that has been modified to account for net response change – one of the most significant data-related challenges.

How many people currently identify as racially AIAN? The answer has a huge range depending on how AIAN is defined, and which data source is used. After centuries of interracial

marriages and assimilation programs, family trees in the AIAN population are deeply multiracial. More than half of census-identified AIAN people report multiple races, and those who identify as single-race AIAN may also have non-AIAN people in their family trees. Despite the resistance of Native people, the painful history of forced assimilation has also produced millions of Americans with Indigenous heritage who do not currently racially identify as AIAN on the census.

People in all race groups can (and many do) change their race responses over time, and this is likely to impact the future size and composition of the AIAN population. Census race response change has led to large net increases in the AIAN population in each decade since the Census Bureau started using self-identification to gather race data. Response change rates vary across time and place; for example, change is less common in Tribal Areas and more common among people reporting multiple races and/or Hispanic origins.

If net response change continues in the next 30 years as it has in the past 50 years, the research presented in this report projects the 2050 AIAN population to be about 23.9 million people, including an estimated 17 million non-Hispanic AIAN people. If the geographic distribution of AIAN people remains consistent to 2050, over one in eight AIAN people will live in a Tribal Area (13.7%, up from 13.4% in 2020); over one-quarter (27.9%) of Tribal Area residents will be minor children.

Of the anticipated 6.6 million Hispanic AIAN people in 2050, few are projected to live in Tribal Areas such as reservations. Hispanic AIAN people are likely to continue to include a large minority of people with Indigenous heritage who were born outside the U.S. New World colonization practices have deeply impacted Indigenous people throughout the Western Hemisphere, and AIAN immigrants are also subject to profound structural disadvantages.

Policy makers, civil rights leaders, and governments often make plans based on the future size and composition of populations. However, AIAN populations have often been left out of

statistical analyses and demographic projections. Tribal leaders also need high quality data about their populations in order to govern. Given the centralized nature of federal funds for data collection, tribes have limited resources for gathering their own data. Unfortunately, the 2020 Census data are of limited utility for a combination of reasons, creating serious problems with data equity for non-White and for rural populations, including many AIAN people living in Tribal Areas.

Four policy recommendations are based on the research presented here:

- 1. The decennial census aims to reach every person but significantly undercounts AIAN people living in Tribal Areas. In order to increase the quality of data collected about people living in Tribal Areas while supporting tribal sovereignty, we must increase the power of Tribal Leaders in the data collection process. For example, Tribal Leaders could be given a significant budget and effective training programs to collect data about their citizens as part of the next decennial census.
- 2. To effectively understand topics important for AIAN equity, the Census Bureau could add a national survey similar to Statistics Canada's Indigenous People's Survey (IPS). Topics and questions for the IPS are developed with national Aboriginal organizations and the survey has a very high response rate.
- 3. Data disclosure and coding policies within the Census Bureau have significantly impacted the quality of available data about the AIAN populations throughout the U.S., including information about size and composition. Post-hoc analyses by the Census Bureau should look at the impact of their policies on AIAN data and release white papers and data crosswalks to support data users.
- 4. The Census Bureau should expand its partnering with Tribal Leaders to ensure that the released data is as useful as possible. For example, specialists nominated by AIAN organizations and/or Tribal Leaders should be given security clearance, access, and

training so that they can support Tribal staff and data users in effective use of the available data for Tribal governance.

Implementing policy recommendations such as these would significantly improve

Indigenous data equity and tribal sovereignty. With clear, relevant information about the AIAN

population and subpopulations, policies can be developed to address shortfalls in the civil rights of

AIAN people. Tribal leaders, analysts, policy makers, and the public must continue to push for the

creation of high-quality data on AIAN people and assure that its use in analyses improves the lives

of Indigenous people.

American Indian and Alaska Native Populations: Envisioning the Future Carolyn A. Liebler¹¹

Introduction

American Indian and Alaska Native people (AIAN people) continue to face disproportionate challenges in the US. Health, education, employment, housing, and wealth statistics show the disastrous results of policies and programs. Some policies and programs were meant to improve the lives of AIAN people, but many were aimed directly at dispossession, despite the extreme hardship they caused. Historically-based structural disadvantages impinge on AIAN people's civil rights. AIAN people are also subject to statistical racism, in which their data are collected but left out of analyses because they are a relatively small and complex population; this raises multiple ethical issues¹² and limits empirical knowledge about AIAN successes and needs.

Work toward equal access to resources for all Americans, including Indigenous people, has made it clear that we need to know how many AIAN people there will be in the future. Tribal leaders require quality information about their people in the past, present, and future to effectively fulfill the promises of tribal sovereignty. Data sovereignty – the sovereign ownership of data about oneself – is an important issue for Indigenous individuals and Tribal Nations.¹³

Data-related challenges such as systematic undercounting and changes in race responses impact AIAN people more than other groups (Liebler et al. 2017), so traditional methods of estimating a future population fall short with AIANs; for example, the Census Bureau (2017)

¹¹ Department of Sociology and Minnesota Population Center, University of Minnesota

¹² The Belmont Report (1979) describes three core ethical principles for research, two of which are implicated. The principle of *Beneficence* requires that data that are collected must be used, or else the risk cannot be outweighed by the benefit. The principle of *Justice* requires that AIAN people should be included in research unless there is a good reason to exclude them; convenience of the analyst is not considered a "good" reason.

¹³ The Native Nations Institute at the University of Arizona has gathered relevant resources here: https://nni.arizona.edu/programs-projects/policy-analysis-research/indigenous-data-sovereignty-and-governance. For an international overview of Indigenous data sovereignty, see Walter et al. (eds.) 2020.

projected 7.05 million AIAN people in 2020, but the 2020 Census enumerated 9.67 million AIAN people. To provide a basis for a civil rights agenda, especially one focused on minor children and on people living in Tribal Areas such as federal American Indian reservations, this report presents population projections of the racially-identified AIAN population to 2050. The analysis uses a traditional demographic method that has been modified to account for (net) race response change – one of the most significant challenges to conventional demographic assumptions.

This report begins by familiarizing the reader with past and current data on AIAN people in the US, including data-related issues. The history of census data on AIAN people falls into two distinct periods. In 1890-1950, assimilation programs were active and enumerators gathered census data; population increase was slow. In 1960-2020, self-identification was possible and the population increased dramatically as people changed their race responses to reclaim AIAN identities. ¹⁴ In this same period, the definition of AIAN expanded to include Indigenous peoples from Central and South America, ¹⁵ increasing the Hispanic AIAN population. The 2020 Census faced additional data collection challenges because of the Covid-19 pandemic, which disproportionately affected AIAN people and shuttered many Tribal Areas during crucial data collection periods (Connolly 2020). This section concludes with a disaggregation of the 2000-2020 census data and a brief discussion of other types of national data about AIAN people.

The remainder of the report is focused on projecting the future size, age structure, and location (in a Tribal Area or not) of the racially-identified AIAN population. A consideration of the Census Bureau's 2017 projections reveals that their high-quality work was undermined by race

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¹⁴ Despite the resistance of Native people, the painful history of forced assimilation created millions of Americans with Indigenous heritage who do not currently racially identify as AIAN. Note that individuals change their race responses to and from all single- and multiple-race groups in the US (Liebler et al. 2017). See Liebler, Bhaskar, and Porter (2016) for a study of race response change among AIAN people.

¹⁵ Although histories have varied, Indigenous peoples in the Americas share common experiences of settler colonial assimilation, land dispossession schemes, and related violations of human and civil rights.

response change, which they did not include in their model. This report describes a novel strategy for including race response change rates in demographic models and develops estimates of response change rates for use in projections. The strategy is applied to develop estimates of how the 2020 racially-identified AIAN population might grow to 2050. If net response change continues in the next 30 years as it has in the past 50 years, the 2050 racially-identified AIAN population may hold about 23.9 million people.

Definitions

American Indian or Alaska Native (AIAN) is both a socially-constructed "race" category defined by the US federal government, and a legal status based on enrollment in a federally-recognized tribe. The federal government has defined *Hispanic or Latino* (shortened to Hispanic here) as an ethnicity, not a race, and notes that people of Hispanic or Latino origin can be of any race(s).

Racial and ethnic categories were created for social and political reasons, including the purposes of colonization and domination. According to the current federal definition of the race group, an AIAN person is: "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." Tribal enrollment criteria vary. As citizens of governments recognized by federal treaties, AIAN people have rights as defined by those treaties (though virtually all treaties have been broken in significant ways).

The *racially-identified AIAN population* includes people who report that their race is AIAN (whether they report other race(s) or not). This terminology is meant to distinguish the group

¹⁶ AIAN is the only race category that includes the concept of community attachment in its federal definition. Current federal standards for collecting data on race and ethnicity date to 1997 and can be seen here (OMB 1997): https://obamawhitehouse.archives.gov/omb/fedreg 1997standards

¹⁷ See Rodriguez-Lonebear (2021).

from the millions of Americans with AIAN heritage who report AIAN as their ancestry (not their race)¹⁸ or who do not report their AIAN background at all on official documents such as the census. This study is focused on the racially-identified AIAN population as listed in the Census, recognizing that this is one of many possible definitions of "the AIAN population." Data about the racially-identified AIAN population is widely used by Tribal Nations and therefore supports tribal sovereignty, despite its historical relationship to colonization.¹⁹

Self-definitions, community definitions, and tribal enrollment criteria are more complex and often use different terminology. In this report, I treat *Native* and *Indigenous* as general synonyms for AIAN; individuals have varied preferences for words to describe the group. For many Indigenous people, the AIAN category is best seen as a nationality or political category, rather than a "race" or something with a biological basis. ²⁰ After centuries of contact with other groups, most AIAN people (even those who self-identify as single-race) have other federally-defined race groups in their family tree; so-called "blood quantum" is not often "full blood." ²¹ In this context, a race response of single-race AIAN can be seen as an identity statement or political claim.

Tribal Nations are sovereign governments defined by treaty relationship to the U.S. government. All Tribal Nations require data for governance and policy purposes, but this need is especially acute for Tribal Nations with land bases.²² There are many forms of tribal land, under varying types of laws and governance, and most of them are included in a census geographic

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¹⁸ For example, see Liebler (2010a).

¹⁹ See Evans-Lomayesva, Lee, and Brumfield (2022) for more on this topic.

²⁰ See McKay (2021) and Rodriguez-Lonebear (2021) for discussions of some of these complexities.

²¹ For a review on this topic, see Schmidt (2011). The "logic" of blood quantum has been a powerful force undermining tribal sovereignty (Kauanui 2008; Tallbear 2013). The federal definitions of race include a warning that they "do **not** establish criteria or qualifications (such as blood quantum levels) that are to be used in determining a particular individuals' racial or ethnic classification" (OMB 1997, Section D). Yet federal courts use a definition of "Indian status" (in the context of criminal jurisdiction) which requires a genealogical tie to a tribe (see Summers 2018 for more on the complex relationship between tribal sovereignty, civil rights, and "Indian blood").

²² See Evans-Lomayesva, Lee, and Brumfield (2022) and National Congress of American Indians (2020) for more on Tribal Nations and the importance of quality data for governance and other purposes.

concept called "American Indian, Alaska Native, and Hawaiian²³ Homelands." The Census Bureau and Tribal Nations cooperatively define the geographic boundaries of these areas; these are federal-and state-recognized reservations, off-reservation trust lands, and tribally-designated statistical areas (e.g., in Oklahoma and Alaska). Geographic information is limited in public census data, but the data often include an indicator of whether a person lives in a Tribal Area. People of any race can live in these areas. These areas are labeled "AIANHH areas" in Census Bureau documents and described as *Tribal Areas* here.²⁴ People in Tribal Areas often have particularly high rates of being missed in census counts.²⁵

Past and Present Data on AIAN People

Past and present American Indian populations in the US, as seen through the US Census

American Indian population change – 1890 to 1950

The US Indigenous population has not always been included in general censuses.²⁶ The first census to attempt to include American Indian people living throughout the country was in 1890,²⁷ taken the same year as the Wounded Knee Massacre. The Native population was at a demographic low point from disease, wars, and removal to reservations, and the boarding school era of "Kill the Indian, Save the Man" was beginning (the first federal boarding school - Carlisle Indian Industrial School in Carlisle, Pennsylvania - opened in 1879). It was a difficult time to be Native in the U.S.,

²⁷ Ogunwole (2002).

²³ Note that all Hawaiian Homelands are in Hawaii, and there are no AIAN reservations or other AIAN Tribal Areas in Hawaii.

²⁴ The Census Bureau provides an interactive tool for exploring Tribal Areas: https://www.census.gov/tribal/. For information about this geography, which was called "American Indian Area/Alaska Native Area/Hawaiian Home Land" in 2020, see Appendix A of Census Bureau 2021.

²⁵ Census undercount rates for AIAN people in Tribal Areas were significantly high even in the most recent censuses (see Khubba et al. 2022). Census totals for past censuses (1850-2020) are shown without adjustment for estimated undercount because this information is not available in all years.

²⁶ See https://www.census.gov/history/www/homepage archive/2021/november 2021.html and Thornton and Young-DeMarco (2021) for more on the history of AIAN people in early censuses.

and there were many reasons people might not have wanted to participate in a federal population count. The 1890 Census counted about 248,000 American Indians; see Table 1 and Figure 1.

Increase in the enumerated American Indian population was slow between 1890 and 1950, perhaps, in part, because Native people were not enumerated as Native. There are at least five reasons to see these censuses as ineffective in enumerating every American Indian.

- A Native person was deemed a "civilized Indian" if they were living off the reservation and counted in the general census in 1890, but the general census did not necessarily capture their race accurately. To be counted in the general census as American Indian, the census enumerator would need to identify the person visually as American Indian and report them as such. Enumerators continued to visually identify people's race throughout the US until 1950.²⁸ People with African heritage were often excluded.²⁹
- Trust between Native people and the US government was low, and Native people may
 have avoided encounters with federal agents doing census counts.
- Assimilation programs aimed at Native children, such as boarding schools³⁰ and outadoption,³¹ burgeoned in the late 19th Century and most of the 20th Century, created

²⁸ Thornton, Young-DeMarco, and Smith (2021) discuss undercount due to limited identification of AIAN people by enumerators in early censuses. Also see: https://usa.ipums.org/usa/resources/voliii/measuring_america.pdf.
²⁹ For example, see Lowrey (2010). Research by Herndon and Sekatu (1997) reveals this as a problem in colonial times as

²⁹ For example, see Lowrey (2010). Research by Herndon and Sekatu (1997) reveals this as a problem in colonial times as well.

³⁰ With the Indian Civilization Fund Act of 1819, the US federal government adopted a mandatory boarding school policy that was intended to commit cultural genocide. The number of Indigenous children taken to boarding school is unknown, but by 1926 an estimated 83% of AIAN school-age children were attending boarding schools (Wallace Adams 1995). In 1971, the Bureau of Indian Affairs (BIA) reported that about 17% of all school-aged Indian children were enrolled in a federal boarding school (see p.9 of https://www.narf.org/nill/documents/icwa/federal/lh/hr1386.pdf). See NABS (2020) and Churchill (2004).

³¹ "Before 1978, approximately 80 percent of Native American families living on reservations lost at least one child to the foster care system, according to data compiled by National Indian Child Welfare Association." (https://www.potawatomi.org/blog/2021/04/06/disproportionate-representation-of-native-americans-in-foster-care-across-united-states/). For more, see Hentz (2016), Jacobs (2014), https://www.wearecominghome.org/, and https://blog.americanindianadoptees.com/. AIAN children continue to be removed from their family homes at highly disproportionate rates.

generations of people who were reluctant to appear Indigenous or report it to an authority figure.

- Counting people in very rural places (especially places without addresses, with movable housing, or places that are only sometimes used as housing) has always been difficult.
- Groups that were included in later definitions of "American Indian" were not included
 under this (or any) category at this point specifically Alaska Natives (Alaska joined the
 US in 1959) and Central and South American Indigenous people.

With extra efforts toward a complete count in 1910 and 1930, the 1910 Census counted about 291,000 American Indians and the 1930 Census counted about 362,000. By 1950, about 377,000 American Indians were counted in the census.

Table 1: American Indians counted in US Censuses, 1890 to 1950

Year	Total	% Change in 10 years	AAGR
1890	248,000		
1900	237,000	-4.4%	-0.5%
1910	291,000	22.8%	2.1%
1920	261,000	-10.3%	-1.1%
1930	362,000	38.7%	3.3%
1940	366,000	1.1%	0.1%
1950	377,000	3.0%	0.3%

AAGR = Average Annual Growth Rate

Figure 1: American Indians counted in US Censuses, 1890 to 1950



American Indian population change – 1960 to 2020

The racially-identified American Indian population started a new period of expansion in 1960; see Table 2 and Figure 2. The 1960 Census showed a 46% increase in the AIAN population. This increase coincided with the addition of the state of Alaska to the United States, which added Alaska Natives to the AIAN population for the first time. Also, starting in 1960, the Census Bureau changed its enumeration strategy from in-person enumerators to self-response by mail for people living in cities. Allowing people to self-report race probably eliminated a significant source of racial misidentification of AIAN people because enumerators had previously inferred race rather than asking about it directly.

Table 2: American Indians and Alaska Natives counted in US Censuses, 1960 to 2020

Year	Total	% Change in 10 years	AAGR
1960	552,000	46.4%	3.8%
1970	827,000	49.8%	4.0%
1980	1,420,000	71.7%	5.4%
1990	1,959,234	38.0%	3.2%
2000	4,119,301	110.3%	7.4%
2010	5,220,579	26.7%	2.4%
2020	9,666,058	85.2%	6.2%

AAGR = Average Annual Growth Rate

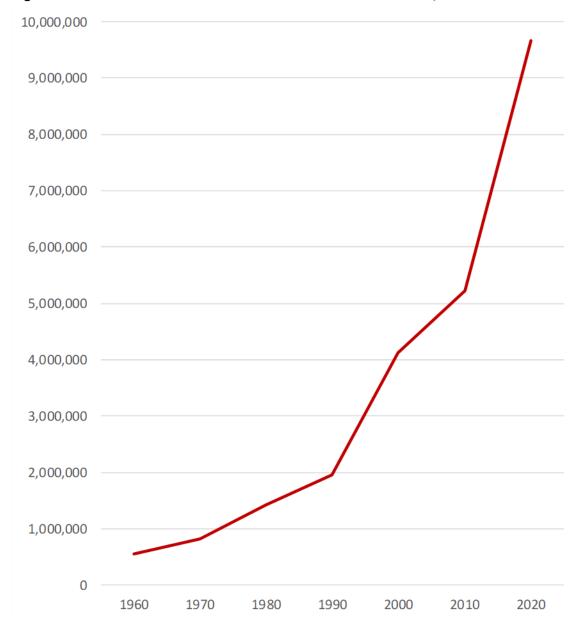


Figure 2: American Indians & Alaska Natives counted in US Censuses, 1960 to 2020

Other factors continued to limit the enumerated AIAN population. Out-adoption of Native children into non-Native homes and generational impacts of boarding schools were still disrupting Native families and identities. Rural areas remain difficult to enumerate. AIAN people continue to

have reasons to avoid interaction with federal agents or to share details of their housing arrangements.³²

As segregation laws were overturned in the 1960s, there was a fundamental shift in racialized experiences of AIAN people. For example, Oklahoma and Louisiana had anti-miscegenation statutes prohibiting marriage between AIAN and Black people, placing AIAN people on the White side of segregation laws; other states, such as Arizona, prohibited marriage between AIAN and White people.³³ The Red Power Movement was going strong in 1970, and some people who had previously hidden their Indigenous heritage were inspired to reclaim the identity.³⁴ For the 1970 census, the Census Bureau expanded self-response to include most rural areas.³⁵ Tribal affiliation was included as part of the race question, perhaps making the question more culturally-relevant.³⁶ The AIAN population increased by another 50% between the censuses of 1960 and 1970.

Demographers began to talk about the large "error of closure" between the expected number of AIAN people and the number that was counted in the census.³⁷

Faced with enforcing civil rights legislation with insufficient data, in 1978 the federal government's Office of Management and Budget created federally-defined race groups. Unlike any other race group, AIAN was defined by cultural identification, in addition to familial origins: "American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community

³² For example, AIAN people in Minnesota experiencing homelessness or near-homelessness are often sharing housing with family or friends, sometimes creating overcrowded housing (Aman et al. 2020). People may fear reporting overcrowded housing on a census form, and instead leave some people uncounted.

³³ Pascoe (1996); Osburn (2014)

³⁴ Nagel (1996)

³⁵ Very rural areas – places such as Alaska, Maine, and some reservations – are still visited by census enumerators rather than receiving the census invitation in the mail.³⁵

³⁶ In all census years, some people did not report AIAN race directly but instead reported a tribal group and were coded as AIAN by the Census Bureau.

³⁷ Passel (1976)

recognition."38 The Red Power Movement continued in the 1970s. The Indian Self-Determination Act of 1975³⁹ enhanced tribal powers, and the Indian Child Welfare Act of 1978⁴⁰ brought attention to the issue of excessive practices of child removal from Indigenous families. In this decade (1970 to 1980), the AIAN population grew by 72% to 1.4 million, with another 5.5 million people reporting AIAN ancestry (but not race) in the new census ancestry question. Again, the enumerated number far outstripped the number expected.⁴¹

The speed of expansion slowed slightly in the 1980s, with a 38% increase in the raciallyidentified AIAN population size between 1980 and 1990. At the same time, the number of people identifying AIAN ancestry but not race increased to 7.1 million in 1990 (shown in Table 3). Combining race and ancestry responses, the total number of people reporting AIAN somewhere in the 1990 census topped 9 million – 1.96 million with AIAN race (Table 2) and 7.12 million with AIAN ancestry (Table 3) – only 100 years after the first enumeration counted one-quarter million in 1890.

Table 3: People who report AIAN ancestry but not AIAN race

		White race, AIAN		Black race	e, AIAN	Another n	on-AIAN
		ancestry		ance	stry	race, Al	AN anc
	Total	Non-Hisp.	Hispanic	Non-Hisp.	Hispanic	Non-Hisp.	Hispanic
1980	5,539,000	5,096,620	137,220	250,880	4,740	39,700	9,840
1990	7,119,434	6,474,169	89,983	317,761	6,193	176,210	55,118
2000	5,311,161	4,739,570	75,331	334,795	4,190	85,974	71,301
2010	8,842,806	7,447,550	142,209	747,247	7,994	434,992	62,814
2019	5,587,729	4,520,593	199,244	625,289	9,092	160,919	72,592

Data: 1980, 1990, and 2000 ancestry data are from the decennial census long forms for those years. 2010 data is from the 2008-2010 American Community Survey (ACS). 2019 data is from the 2019 ACS. All data are from samples which were weighted to represent the US population in one year. Data were accessed through usa.ipums.org.

Note: In this table, "White" and "Black" include only single-race responses.

³⁸ Office of Management and Budget (1978)

³⁹ See: https://www.bia.gov/sites/bia.gov/files/assets/bia/ots/ots/pdf/Public Law93-638.pdf

⁴⁰ See: https://uscode.house.gov/view.xhtml?path=/prelim@title25/chapter21&edition=prelim

⁴¹ Passel and Berman (1986)

Between 1990 and 2000, two definitional changes substantially impacted census data on AIAN people. Both changes were part of the 1997 revision to the federal definitions of race groups. First, the definition expanded to include Central and South American Indigenous people. This is especially notable because the list of federally-defined races does not include a Hispanic or Latino category and AIAN is the only category to mention Central or South America. Second, the race question instructions were changed from "mark one" race to "mark one or more" – multiple race responses were invited for the first time. In 2000, 40% of people who reported AIAN race also reported at least one other race.

The racially-identified AIAN population more than doubled to 4.1 million (up by 110% between 1990 and 2000, see Table 2), and demographers investigated an "error of closure" of more than one million people.⁴⁴ Because the AIAN ancestry population decreased by 1.8 million (see Table 3) while the AIAN race population increased by 2.1 million, it is plausible that many people with AIAN heritage simply changed the way they report this on the census form

Between 2000 and 2010, the racially-identified AIAN population increased from 4.11 million to 5.22 million. This relatively low rate of increase (27%) is potentially misleading because (like all censuses) it includes only single point-in-time snapshots of the population. Using linked census data,⁴⁵ researchers revealed that millions of people who reported AIAN race in 2000 did not report it in 2010, while at the same time millions of others reported AIAN race in 2010 who had not done so in 2000; of the 4.11 million people who reported AIAN in 2000, only about 40% (1.65 million) also

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⁴² The 1997 Office of Management and Budget directive can be seen here (OMB 1997): https://obamawhitehouse.archives.gov/omb/fedreg_directive_15/

⁴³ "American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition" (OMB 1997). New World colonization practices have impacted Indigenous people throughout the Western Hemisphere.

⁴⁴ Liebler and Ortyl (2014)

⁴⁵ Liebler et al. (2016, 2017). An individual's response to Census 2000 was linked to their response in the 2010 Census. Linking technology has not yet included other decennial census years.

reported AIAN in 2010.⁴⁶ Table 4 gives an example of the implication of this AIAN population "churn" – the AIAN population in the early 21st Century can be seen as much larger (or smaller) than is represented in any one census.

Table 4: Response change and the potential AIAN population in 2000 and 2010

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		Scenario 1:	Scenario 2:
	Racially-identified	If "AIAN" included only	If "AIAN" included all
	AIANs enumerated in	those who reported	who reported AIAN in
Year	this Census	AIAN in 2000 AND 2010	2000 OR 2010
2000	4,119,301	1,656,780	6,146,490
2010	5,220,579	2,099,714	7,131,823

Data: Calculations by the author are based on Table 3 in Liebler, Bhaskar, and Porter 2016.

Many of the response changes were either from single-race AIAN to multiple-race AIAN, or vice versa, with relatively few response changes across the Hispanic/non-Hispanic distinction. In 2010, 44% of people who reported AIAN race also reported at least one additional race. Notably, the estimated number reporting AIAN ancestry (but not AIAN race) grew by 3.5 million (from 5.3 million to 8.8 million) between 2000 and 2010.⁴⁷ This time period coincided with the rise of genetic ancestry tests, which gave some Americans new information about their ancestry, including AIAN ancestry, which may have influenced their census race and ancestry responses.⁴⁸

The racially-identified AIAN population jumped once again between 2010 and 2020, increasing by 85% to 9.7 million people, despite significant census data collection challenges on some reservations because of the Covid-19 pandemic.⁴⁹ However, some reservation borders were

⁴⁶ There were 4.11 million people who reported AIAN in the 2000 census, but not all Census 2000 respondents were able to be linked to their 2010 responses. In total, 3.1 million people who reported AIAN race in 2000 and/or 2010 were able to be linked, and the estimate (1.65m) is based on the patterns of those who were linked. This table shows calculations based on Table 3 in Liebler et al. (2016).

⁴⁷ In 1980 to 2000, ancestry was a question in the decennial census long form. It is now asked in the American Community Survey. See: https://usa.ipums.org/usa-action/variables/ANCESTR1#description_section.

⁴⁸ Roth and Ivemark (2018) and Walajahi et al. (2019).

⁴⁹ See https://www.census.gov/library/fact-sheets/2020/dec/update-leave-aian.html and https://www.census.gov/library/stories/2019/12/counting-people-in-rural-and-remote-locations.html and https://www.smithsonianmag.com/history/covid-19-adds-new-snag-to-2020-census-count-native-americans-180975150/.

closed for a significant period during the pandemic, disrupting enumerator visits.⁵⁰ Another unequal barrier to participation in the 2020 Census was created when the Census Bureau expanded the response modes to include internet responses, yet poorer and more rural people (including many AIAN people in Tribal Areas) are less likely to have the access (to computers and the internet) and computer experience necessary to complete the form online. Thus, 2010 to 2020 population growth in Tribal Areas (shown below) was probably at a higher rate than the 2020 census numbers can reveal.⁵¹

Some part of the large increase in the AIAN population between 2010 and 2020 may have been caused by the new Census Bureau strategy for coding write-in responses in the race and Hispanic origin questions. The 2020 race and Hispanic origin data coding strategy included people's full write-in responses (up to 300 characters instead of only 60 characters in 2010). ⁵² The Census Bureau has not released an analysis of the impact, but it is likely that this strategy probably would have identified more AIAN responses in previous years (if it had been applied) because the AIAN population has many people of mixed racial heritage and long tribal names. In 2020, 61% of people who reported AIAN race also reported another race.

The Bureau implemented another data processing change that may have increased the size of the AIAN population relative to prior years. In 2020, they used *all* information in *both* the race and Hispanic origin write-in spaces to determine their final coding of a person's race and Hispanic origins, instead of coding that information separately as they had done previously. This may have particularly impacted the number of Hispanic AIAN people in the census data; for example, if a

⁵⁰ For an overview of issues, see https://indiancountrytoday.com/opinion/rushed-census-would-harm-native-communities.

⁵¹ For the projections, the base population is adjusted for estimated undercount. This estimate has a large standard error, so the adjustment is simply a best guess.

⁵² The Census Bureau discussed these changes here: https://www.census.gov/newsroom/blogs/random-samplings/2021/08/improvements-to-2020-census-race-hispanic-origin-question-designs.html

person reported their race as "Peruvian" and their Hispanic origin as "Aymara" (a South American Indigenous group), they would have been classified in 2010 census data as Hispanic "Some Other Race" (SOR),⁵³ but classified as Hispanic AIAN and SOR⁵⁴ in 2020 census data. Unfortunately, the Census Bureau has not yet quantified the impact of these coding changes on population sizes. See below for a disaggregation of AIAN populations by Hispanic origin. Note that Indigenous people throughout the hemisphere are subject to pervasive structural disadvantage.

In sum: Growth in the size of the racially-identified AIAN population has been dramatic for each census since 1960. There are questionnaire and definitional reasons for this, but a primary reason for these increases seems to include how individuals report their race(s) on the census.

Although individuals in all groups change their answers to the race and Hispanic origin questions, the net changes in the AIAN population are particularly noticeable and persistent.

Despite these complexities, the data are vitally important. It is statistical racism to leave AIAN people out of analyses simply because of these challenges. The challenges must also be met for tribal leaders' governance, policy development, and funding reasons. Many of the issues with past and present census data on AIAN people and on Tribal Areas could be mitigated by post-hoc analyses by the Census Bureau (for example, applying the 2020 coding changes to the 2010 data). It would also be useful for the Census Bureau to expand its partnering with Tribal Leaders to ensure that the released data is as useful as possible; current practices are insufficient in terms of scope, shared power, and available resources.

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⁵³ "Peruvian" is not one of the federally-defined races, and so the person would be coded as "Some Other Race." Any answer in the Hispanic Origin question would result in being coded as Hispanic.

⁵⁴ In 2020, the Census Bureau took both responses together and coded them accordingly. For example, "Peruvian Aymara" is considered both Hispanic and Indigenous.

American Indians and Alaska Native sub-populations in 2000, 2010, and 2020

The 2020 Census results have begun to be released, but detailed information about AIAN people was not available at the time of this writing.⁵⁵ In Table 5, the initial release of 2020 data⁵⁶ is shown in comparison to 2000 and 2010, looking at the US as a whole, as well as focusing specifically on people living in Tribal Areas. Figure 3 visually represents the same information shown in Table 5.

Change over time in the number of people living in Tribal Areas has been much less dramatic than the overall growth. While the general AIAN population was much larger in 2020 than 2010 (an 85% increase), the AIAN population enumerated in Tribal Areas saw only a 12% increase in the decade. Tribal Leaders rely on detailed, accurate census data about Tribal Area populations for their governance needs, including accessing funds and designing policies. The Census Bureau's new strategy for keeping detailed 2020 Census data private (so called "differential privacy") has had very substantial negative impacts on the usefulness of the data for tribal leaders because true population sizes are not being released. 58

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⁵⁵ See Sánchez-Rivera, Jacobs, and Spence (2023) for the Census Bureau's overview of detailed AIAN data from the 2020 Census.

⁵⁶ The 2020 Census Public Law 94-171 Redistricting Data disaggregates by location, race, and minor/adult status but not tribe response, detailed age, or sex: https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.html. Table 5 shows P.L. 94-171 data for 2000 and 2010 as well.

⁵⁷ The enumerated population in Tribal Areas probably was impacted by Covid-19-related enumeration challenges, though to an unknown extent. The Census Bureau's Post Enumeration Survey estimated significant undercounts of AIAN people in 2010 and 2020 (Khubba et al. 2022, Table 4). AIAN people on reservation lands were undercounted in the 2020 Census at an estimated rate of 5.64% (std error: 2.72%) and those in off-reservation areas of the US were undercounted at an estimated rate of 0.86%. In 2010, there was an estimated 4.88% undercount of AIAN people on reservations. In Census 2000, the estimated undercount of AIAN people was not significantly different from zero (Mulry 2006).

⁵⁸ See Liebler (2022) at https://www.nationalacademies.org/event/06-21-2022/2020-census-data-products-workshop-on-the-demographic-and-housing-characteristics-files and Gregg, Trostle, and Liebler (2023).

Table 5: American Indian and Alaska Native subpopulations in 2000, 2010, and 2020

_		Whole US			Ir	n Tribal Areas	
_	Total	Ages 0-17	Ages 18+		Total	Ages 0-17	Ages 18+
2000				,			
Total AIAN	4,119,301	1,383,502	2,735,799		1,026,929	403,157	623,772
Non-Hispanic AIAN	3,444,700	1,113,676	2,331,024		999,361	387,910	611,451
Non-Hispanic, single race	2,068,883	685,911	1,382,972		874,311	339,516	534,795
Non-Hispanic, multiple races	1,375,817	427,765	948,052		125,050	48,394	76,656
Hispanic AIAN	674,601	269,826	404,775		27,568	15,247	12,321
Hispanic, single race	407,073	154,401	252,672		20,862	11,304	9,558
Hispanic, multiple races	267,528	115,425	152,103		6,706	3,943	2,763
2010							
Total AIAN	5,220,295	1,651,110	3,569,185		1,148,310	408,463	739,847
Non-Hispanic AIAN	4,029,629	1,196,758	2,832,871		1,100,963	382,486	718,477
Non-Hispanic, single race	2,247,098	647,321	1,599,777		934,415	315,956	618,459
Non-Hispanic, multiple races	1,782,531	549,437	1,233,094		166,548	66,530	100,018
Hispanic AIAN	1,190,666	454,352	736,314		47,347	25,977	21,370
Hispanic, single race	685,150	241,051	444,099		32,769	17,023	15,746
Hispanic, multiple races	505,516	213,301	292,215		14,578	8,954	5,624
2020							
Total AIAN	9,665,505	2,683,265	6,982,240		1,290,497	425,986	864,511
Non-Hispanic AIAN	6,691,417	1,744,528	4,946,889		1,226,150	394,041	832,109
Non-Hispanic, single race	2,251,699	590,106	1,661,593		939,748	290,670	649,078
Non-Hispanic, multiple races	4,439,718	1,154,422	3,285,296		286,402	103,371	183,031
Hispanic AIAN	2,974,088	938,737	2,035,351		64,347	31,945	32,402
Hispanic, single race	1,475,436	418,659	1,056,777		37,263	17,327	19,936
Hispanic, multiple races	1,498,652	520,078	978,574		27,084	14,618	12,466

Data: Decennial Census redistricting data.

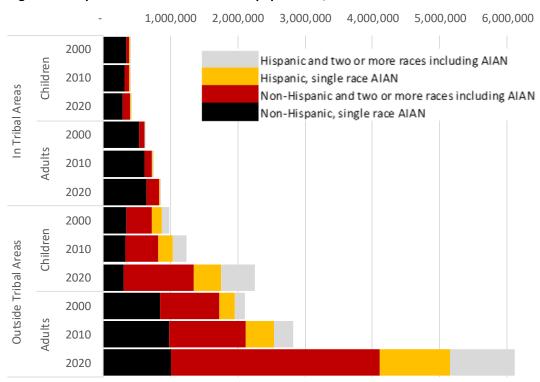


Figure 3: Comparative increases in AIAN subpopulations, 2000 to 2020

As the total racially-identified AIAN population has grown from 4.1 million to 5.2 million to 9.7 million, the population has also gained in the proportion reporting Hispanic origins; the percent of racially-identified AIANs who identify as Hispanic increased from 16% to 23% to 31% over the three censuses. The enumerated non-Hispanic single-race AIAN population was almost stagnant in growth between 2010 and 2020. There are two likely causes for this. This group is disproportionately found in Tribal Areas, which were significantly undercounted in 2020. And changes in census procedures for coding race and Hispanic origin probably lowered the census totals for non-Hispanic single-race AIAN populations (while increasing the multiple-race and/or Hispanic AIAN populations). Because a race response of single-race AIAN can be seen as an identity statement or political claim, it could become a more common choice in the future as people reclaim Indigenous identities.

AIAN children are reported as multiple races at a higher rate than AIAN adults. Besides the increasing societal acceptance of multiracial identities, this pattern is likely caused by high rates of interracial marriage by AIAN people. By one recent measure, only 22% of married AIAN people were married to another AIAN person.⁵⁹

A significant proportion of Hispanic AIAN people were born outside the US. ⁶⁰ In the 2015-2019 period, 27% of Hispanic single-race AIAN people and 18% of Hispanic multiple-race AIAN were born outside of the US. It is rare for non-Hispanic AIAN people to have been born abroad (1% and 2%, respectively). In other words, the Hispanic AIAN population is significantly impacted by international immigration. Overall, about 6.3% of AIAN people were born abroad.

Past and present American Indian populations in the US, as seen through other data

There are other data collection efforts that include AIAN people. This section contains a brief overview of data collected by tribes, information from the state and federal vital records systems, and reports by schools about their enrolled students.

Tribal data

Theoretically, tribes would have information about their populations because they are sovereign governments. Tribal enrollment offices keep lists of enrolled members, but tribes rarely have funds and the other necessary resources to gather other information about members such as education, income, health status, or employment status. In cases where tribes do have data about their populations, this is generally not available to outside researchers because it was not collected for outside researchers.⁶¹

⁵⁹ This includes only partnerships where one of the spouses is listed as "person 1" (i.e., the householder). This statistic does not include unmarried couples, married couples living separately, or couples who were not listed first on their ACS form. Data: 2019 ACS 5-year from IPUMS USA. Calculation by the author.

⁶⁰ Data: 2019 ACS 5-year from IPUMS USA. Calculation by the author.

⁶¹ After centuries of having little control over data about themselves, Indigenous people and tribal leaders are increasingly able to achieve data sovereignty.

For grantmaking and planning purposes, most tribes rely on the Census Bureau, which has pledged to work closely with tribes to make sure the provided data are useful. One way that this relationship has been relatively successful is in defining the geographic areas that are encompassed in the Tribal Area concept. Tribal Area data describes all people in the area, regardless of race or tribal enrollment status. The Census Bureau tool titled "My Tribal Area" gives a summary of Tribal Area statistics based on the most recent American Community Survey data.⁶²

National Vital Statistics System data

The Centers for Disease Control and Prevention oversees the federal National Vital Statistics System (NVSS), which collects and disseminates data from states. States are required to register every birth and death, and standardized forms are suggested. In the 2003 revision of these standardized forms, the race question was modified to be parallel to the 2000 Census (i.e., AIAN was a category and multiple race responses were allowed). States were slow to adopt the new forms; some states continued to require single race responses until very recently. Because of this difference in how race groups were defined, most national vital statistics *rates* are calculated using a denominator of "bridged" race data. Bridged data uses characteristics of each non-Hispanic multiple-race individual to predict which single race they would have chosen if necessary. All Hispanic people are grouped into the Hispanic category regardless of race response. Studies of race reporting on death certificates show that deceased AIAN people are often not reported as AIAN by the coroner, especially if they are living in an area with few other AIAN people. As discussed below, fertility rates and survival rates used in this report's projections are based on data gathered in

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⁶² This tool is available at https://www.census.gov/tribal/

⁶³ https://www.cdc.gov/nchs/nvss/revisions-of-the-us-standard-certificates-and-reports.htm

⁶⁴ See https://www.cdc.gov/nchs/nvss/bridged race.htm and Liebler and Halpern-Manners (2008) and the RACHSING variable in IPUMS USA (https://usa.ipums.org/usa-action/variables/RACHSING). The census data are used as a denominator when calculating vital statistics rates.

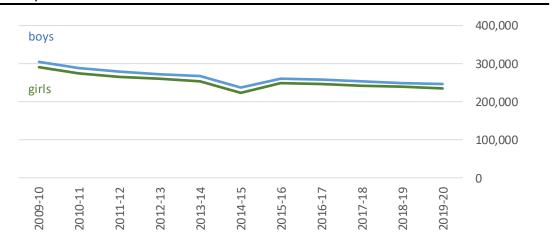
⁶⁵ Arias, Heron, and Hakes (2016). They also show some mortality misclassification for Hispanics.

the NVSS, with bridged race denominators and an adjustment for racial misclassification on death certificates.

Common Core / Education data

Another source of data on AIAN populations is the Common Core of Data collected by the National Center for Education Statistics. These data include children (of any age) enrolled in public and private elementary and secondary schools (pre-K through grade 13). The Common Core of Data reports that there were 480,579 non-Hispanic single-race AIAN people enrolled in grades K-12 in 2019-2020, down from 579,094 ten years earlier; see Figure 4. The census population of non-Hispanic single-race AIAN children has also been declining since 2000, possibly because the children are increasingly likely to be reported or coded as multiple races. The 2020 Census reported 590,106 non-Hispanic single-race AIAN children ages 0-17 (shown above).

Figure 4: Number of non-Hispanic single-race AIAN people enrolled in elementary or secondary school, 2009-2020



Data: Common Core Data (CCD) is gathered by schools and collected by the National Center for Education Statistics. Data were accessed through https://nces.ed.gov/ccd/elsi/tableGenerator.aspx

AIAN Future Populations

Projections of the future racially-identified AIAN population are difficult to calculate because there are no established methods for predicting future social patterns that influence racial identification. This section begins with a summary of three sources of potential growth in the future AIAN population, with the implication that growth⁶⁶ through response change can continue in coming decades. Then it describes the Census Bureau's most recent population projections, which did not account for response change, and which failed to anticipate the 2020 AIAN population size. Next, the report describes the present projections of the AIAN population (to 2050) which use a novel approach to include potential response change in the analysis.

Sources of potential growth

Given the immense growth of the AIAN population since 1890, and particularly since 1960, what might the future hold? This section describes reasons that the AIAN population has the potential to continue rapid growth – millions of people who do not currently identify as AIAN race could do so in the future. Three large groups of people who could become racially-identified AIAN people are (a) those with connections to a Central or South American Indigenous group, (b) people with an AIAN parent, and (c) descendants of North American Indigenous people who were subject to assimilation programs. These paths of possible race response change are described in this section and visually summarized in Figure 6.

People with connections to a Central or South American Indigenous group

The federal definition of AIAN includes people with connections to a Central or South

American Indigenous group; this group includes people who currently live in the US and also future
international immigrants. Because of the history of Latin America, many people who are in Central

⁶⁶ People both join and leave the AIAN population as their identities change (Liebler, Bhaskar, and Porter 2016), so the total population size could also theoretically decline through response change. This has not happened in the past.

and South American Indigenous groups also identify as Hispanic (and/or would be coded as Hispanic by the Census Bureau's algorithm). Additionally, AIAN may be an appealing option for racial identification for people who identify primarily as Hispanic or Latino and do not see themselves represented in the race question (which does not include a Hispanic option). Though Indigenous people from all parts of the Americas have been subject to the violent dispossessions of colonialism, only those who hold a family relationship to a federally-recognized U.S. tribe can claim rights based on that status.

Among people in these groups who report Hispanic origins, research shows that race response change is common.⁶⁷ The same research shows, notably, that people do not usually change answers to the Hispanic origin question. In Figure 5, these response changes are summarized as movement into "not racially identified as AIAN" from Hispanic AIAN single- and multiple-race populations, and vice versa.

People with an AIAN parent

Most AIAN people who are married have a non-AIAN spouse.⁶⁸ Children with one AIAN parent and one non-AIAN parent are commonly reported in the census as one race, rather than biracial.⁶⁹ For example, in the 2000 census, only 17% of children with one AIAN and one White parent were reported as both races.⁷⁰ Over the past 50 years, about half of young children from these families have been reported as AIAN and most of the rest are reported as their other parent's race.⁷¹ As they gain life experience, these individuals may give a different census race response than their parents provided for them as children. Some of these children are tribal members and others

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⁶⁷ See Liebler et al. (2017) and Fernández et al. (2018).

⁶⁸ In the 2015-2019 period, only 22% of married AIAN people were married to another AIAN person (analysis by the author using 2019 5-year American Community Survey (Ruggles et al. 2021); this statistic does not include unmarried couples, married couples living separately, or couples who were not listed first on their ACS form).

⁶⁹ Liebler (2016) and Lichter and Qian (2018).

⁷⁰ Liebler (2016), Table 2.

⁷¹ Liebler (2016), Tables 2 and 3, show that just over half of children of AIAN-White marriages and about 40% of children of AIAN-Black marriages are reported as single-race AIAN.

may gain tribal membership as tribal leaders reconsider enrollment criteria based on so-called "blood quantum" in favor of more inclusive criteria such as lineal descent.⁷² In Figure 5, these response changes are depicted as changes between "not racially identified as AIAN" and any of the racially-identified AIAN populations.

Descendants of North American Indigenous people who were subject to assimilation programs

The history of North American Indigenous people includes large-scale assimilation efforts, including boarding schools and other child removal policies. Some Indigenous people responded to these attacks by minimizing their own AIAN identification and discouraging AIAN identification by their children and other descendants; the relatively low AIAN populations in 1890-1950 may reflect the non-identification of individuals who experienced these (often violent) assimilation policies. Nevertheless, millions of descendants exist, and many know of their Indigenous ancestors and are willing to report it to the Census Bureau on the ancestry question. Social and cultural factors dictate whether these descendants reclaim AIAN as a racial identity at some point in the future. Like the children of AIAN-identified people, these descendants may or may not be tribal members, depending on enrollment requirements (which can be changed). In Figure 5, this set of response changes are depicted as primarily changes between "not racially identified as AIAN" and any of the non-Hispanic multiple-race AIAN population, though other changes are also plausible.

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⁷² The Cherokee Nation is perhaps the most well-known tribe using lineal descent, but over 100 Native Nations do not have minimum requirements for blood line (Rodriguez-Lonebear 2021).

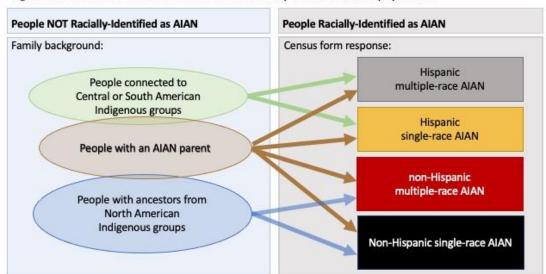


Figure 5. Sources of Potential Growth in the Racially-Identified AIAN population

Notes: Arrows depict likely response choices if people in this group begin to racially identify as AIAN. Only the most likely paths are shown.

Census Bureau projections, circa 2017

The US Census Bureau releases official Population Projections every few years, and the most recent release of projections (for each federally-defined race group) was circa 2017. These official projections are based on the traditional demographic method called "cohort component analysis." In this strategy, the analyst divides the known population into age/sex subgroups (usually five-year age groups and two sexes), then applies age/sex-specific rates of birth, international net migration, and survival. The analyst must also specify how these rates are expected to change in the future. The Census Bureau's 2017 projection analysis was based on the 2010 Census and federal birth and survival statistics (international migration plays a very small role in their AIAN projections). For their race-specific projections, the Census Bureau calculated the birth rate of AIAN mothers and the rate at which all babies have been classified as AIAN for each type of same-race and interracial union. Although the Census Bureau acknowledges response change, the Population Estimates and

⁷³ Vespa et al. (2018).

Projections branch has not yet integrated response change into their work and it was not included in this projection.

Table 6 (depicted in Figure 6) shows the past enumerated AIAN population and the Census Bureau's circa 2017 projection results. The Census Bureau projected an expected 7.05 million AIAN people in 2020, rising to 9.4 million by 2050. The percent change in 10 years was expected to drop to 12% or lower in later years of the projection – an unrealistically low growth rate similar to the 1890-1950 period. The omission of response change as a source of population growth likely lowered these projections substantially.

Table 6 and Figure 6 also include a calculation and depiction of the average annual growth rate (AAGR) for the AIAN population. The AAGR is notably unstable from census to census, with an upward trend over time. Years with extra efforts at reaching AIAN populations (e.g., 1910 and 1930) and years with procedural changes allowing more control over self-identification (e.g., 1960, 2000, and 2020) have seen relatively high AAGRs.

Table 6: Enumerated (1890-2020) and Projected AIAN populations (2020-2050), with

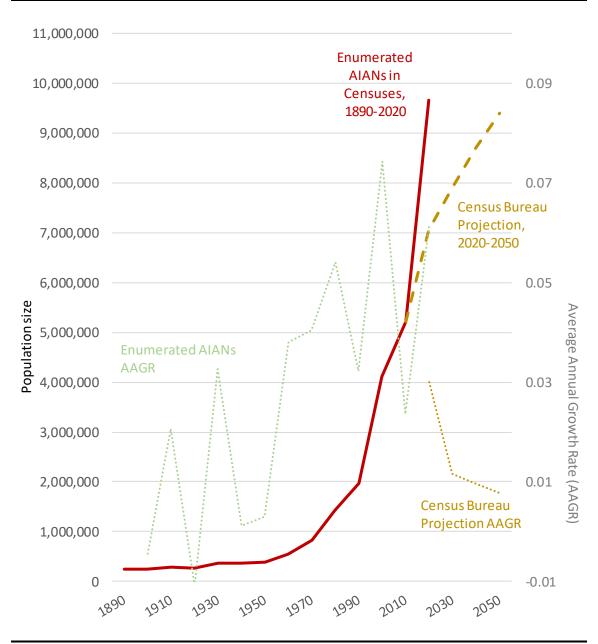
Measures of Change

	Population		% Change in	n 10 Years	AAGR	
Year	Enumerated	Projected	Enum.	Proj.	Enum.	Proj.
1890	248,000					
1900	237,000		-4.4%		-0.5%	
1910	291,000		22.8%		2.1%	
1920	261,000		-10.3%		-1.1%	
1930	362,000		38.7%		3.3%	
1940	366,000		1.1%		0.1%	
1950	377,000		3.0%		0.3%	
1960	552,000		46.4%		3.8%	
1970	827,000		49.8%		4.0%	
1980	1,420,000		71.7%		5.4%	
1990	1,959,234		38.0%		3.2%	
2000	4,119,301		110.3%		7.4%	
2010	5,220,579		26.7%		2.4%	
2020 *	9,666,058	7,051,738	85.2%	35.1%	6.2%	3.0%
2030 *		7,910,451		12.2%		1.1%
2040 *		8,699,224		10.0%		1.0%
2050 *		9,404,381		8.1%		0.8%

AAGR = Average Annual Growth Rate

^{*} Projection by the Census Bureau (Vespa et al. 2018: Table np2017_d1).

Figure 6: Enumerated (1890-2020) and Projected AIAN populations (2020-2050), with Average Annual Growth Rates



Note: This figure illustrates numbers shown in Table 6.

Unfortunately, Table 6 and Figure 6 show that the Census Bureau's projections of the AIAN population are clearly inadequate, despite using high quality source data on the base population, birth rates, and survival rates. The 2020 Census enumerated 9.7 million racially-identified AIAN people – millions more than the 7.05 million projected. This vast difference illustrates the fact the

AIAN population grows through other pathways besides births, including race response change by people who are already in the US population.

Besides response change, three other factors might influence the future size of the AIAN population. First, there may be changes to patterns of AIAN identification among new migrants from Central and South America. As new migrants interact with the US system of classifying race, many may choose to self-report as (Hispanic) AIAN or be classified this way by the Census Bureau. Although net international migration has not been seen as a major source of potential growth in past population projections of AIAN people, this source of AIAN people should be considered for inclusion in future work. Excluding net international migration as a source of growth could cause projections to underestimate actual population increases. Second, there may be a shift in terms of how children of interracial unions are racially identified. As social norms change, these patterns could change in the future. Third, the Office of Management and Budget may revise the race and ethnicity guidance to allow the race and Hispanic origin questions to be combined on future censuses. If this happened, many Hispanic AIAN people might identify as only Hispanic rather than also choosing to name a race category.

Cohort component model projections that include response change

Response change has only recently been acknowledged by demographers, and the field has not yet developed methods to include it in cohort component model population projections.⁷⁸ The

⁷⁴ Of all foreign-born people in the 2015-2019 5-year ACS (from IPUMS USA), only 0.8% reported AIAN race. Three-quarters of these (77%) reported Hispanic origins. The 10 most common birth countries were: Mexico (42% of foreign-born AIANs), Guatemala, Dominican Republic, El Salvador, Canada, Peru, Germany, Honduras, India (2%), and Columbia. Calculations by the author.

⁷⁵ Liebler (2016) Tables 2 and 3 show a slight increase from 1980 to 2010 in AIAN race response given for children of an AIAN - White interracial marriage, and no clear trend for children of AIAN - Black interracial marriages.

⁷⁶ The first step of the OMB review is underway. See: https://www.whitehouse.gov/omb/briefing-room/2022/08/30/omb-launches-new-public-listening-sessions-on-federal-race-and-ethnicity-standards-revision/

⁷⁷ Census Bureau research shows that in 2010, 5.8% of Hispanics did not report a race and 43.5% of Hispanics did not identify with any of the OMB race categories (Ríos, Romero, and Ramírez 2014).

⁷⁸ Statistics Canada's Demosim Team has developed a continuous-time microsimulation projection model which "projects individuals in the population one by one, rather than projecting the population on the basis of aggregate data,

US Census Bureau uses cohort component models for their projections, as do innumerable other demographic teams. The present research represents the first known attempt to account for race response change in a cohort component projection of a population.

As discussed above, research on AIAN race and ethnicity response change shows that AIAN people are very consistent about their Hispanic origin responses, but that they often change responses between single- and multiple-race AIAN. Therefore, projections in this report are developed separately for Hispanic AIAN (single- or multiple-race) and non-Hispanic AIAN (singleor multiple-race) people.

The cohort component method requires the analyst to provide information about the distribution of the starting population by age-group for each sex, as well as fertility, survival, and migration rates for each age-group/sex. Within the language of demography, and specifically for the tool of cohort component analysis, response change can be thought of as a type of migration into or out of the population. Therefore, age-group/sex-specific rates of race response change are calculated as part of this projection.

Methods

Starting population

The 2020 Census Public Law 94-171 data – disaggregated by race and Hispanic origin – were downloaded from IPUMS NHGIS.⁷⁹ These data do not have information about the age and sex distribution of AIAN people, so the 2010 age/sex distribution was applied.

To project the future population of AIAN people, the data were adjusted to account for estimated 2020 Census undercount. A Census Bureau study of undercount found that AIAN people

as is done with cohort-component and multistate models" (Demosim 2022: 10). Their model includes the possibility of intragenerational ethnic mobility of Indigenous people (i.e., response change), and probabilities for these changes were developed in a manner similar to that described in this report; see Demosim 2022, p. 21.

⁷⁹ Manson et al. (2021)

on reservation lands were estimated to be undercounted in the 2020 Census at a rate of 5.64% and those in off-reservation areas of the US were undercounted at an estimated rate of 0.86%. Of those living in Tribal Areas, 56.0% of single-race AIAN people and 13.3% of multiple-race AIAN people were living on "reservations" as defined in the census undercount study.

Adjusting for undercount using the results of the Census Bureau study, the total AIAN population in 2020 is estimated as 9.77 million, with 1,323,719 AIAN people living in Tribal Areas (13.55% rather than 13.35% in Tribal Areas). The estimated totals of 6,770,260 non-Hispanic AIAN and 3,000,492 Hispanic AIAN people were used as starting populations for the analyses in this report.

Fertility rates

The Centers for Disease Control provides age-specific fertility rates by age-group, race, and Hispanic ethnicity. This report's projections use the non-Hispanic AIAN fertility rate⁸¹ for non-Hispanic AIAN people and the general Hispanic fertility rate for Hispanic AIAN people.⁸²

Without further adjustment, a cohort component model would make the improper assumption that all babies of an AIAN mother will be reported as AIAN, and that no other babies (for example, those with an AIAN father and a non-AIAN mother) will be reported as AIAN.⁸³ In fact, 70% of babies living with one AIAN parent and one non-AIAN parent were reported as AIAN in 2015-2019.⁸⁴ To take this into account, the birth rates used in this projection were adjusted to

⁸⁰ Khubba et al. (2022), Table 4. AIAN people living in Tribal Areas that are not reservations were estimated to have no significant undercount, and this population was not adjusted for undercount in this report.

⁸¹ Non-Hispanic AIAN fertility data for 2019: https://wonder.cdc.gov/controller/saved/D66/D231F622.

⁸² Hispanic fertility rate data for 2019: https://wonder.cdc.gov/controller/saved/D66/D232F558. The CDC does provide fertility rates for Hispanic AIAN people, but these numbers are not plausible (probably because this is a small group). Hispanic AIAN people consistently report Hispanic origins even when they change their race responses (Liebler et al. 2016).

⁸³ Census Bureau projections take this into account using the national pattern of child race responses given for children in each type of interracial union. See Jensen and Eickmeyer (2019) for details.

⁸⁴ In cases where the other coresident parent was not AIAN, 70% of babies living with their AIAN father and 70% of babies living with their AIAN mother were reported as racially AIAN (2019 5-year ACS from IPUMS USA; calculations by the author).

include babies from 70% of AIAN fathers in interracial couples and remove babies of AIAN mothers who are not reported as AIAN themselves.⁸⁵ Fertility rates were held constant for the 30 year period of the projection.

Survival rates

The CDC Wonder tool, created by the Centers for Disease Control and Prevention, provides the number of deaths per population using the "bridged" race strategy described above. AIAN racial misclassification on death certificates has the effect of increasing AIAN survival rates above their true value. Rates This report used survival rates based on non-Hispanic AIAN deaths in 2019, by sex and five-year age group, adjusted for non-Hispanic AIAN mortality misclassification. Rates for Hispanic AIAN were derived from the Hispanic (all races) survival rates and misclassification rates. Survival rates were held constant for the 30-year period of the projection. Net international migration

As explained above, international migration is a significant source of people who identify as Hispanic AIAN, but AIAN people comprise a very small fraction of the total number of international migrants. The projections developed here do not include explicit adjustments for net international migration of people who racially identify as AIAN. However, net international

⁸⁵ The adjustment was: new fertility rate = [AIAN female fertility rate * 22% of families with two AIAN parents] + [AIAN female fertility rate * 78% of families with one AIAN parent * 70% of those babies reported as AIAN * 2 to include both AIAN mother families and AIAN father families]. With an original fertility rate of 100, for example, the new fertility rate would be 131.2.

⁸⁶ Racial misclassification on death certificates can happen, for example, when a funeral director completes the death certificate and assumes the deceased person's race based on appearance, location, or cause of death. See Arias, Heron, and Hakes (2016).

⁸⁷ Data for non-Hispanic AIAN mortality in 2019: https://wonder.cdc.gov/controller/saved/D76/D280F626

⁸⁸ The death certificate racial misclassification adjustment used the non-Hispanic AIAN and Hispanic mortality misclassification ratios, by age and sex, shown in Table 2 of Arias et al. (2016).

⁸⁹ Hispanic mortality data for 2019: https://wonder.cdc.gov/controller/saved/D76/D280F629

⁹⁰ See Arias, Heron, and Hakes (2016).

migration of AIAN-identified people is one source of race response change and is thus included in the accounting of the final model. 91

Race response change

Four projections are presented below, each using different calculations of net race response change rates for each five-year-age/sex/Hispanic origin subgroup. To summarize: Net response change rates used in the first projection (Panel A of Table 7, below) were calculated by comparing the expected 2010 population to the enumerated population in 2010. Those used in the second projection (Panel B) were drawn from a published study using a non-representative sample of people who reported AIAN in the 2000 and/or 2010 censuses. Net response change rates in the third projection (Panel C) use a comparison of the expected and enumerated 2020 population. And the rates used in the fourth projection (Panel D) are the average of those used in Panels A and C.

The first projection (shown in Panel A of Table 7) leverages previously-published information about individuals in the 2000 and 2010 censuses who reported AIAN in one or both census and whose responses were able to be linked across the decade. This sample does not include international migrants who arrived between 2000 and 2010, and it is not a representative sample; 25% of people who reported Hispanic AIAN in 2010 and 46% of people who reported non-Hispanic AIAN in 2010 were included in the sample. Although not representative, these linked data are very useful because they show the actual pattern of census race response stability and change for about 2.8 million non-Hispanic and 500,000 Hispanic AIAN people.

The other three projections compare enumerated AIAN populations to those expected by the Census Bureau in short term projections. The first step in calculating these rates for the first and second projections (Panels B and C of Table 7) was to compare (a) the number of people expected

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⁹¹ This contrasts with the 2018 Census Bureau projections, which did not include international migration.

⁹² Liebler, Bhaskar, and Porter (2016), Appendix B.

by the Census Bureau projection to (b) the number counted in the census. ⁹³ The second step was to convert the *number* of people whose race response changed to a *rate* for the cohort component analysis, the number of response changers in the subgroup was divided by the number who were expected to be counted, according to the projections. ⁹⁴ Response change rates were negative in some age/sex groups; this response change out of the AIAN category means that the number of people counted in the census in that sex and age-group was lower than the number expected. Most net change out of the AIAN category was in the 2000-2010 period, among Hispanic AIAN people, and/or in the oldest age groups. Response change rates were held constant for the 30-year period of the projection. The appendix shows an example of how these net response change rates were calculated. The results in the fourth projection (Panel D of Table 7) are based on the average of the rates in the first and third projections, calculated separately for each age-group/sex/Hispanic origin subgroup.

Results

Totals

Using these four strategies to estimate future response change results in four projection models, shown in Table 7 and Figure 7. For non-Hispanic AIAN people, the values projected by the two methods using only 2000-2010 response change (shown in Panels A and B) give relatively similar results (9.3 to 10.3 million non-Hispanic AIAN people expected in 2050). These results are

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⁹³ Specifically, results of the 2010 census were compared to the Census Bureau's 2008 projection, and results of the 2020 census were compared to the Census Bureau's 2017 projection. The 2010 undercount of AIAN people on reservations was significant (estimated at 4.8%), as was the 2020 undercount AIAN people on reservations (estimated at 5.64%; Khubba et al. 2022). The response change rates calculated here are based on data that were not adjusted for census undercount because the expected values (calculated by the Census Bureau) did not make this adjustment. Calculated response change rates would be different if undercount were considered.

⁹⁴ This strategy is parallel to the strategy described in a United Nations (1983) report: In general, an internal migration rate is the number of internal migratory events divided by the population exposed to the possibility of internal migration. In practice, the population of a given area is used as the base for the calculation of in, out, and net migration rates for the area."

strikingly lower than the results using 2010-2020 response change patterns as a model for the 2020-2050 period (Panel C projects 30.1 million non-Hispanic AIAN people in 2050). Panel D shows the results of a middle-ground approach, using the average of the 2000-2010 and 2010-2020 response change patterns (expected vs. enumerated, as shown in Panel B and Panel C) and projecting 17.2 million non-Hispanic AIAN people by 2050.

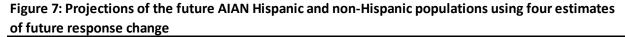
Results from the four models give projections of the Hispanic AIAN population that range between 6.1 million and 8.9 million in 2050. The highest projection is based on rates found in linked data from 2000-2010 (Panel A), data which does not include the impact of international migration and does not account for differences between people who were able to be linked and those who were not. Thus, the results in Panel A, while interesting, are not as compelling as the results in Panels B, C, and D.

Given that the pattern of AIAN population growth is not smooth from decade to decade (as shown in Table 6 and Figure 6), the combination of rates from adjacent decades shown in Panel D may be the most reasonable projection. The remainder of this report focuses on the projection results shown in the fourth projection (Panel D). To summarize, the projected future AIAN population shown in Panel D is based on the 2020 AIAN population adjusted for AIAN undercounts. It includes only the new children of AIAN mothers and AIAN fathers who are expected to be reported as AIAN at birth. Calculations of expected AIAN mortality include adjustment for racial misclassification on death certificates. Changes in the population due to net response change or net international migration were estimated by comparing the expected population to the observed population in 2010 and in 2020 and averaging those rates. The annual growth rate of Panel D's projection is 3.0%, which is similar to the average in the previous 70 years (see Table 6).

Table 7: Projections of the future AIAN population using four estimates of future response change

Panel A: Response change is the same rate as 2000-2010 (linked data from Liebler et al. 2016, App. B)								
	Total AIAN	Non-Hispanic AIAN	Hispanic AIAN	AAGR of Total				
2030	12,499,570	8,047,982	4,451,588	2.6%				
2040	15,676,538	9,298,075	6,378,464	2.3%				
2050	19,220,356	10,354,963	10,354,963 8,865,393					
Panel B: Resp	onse change is the	e same rate as 2000-2010 (e	expected vs. enumerated	d)				
	Total AIAN	Non-Hispanic AIAN	Hispanic AIAN	AAGR of Total				
2030	11,727,138	7,788,077	3,939,061	1.9%				
2040	13,683,488	8,692,108	4,991,380	1.5%				
2050	15,518,875	9,383,223	6,135,652	1.3%				
Panel C: Resp	onse change is the	e same rate as 2010-2020 (e	expected vs. enumerated	d)				
	Total AIAN	Non-Hispanic AIAN	Hispanic AIAN	AAGR of Total				
2030	15,767,825	11,586,165	4,181,660	4.9%				
2040	24,652,907	19,061,411	5,591,496	4.5%				
2050	37,311,438	30,095,581	7,215,857	4.1%				
Panel D: Resp	Panel D: Response change is the average of the 2000-2010 and 2010-2020 rates (expected vs. enum.)							
·	Total AIAN	Non-Hispanic AIAN	Hispanic AIAN	AAGR of Total				
2030	13,639,058	9,580,760	4,058,298	3.4%				
2040	18,363,951	13,083,389	5,280,563	3.0%				
2050	23,884,306	17,232,361	6,651,945	2.6%				

AAGR = Average Annual Growth Rate



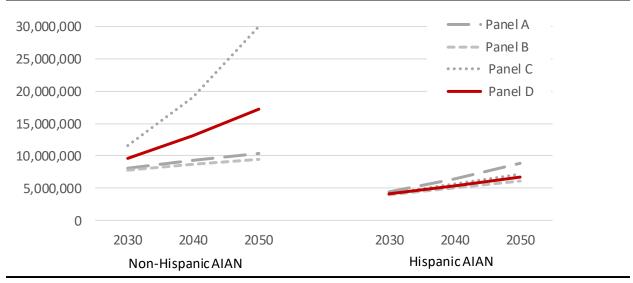


Table 8 shows the results of the Panel D population projection, placing it in context with the full series of census enumerations and projections from 1890 to 2050. The Panel D projection estimates that the AIAN population (including both single-race and multiple-race people) will grow to about 23.9 million people by 2050. The third and fourth columns of Table 8 show measures of growth between censuses since 1890 and reveal that the projection is reasonably plausible.

Table 8: AIANs in US Censuses, 1890 to 2020, and projected 2030 to 2050

Year	Total	% Change in 10 years	AAGR
1890	248,000		
1900	237,000	-4.4%	-0.5%
1910	291,000	22.8%	2.1%
1920	261,000	-10.3%	-1.1%
1930	362,000	38.7%	3.3%
1940	366,000	1.1%	0.1%
1950	377,000	3.0%	0.3%
1960	552,000	46.4%	3.8%
1970	827,000	49.8%	4.0%
1980	1,420,000	71.7%	5.4%
1990	1,959,234	38.0%	3.2%
2000	4,119,301	110.3%	7.4%
2010	5,220,579	26.7%	2.4%
2020	9,666,058	85.2%	6.2%
2030*	13,639,058	41.1%	3.4%
2040*	18,363,951	34.6%	3.0%
2050*	23,884,306	30.1%	2.6%

AAGR = Average Annual Growth Rate

Distribution across age group, races, Hispanic origin, and geography

A benefit of cohort component models is that they provide projections by Hispanic origin, age-group, and sex. For the sake of comparisons, disaggregation by single-race versus multiple-race, and by location, were imputed using the 2020 proportions. This information is displayed in Table 9 and Figure 8.

^{*} Projections from Panel D in Table 7.

Table 9: Projected American Indian and Alaska Native populations in 2030, 2040, and 2050

_		Whole US			n Tribal Areas	S
·	Total	Ages 0-17	Ages 18+	Total	Ages 0-17	Ages 18+
2030						
Total AIAN	13,639,058	3,462,542	10,176,516	1,853,551	555,017	1,298,534
Non-Hispanic AIAN	9,580,760	2,236,985	7,343,775	1,766,136	512,698	1,253,438
Non-Hispanic, single race	3,223,360	756,685	2,466,675	1,355,931	378,199	977,731
Non-Hispanic, multiple races	6,357,401	1,480,300	4,877,101	410,206	134,499	275,707
Hispanic AIAN	4,058,298	1,225,556	2,832,741	87,414	42,318	45,096
Hispanic, single race	2,017,366	546,575	1,470,791	50,700	22,953	27,746
Hispanic, multiple races	2,040,932	678,981	1,361,950	36,715	19,365	17,350
2040						
Total AIAN	10 202 051	4 457 130	12 000 022	2 517 490	726 650	1 700 020
	18,363,951	4,457,128	13,906,823	2,517,489	726,650	1,790,839
Non-Hispanic AIAN	13,083,389	2,942,261	10,141,128	2,405,233	674,342	1,730,891
Non-Hispanic, single race	4,401,520	995,252	3,406,267	1,847,601	497,438	1,350,163
Non-Hispanic, multiple races	8,681,869	1,947,008	6,734,860	557,631	176,904	380,727
Hispanic AIAN	5,280,563	1,514,867	3,765,696	112,257	52,308	59,948
Hispanic, single race	2,630,793	675,602	1,955,191	65,256	28,372	<i>36,885</i>
Hispanic, multiple races	2,649,769	839,265	1,810,504	47,000	23,936	23,064
2050						
Total AIAN	23,884,306	5,433,418	18,450,888	3,294,406	900,710	2,393,696
Non-Hispanic AIAN	17,232,361	3,663,252	13,569,109	3,155,567	839,587	2,315,980
Non-Hispanic, single race	5,796,816	1,239,136	4,557,680	2,425,889	619,333	1,806,556
Non-Hispanic, multiple races	11,435,545	2,424,116	9,011,429	729,677	220,254	509,424
Hispanic AIAN	6,651,945	1,770,165	4,881,779	138,840	61,123	77,716
Hispanic, single race	3,324,135	789,460	2,534,674	80,970	33,153	47,816
Hispanic, multiple races	3,327,810	980,705	2,347,105	57,870	27,970	29,900

Note: Total population (by age group and Hispanic origin) was calculated within the projection (Panel D in Table 7); the distribution of other subpopulations is based on the pattern of the 2020 data (adjusted for estimated AIAN undercount in 2020).

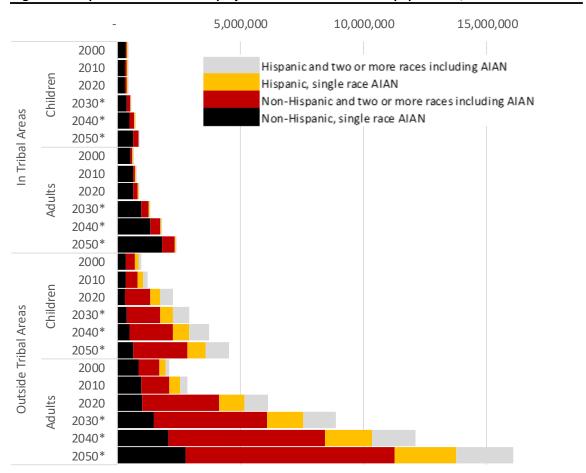


Figure 8: Comparative increases and projected increases in AIAN subpopulations, 2000 to 2050

Table 9 and Figure 8 show that the non-Hispanic AIAN population is projected to grow faster than the Hispanic AIAN population. By 2050, the non-Hispanic population is projected to be 73% of the total AIAN population (17.0 million), up from 69% non-Hispanic in 2020. This relative decline in the Hispanic AIAN population is especially likely if the Office of Management and Budget revises the race and ethnicity guidance and the Census Bureau combines the race and Hispanic origin questions. Some Hispanic AIAN people may identify as only Hispanic rather than also choosing to name a race category; researchers using linked 2000-2010 census data found that only 11% of people who reported Hispanic AIAN in 2000 or 2010 reported it in both 2000 and

^{*} indicates projected population as shown in Panel D of Table 8.

2010.⁹⁵ Immigration of people from Central and South American Indigenous groups will likely be a continued source of Hispanic AIAN people, potentially tempering this decline.

Minor children are projected to be about 26% of the total AIAN population in 2030, declining to 23% by 2050 because the fertility rate of AIAN women is relatively low and response change is more common among adults than children. The percent of the population that is of Hispanic origin is projected to decrease from 31% in 2020 to 27% in 2050. Children living on tribal lands and/or enrolled in a tribe are not only relatively connected to AIAN cultures but also more likely to be reported as AIAN on the census form. Thus, migration to/from Tribal Areas and changes in enrollment criteria can impact the future number of AIAN children.

The population in Tribal Areas is projected in this model to grow more slowly than the general population because Tribal Areas have a higher proportion of children than non-Tribal Areas, and children have lower rates of response change than do adults in these populations. AIAN people living in a Tribal Area such as a reservation often have limited access to culturally-relevant schooling, economic opportunities, and health-related resources. If the 2020 proportion in Tribal Areas continues to 2050, the total population in Tribal Areas in 2050 is projected to be about 3 million people, including about 866,000 children. Minor children are expected to be 30% of the AIAN Tribal Area population in 2030 and 27% in 2050.

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⁹⁵ Liebler et al. 2017, Figure 3.

⁹⁶ Liebler 2010b.

Conclusions and Recommendations

Policy makers, civil rights leaders, and governments often make plans based on the future size and composition of populations. Due to questionable assumptions and ethics, AIAN populations have often been left out of statistical analyses and demographic projections. This statistical racism limits the options for assessing and addressing structural inequalities facing this significant and important population.

Centuries of aggressive assimilation policies and dispossession practices have suppressed racial identification for many people of AIAN descent, but traditional demographic projection techniques ignore the possibility of race response change as a potential source of additional group members. This research develops a projection of the racially-identified AIAN population which does account for past patterns of response change and therefore is more likely to be consistent with future reality. The national AIAN population is projected to reach 23.9 million by 2050.

Tribal leaders need high quality data about their populations in order to govern. Given the centralized nature of federal funds for data collection, tribes have limited resources for gathering their own data. The Census Bureau has pledged to make their data as useful as possible for tribes. Unfortunately, the 2020 Census results are likely to be of poor quality for this purpose, particularly because the disclosure avoidance strategy introduces serious discrepancies in population counts and growth rates for non-White and for rural populations.⁹⁷

The following recommendations arise based on the research presented here:

The decennial census aims to reach every person but significantly undercounts AIAN
people living in Tribal Areas. In order to increase the quality of data collected about

⁹⁷ Muller and Santos-Lozada (2022) show that the tabulation approach for the 2020 census data is significantly flawed "at the county level for all groups except the total and non-Hispanic white population." Benefits of research cannot be attained when the data are rendered unusable. Thus, the Census Bureau's approach violates the ethical principle of Justice (Belmont Report 1979), which states "An injustice occurs when some benefit to which a person is entitled is denied without good reason…"

people living in Tribal Areas while supporting tribal sovereignty, we must increase the power of Tribal Leaders in the data collection process. For example, as part of the next decennial census, Tribal Leaders could be given a significant budget and effective training programs to collect data about their citizens. The Tribe would retain control over their data (i.e., they would have "data sovereignty"). In exchange, the Tribe would provide summary statistics to the Census Bureau about their citizens.

- 2. To effectively understand topics important for AIAN equity, the Census Bureau could add a national survey similar to Statistics Canada's Indigenous People's Survey (IPS). The IPS is a voluntary post-census survey for people who identify as Indigenous on the Canadian Census (both the Census and the IPS are administered every 5 years). Topics and questions on the IPS are developed with national Aboriginal organizations and the survey has a very high response rate (76% in the 2017 round).
- 3. Data disclosure and coding policies within the Census Bureau have significantly impacted the data giving the size and composition of the AIAN populations throughout the U.S. Many of the issues with past and present census data on AIAN people and on Tribal Areas could be mitigated by post-hoc analyses by the Census Bureau (for example, applying the 2020 race/ethnicity coding changes to the 2010 data and providing an analysis of impacts). The Census Bureau should thoroughly analyze the impact of their policies on AIAN data and release white papers and data crosswalks to support data users.
- 4. It would also be useful for the Census Bureau to expand its true partnerships with Tribal Leaders to ensure that the data collection process is culturally relevant, and that released data is as useful as possible; current practices are insufficient and

⁹⁸ For more, see: https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3250

give Tribal Leaders little opportunity to impact any aspect of data collection. Specialists nominated by AIAN organizations and/or Tribal Leaders should be given security clearance, access, and training so that they can support Tribal staff and data users in effective use of the available data.

Implementing policy recommendations such as these would significantly improve

Indigenous data equity and tribal sovereignty. With clear, relevant information about the AIAN

population and subpopulations, policies can be developed to address shortfalls in the civil rights of

AIAN people. Tribal Leaders, analysts, policy makers, and the public must continue to push for the

creation of high-quality data on AIAN people so that it can be used to improve the lives and

support the rights of Indigenous people.

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Appendix

Appendix: Example comparison between expected and enumerated population sizes: Non-Hispanic AIAN people (single and multiple-race) in 2020

Enumerated		Expected (.	2017 proj)	# Net me	ntal mig.	10 year	rate*	
Age group	<u>Female</u>	Male	<u>Female</u>	<u>Male</u>	<u>Female</u>	Male	<u>Female</u>	Male
0-4	234,794	241,707	163,812	170,726	70,982	70,981	0.43	0.42
5-9	231,716	238,363	158,461	165,308	73,255	73,055	0.46	0.44
10-14	240,841	246,949	<i>161,723</i>	166,480	79,118	80,469	0.49	0.48
15-19	277,652	285,083	159,542	163,515	118,110	121,568	0.74	0.74
20-24	272,526	271,402	166,003	169,905	106,523	101,497	0.64	0.60
25-29	252,804	241,089	176,852	181,761	75,952	59,328	0.43	0.33
30-34	231,556	219,207	<i>157,482</i>	155,870	74,074	63,337	0.47	0.41
35-39	227,404	213,121	144,583	136,147	82,821	76,974	0.57	0.57
40-44	235,148	219,654	132,296	124,004	102,852	95,650	0.78	0.77
45-49	265,360	243,638	127,356	118,060	138,004	125,578	1.08	1.06
50-54	257,495	231,755	130,676	119,875	126,819	111,880	0.97	0.93
55-59	213,769	192,870	144,744	128,970	69,025	63,900	0.48	0.50
60-64	168,392	153,539	139,109	119,706	29,283	33,833	0.21	0.28
65-69	116,421	103,230	112,800	95,642	3,621	7,588	0.03	0.08
70-74	80,786	67,813	85,664	72,515	(4,878)	(4,702)	(0.06)	(0.06)
75-79	56,906	42,047	54,824	43,922	2,082	(1,875)	0.04	(0.04)
80-84	39,187	25,455	33,950	24,922	5,237	533	0.15	0.02
85 +	34,762	16,977	32,068	18,210	2,694	(1,233)	0.08	(0.07)

Note: Numbers in parentheses are negative.

^{*} Rates were used to calculate the projection shown in Panel C of Table 7.