

# Continuity and Change: Demographic, Socioeconomic, and Housing Conditions of American Indians and Alaska Natives



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# **Continuity and Change: Demographic, Socioeconomic, and Housing Conditions of American Indians and Alaska Natives**

Prepared for:  
U.S. Department of Housing  
and Urban Development  
Washington, D.C.

Prepared by:  
Kathryn L.S. Pettit  
G. Thomas Kingsley  
Jennifer Biess  
Kassie Bertumen  
Nancy Pindus  
Chris Narducci  
Amos Budde

January 2014

## Acknowledgments

The authors would like to acknowledge Jennifer Stoloff of the Policy Development and Research Office at the U.S. Department of Housing and Urban Development for her guidance on this project. Emily Wright from the HUD Office of Native American Programs also provided helpful feedback that improved the report. Karl Eschbach's insights on the demographic trends of Native Americans helped to guide our analysis of population change. Brittany Edens at the Urban Institute provided excellent research assistance that helped ensure the accuracy and clarity of the report. Finally, we appreciate the thoughtful comments from the Expert Panel members, who are listed below.

### **Expert Panel for the Assessment of Native American, Alaska Native, and Hawaiian Housing Needs**

Dr. Laura R. Appelbaum, Senior Research Analyst, Centers at the University of Colorado at Denver and Health Sciences Center and Co-Principal of Alto Research

Kauila Clark, Native Hawaiian Traditional Healing Center

Marvin Jones, Retired Executive Director of Community Services at the Cherokee Nation

Miriam Jorgensen, Research Director, Native Nations Institute, University of Arizona, and Research Director, Harvard Project on American Indian Economic Development

Dr. Blake Kazama, Retired Executive Director, Tlingit-Haida Regional Housing Authority

Peter Morris, Director of Strategy and Partnerships, Policy Research Center, National Congress of American Indians

Patricia Nie, Community Development Officer, Wells Fargo

Deana K. O'Hara, Senior Advisor to the Deputy Assistant Secretary, Office of Native American Programs, U.S. Department of Housing and Urban Development

Don Shircel, Director, Family Services, Tanana Chiefs Conference, Inc

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## Executive Summary

This interim report is part of the National Assessment of Native American, Alaska Native, and Native Hawaiian Housing Needs, sponsored by the U.S. Department of Housing and Urban Development (HUD). The project's overarching purpose is to document the housing needs and conditions of American Indians and Alaska Natives (AIANs) and Native Hawaiians. As a component of this broader project, this specific report examines trends in the circumstances (social, economic, and housing) of the AIAN population using secondary sources, predominantly the products of the U.S. Census Bureau. The final report of this study will merge rich field research data with the findings presented here. Though this report only offers a partial picture, it contains new information about how Native Americans are faring in the Nation today. The housing needs and conditions of Native Hawaiians will be described in a separate report.

### Population Growth and Distribution

This report primarily relies on U.S. Census Bureau data sources, including the decennial census and the American Community Survey (ACS). In these surveys respondents self-report on their race and ethnicity. These data are uniformly defined nationwide and provide both the racial and geographic

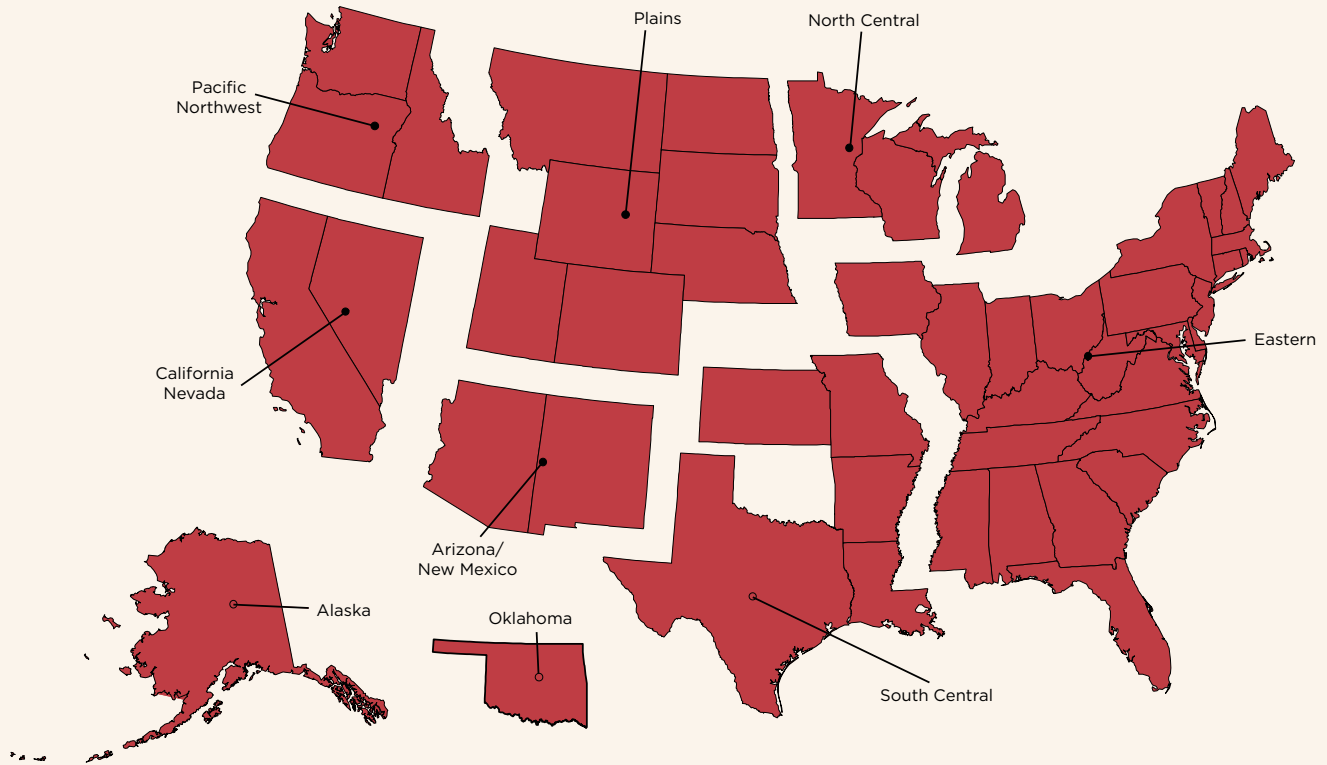
detail required for our research questions. Where possible, we compare the conditions of AIAN and non-AIAN populations across four area types: 1) tribal areas, 2) surrounding counties (the non-tribal parts of counties that include tribal areas), 3) metropolitan counties without any tribal area, and 4) nonmetropolitan counties without any tribal area. We also divide the country into nine study regions as a method for understanding variation in the indicators (Figure ES.1).<sup>1</sup>

In census surveys individuals who select AIAN as their only race are called the "AIAN alone" population; 2.9 million people were in this category in 2010, up 18 percent since 2000 (almost twice the 9.7-percent growth rate of the Nation as a whole). The intersection between race and ethnicity has emerged in the last decade as an important issue. The Hispanic share of the AIAN alone population climbed from 8.4 percent in 1990 to 16 percent in 2000 and again to 23 percent in 2010. The non-Hispanic and Hispanic AIAN populations have markedly different spatial and growth patterns. From 2000 to 2010, the non-Hispanic AIAN alone population rose by 8.6 percent, while the Hispanic AIAN alone population experienced a rapid growth of 68 percent.

The residential spatial patterns of non-Hispanic and Hispanic AIAN populations also differ. Non-Hispanic AIAN alone persons were more commonly located in

<sup>1</sup> For descriptions of the geographic definitions used in this report, see Section 2 and Appendix 2.

Figure ES.1. Study Region Map



places termed “Indian Country” (which we define in this report as all AIAN tribal areas and the counties that surround them). In 2010, Indian Country accounted for two-thirds of the population of non-Hispanic AIANs and more than three-quarters of the growth in non-Hispanic AIANs over the 2000s. Specifically, 42 percent of this group lived in reservations and other AIAN tribal areas, and 26 percent more lived in the counties surrounding those areas.

In contrast, only 5 percent of Hispanic AIAN alone lived in tribal areas and 27 percent in surrounding counties. About two-thirds were residents in other parts of the country (mostly metropolitan areas). Only 30 percent of the growth of this group occurred in Indian Country; the share of

Hispanic AIAN alone people living in Indian Country declined slightly from 2000 to 2010.

Individuals in a third group, here termed AIAN multiracial, identify themselves as AIAN and at least one other race. This group is nearly as large as the AIAN alone population (2.3 million people in 2010) and growing rapidly (up 39 percent since 2000). Similar to the Hispanic AIAN alone population, they are more likely to live in metropolitan areas outside of Indian Country. Only 8 percent live in tribal areas; 67 percent live outside of AIAN counties, predominantly in metropolitan areas.

Nationally, about 16 percent of AIAN residents in tribal areas are multiracial, but the prevalence of AIAN people identifying

with multiple races varies across regions. At one extreme, 31 percent of AIAN tribal area residents in Oklahoma identify with more than one race. In the other regions, AIAN tribal area residents identifying as multiracial range from 2 percent in Arizona/New Mexico, to 19 percent in the South Central study region. Data are limited for AIAN multiracial households, so for the remainder of this report, indicators labeled as “AIAN” will refer to AIAN alone, unless otherwise noted.

## Social and Economic Conditions

In this section we compare characteristics of the AIAN alone population (non-Hispanic and Hispanic combined) with those for non-AIAN people. Most of these measures use the ACS 5-year data from 2006 to 2010, which combines 5 years of monthly surveys to produce reliable estimates for tribal areas and other smaller geographies. The social and economic conditions of the AIAN population traditionally differ from non-Indians along a number of dimensions that affect their housing needs and preferences. Though most of those differences remain, a number of them narrowed over the first decade of the 2000s:

- In 2010, 30 percent of the AIAN population was under age 18 (compared with a non-AIAN share of 24 percent) and the AIAN share age 62 and older was 9.3 percent (compared with 16 percent for non-AIAN). Both gaps have diminished since 2000.
- Historically, married couples with children represented a higher share of AIAN than non-AIAN households. In the 2000s this share dropped markedly for both groups, especially for Indians, enough so that the difference was eliminated. The AIAN share dropped from 29 percent in 1990 to 19 percent in 2010; the non-AIAN share dropped from 26 to 20 percent over the same period.

- In 2010, AIAN households were still larger than non-Indian households: 3.0 versus 2.6 persons on average. These numbers changed very little over the decade and did not vary significantly by area type.
- Educational attainment improved markedly for Native Americans over the past decade, with the share over age 25 without a high school diploma falling from 29 percent in 2000, to 23 percent in 2006-2010 (multiyear average). This measure dropped by a smaller amount for the non-AIAN population (from 20 to 15 percent), so the gap actually widened.

AIAN social and economic characteristics vary considerably by area type. In 2010, for example, 34 percent of the AIAN alone population living in tribal areas was under 18, as compared to 26 percent in other nonmetropolitan counties. The AIAN alone poverty rate ranged from 32 percent in tribal areas to 25 percent in the surrounding counties, and the unemployment rate ranged from 16 percent in tribal areas to 12 percent in other nonmetropolitan counties.

For a sense of the changes in AIAN socioeconomic well-being, it is important to look at what happened before and after the start of the Great Recession of 2008. As might be expected, conditions for Native Americans worsened significantly during the Great Recession. The declines in employment and income were similar to non-AIAN populations, but the AIAN population on average began in a more financially vulnerable situation.

- The AIAN labor force participation rate (as a percentage of the population over age 16) dropped slightly from 2008 to 2010, from 61 percent to 59 percent. By comparison, the non-AIAN rate also fell about 1.5 points to 64 percent in 2010.

- The AIAN unemployment rate jumped from 11 percent in 2008 to 18 percent in 2010. This measure for the non-AIAN population also increased sharply over these 2 years from 6.3 percent to 11 percent.
- The AIAN poverty rate was 24 percent in 2008 but rose to 28 percent by 2010. The non-AIAN poverty rate experienced less of an increase, growing by 2.1 percentage points to end at 15 percent in 2010.

National averages on the effects of the recession mask important regional variations. Data covering the recession years are available only for the four major Census Bureau regions: Northeast, South, Midwest, and West. Native Americans in the West, which includes the two most distressed of our study regions, Northern Plains and Arizona/New Mexico, were hit hardest by the Great Recession. Recession effects appear mildest in the South, which includes the Oklahoma and South Central study regions as well as the southern half of Eastern Woodlands.

- The AIAN labor force participation rate in the West dropped 60 percent to 57 percent between 2008 and 2010. The 2010 rates for the other three regions were higher and ranged from 60 to 62 percent. The fall in the Western rate exceeded the 1.4- point decline in the Northeast and Midwest and the 0.27-point decline in the South.
- The West also saw an 8.6 percentage-point spike in the AIAN unemployment rate from 2008 to 2010, resulting in a 2010 rate of 21 percent. The rates for the other regions were 14 percent (South), 15 percent (Northeast), and 19 percent (Midwest), reflecting increases of five to six points.
- The Great Recession yielded sizable increases in AIAN poverty in all regions,

but again, the change for the West was most severe: an increase from 24.8 percent in 2008 to 30 percent in 2010. The poverty level was higher in the Midwest (33 percent), but the increase was only about half of the Western change. Poverty rates in 2010 were 25 percent in both the Northeast and South, up 3.3 and 3.8 points, respectively.

## Economic Development

The most important factor driving economic well-being and the ability to improve housing conditions in any area is the state of the local economy. Residents cannot prosper unless good jobs are being generated and sustained nearby. This section examines economic development trends, focusing on outcomes in tribal areas.

Research by the Harvard Project on American Indian Economic Development (2008) showed that economic development in Indian Country improved substantially in the 1990s, although there were important differences in performance by tribe and region. With the shift in national policy orientation toward self-determination, researchers saw increasing tribal efforts to create environments supportive of private entrepreneurship: “tribes investing in their own capacities to govern and thereby improving local accountability and encouraging tribal and non-tribal investments in human and other capital” (Harvard Project 2008, p. 111).

There are a number of indications that positive trends continued in the 2000s, at least up until the Great Recession. Though there are no separate data for tribal areas, government reports indicate that the number of Native-owned businesses increased nationally from 102,000 in 1992 to 201,000 in 2002, and then to 237,000 in 2007. The growth between 1992 and 2002 translates

into a 7 percent annual increase for Native-owned businesses, more than twice the 2.9 percent rate recorded for all U.S. businesses over that period. The growth in Native-owned business between 2002 and 2007 translates into a rate of 3.3 percent increase per year; below that for the previous period, but comparable to the growth rate for all U.S. businesses for that period (U.S. Census Bureau 2011; U.S. Minority Business Development Agency 2006).

In tribal areas, the new economic activity includes large-scale investments by the tribes themselves, which are reportedly operating in a more businesslike manner than previous tribal enterprises. It also accounts for businesses of many types established and owned by private tribal citizens, including gaming.

The role of gaming in Indian Country over this period warrants mention because it accounts for a large share of economic activity in some areas. It has been estimated that there were only 81 Indian gaming operations under way in 1992; by 2011 that number had increased to 421 operations, generating about \$27.2 billion in total revenues (Robinson 1995; National Indian Gaming Commission [NIGC] 2012b). Tribes often reinvest gaming profits in other tribal enterprises, and significant shares have been distributed to tribal members through per-capita payments (“per-caps”), creating substantial wealth in some places.

However, proceeds have been very uneven. A large share of gaming revenues flows to a relatively small number of tribes that account for a fairly small share of tribal area population. In 2011, 5 percent of tribal gaming enterprises (23 enterprises) generated about 38 percent of the total Indian gaming revenues, and 18 percent (78 enterprises) accounted for close to 75 percent. The larger casinos are mostly

near major population centers, as gaming has been of little benefit to large tribes remote from customer markets. With the competition from a growing number of non-Indian casinos and prospects of a possible major expansion of Internet gambling, the future of the industry is uncertain.

The positive trends in Native American enterprises are consistent with a rise in employment in Indian Country. Data for individual tribal areas are not available, but there is information about employment levels in AIAN counties. In 2000, 20.7 million jobs were located in AIAN counties, 18 percent of the national total. From 2000 to 2007, employment in those counties grew by 303,000 per year, 48 percent of total U.S. job growth. This is a growth rate of 1.4 percent per year, dwarfing the 0.36 percent average for all non-AIAN counties.

During the Great Recession, the patterns reversed. Places that performed best earlier in the decade typically faced sharper reversals later on. The total number of jobs in AIAN counties dropped by 3 percent per year from 2007 to 2010, compared with a drop of 2.3 percent annually for non-AIAN counties. The net result over the full decade was that employment in AIAN counties grew by 0.65 percent, a sharp contrast to the 4.5 percent decline in non-AIAN counties.

## Housing Conditions and Needs

Since 6 out of 10 of AIAN households live in tribal areas and surrounding counties, we need to understand the overall housing market in those areas. The number of housing units in tribal areas totaled 2.1 million in 2010, a slower 8.1-percent increase since 2000 when compared with a nationwide increase of 14 percent. In contrast to the slower tribal area increases, the 18-percent growth in housing units in the surrounding counties exceeded the national average. The

high housing growth rate in surrounding counties was largely driven by growth in three of the study regions: Northern Plains, California/Nevada, and Arizona/New Mexico.

Vacancy rates for all housing units in 2010 in tribal areas (14 percent) and surrounding counties (13 percent) exceeded the U.S. rate of 11 percent. The rate is above 30 percent in tribal areas in the California/Nevada region. A high vacancy rate in a given area does not preclude there being a shortage of housing for particular groups in that area. The vacant units may be too expensive for low-income families, too small for larger households, of poorer quality than other housing in the area, or far from employment centers.

The number of AIAN owner-occupied housing units rose 16 percent from 2000 to 2010, twice the rate for non-AIAN households. The overall AIAN homeownership rate of 54 percent still lagged considerably behind the non-AIAN rate of 65 percent. AIAN homeownership rates in tribal areas, however, overall are quite high: 67 percent in 2010.

The mix of structure types for housing units occupied by AIAN households differs greatly by area type. In tribal areas, about 74 percent of both AIAN and non-AIAN households lived in single-family detached homes in 2006–10. Another 17 percent of AIAN households in tribal areas lived in mobile homes and recreational vehicles (RVs) during this period. In the surrounding counties, only about half of the AIAN homes are single-family residences, 12 percentage points lower than the share for non-AIAN households. Mobile homes and RVs account for 13 percent of housing units, almost twice the non-AIAN rate in these areas.

For certain housing indicators (age and size of housing, housing costs, and housing problems), we used the ACS Selected Population Tables, which include additional

indicators for the AIAN population that are unavailable in the standard ACS summary files. The data set only reports AIAN indicators for geographies with at least 50 AIAN individuals. Even with the suppression, the areas that meet the population threshold account for a large share of the AIAN households. We group the individual geographies to calculate indicators for three area types: larger tribal areas, selected AIAN counties, and selected non-AIAN counties.

The age and size of housing in AIAN counties vary by area type. In 2006–10, about 25 percent of all AIAN households lived in buildings built before 1960. The share was much lower for larger tribal areas (15 percent) and selected AIAN counties (18 percent). Fifty-four percent of AIAN renters in larger tribal areas lived in units with three or more bedrooms, compared with 41 percent in the selected AIAN counties, and 29 percent in other counties.

Given that AIAN households on average have lower incomes, it is not surprising that the home values for homeowners and rents were lower than the national average. The average home value for AIAN homeowners in 2006–10 was \$175,000 nationally; about 66 percent of the average for all households in 2006–10. After adjusting for inflation, home values rose by 46 percent since 2000 for all households in the selected AIAN counties but only rose 29 percent for AIAN homeowners in those counties.

AIAN renter households paid, on average, \$700 in gross rent in 2006–10. Like home values, these rents were lower compared with the national average. Rents averaged a low \$440 in the larger tribal areas, rising to \$630 in AIAN counties. AIAN households experienced a much smaller increase in rents than all renters, with an increase of 5.6 percent compared with 42 percent for all renters, after controlling for inflation.

Housing problems for AIAN households relate to quantity, quality, and price of housing. The general standard for adequate quantity of housing is having no more than one person per room; a household with a higher ratio is considered overcrowded. In 2006–10, 65,000 AIAN households (8.1 percent of all AIAN households) were overcrowded, much higher than the national average of 3.1 percent. This pattern continues with housing quality, where almost 3 percent of AIAN households lacked complete plumbing facilities in 2006–10, more than five times the share for all households. A similar share of AIAN households lacked complete kitchen facilities, three and a half times as high as the national average. Both indicators have dropped by one-third for AIAN households over the last decade.

AIAN households in larger tribal areas and selected AIAN counties are most likely to experience overcrowding and inadequate facilities. Larger tribal areas and selected AIAN counties show the highest rates of AIAN overcrowding in 2006–10 (11 and 10 percent, respectively). Similarly, the facility inadequacy rates for AIAN households in larger tribal areas were about twice the national rates; specifically, 6.1 percent had incomplete plumbing and 5.4 percent had incomplete kitchen facilities. The housing quality problems for AIAN households were also high in the selected AIAN counties (4.4 percent for plumbing and 3.9 percent for kitchen facilities).

AIAN households in two regions in particular experience much worse housing quantity and quality problems. Selected AIAN counties in the Arizona/New Mexico and Alaska regions exhibited the highest rates of AIAN overcrowding in 2006–10, 16 percent and 22 percent, respectively. In these Arizona/New Mexico counties, 9.8 percent of AIAN households have incomplete

plumbing, and 8.5 percent lack complete kitchen facilities. The comparable numbers for selected AIAN counties in the Alaska region were 18 percent for plumbing and 15 percent for kitchen facilities.

Housing affordability is the most common problem for AIAN households. In 2006–10, almost 4 out of 10 AIAN households were paying more than 30 percent of their income on housing costs, or cost burdened. Almost 2 out of 10 were severely cost burdened (paying more than 50 percent). Unlike the changes in facilities and overcrowding, housing affordability problems are on the rise. The cost-burdened rate went up 5.9 percentage points for AIAN households from 2000 to 2006–10.

The spatial patterns also provide a contrast to earlier problem indicators, because housing is more affordable in tribal areas and AIAN counties than in the United States on average. Only about one-quarter of AIAN households in larger tribal areas and one-third in selected AIAN counties were cost-burdened in 2006–10. In both area types, these rates were lower than those for all households.

The households in the selected AIAN counties in the California/Nevada region had the greatest financial housing hardship. About half of those AIAN householders paid more than 30 percent of their income on housing in 2006–10.

The data source for the four indicators of housing problems does not provide information about how those problems overlap, but that information is available from the Comprehensive Housing Affordability Strategy data derived from the 2005–09 ACS. About 41 percent of AIAN households in 2005–09 had at least one housing problem, compared with 36 percent of all households. This rate exceeded the AIAN cost-burdened share of 33 percent, indicating that 7 percent of AIAN

households have physical or overcrowding problems but not financial ones.

## Conclusion

A central focus of this study is on conditions in tribal lands and their surrounding counties. In these areas, the Native American Housing Assistance and Self-Determination Act (NAHASDA) is the dominant framework for the delivery of housing assistance. Two findings in this report suggest that the circumstances of the AIAN population in these areas should continue to be a priority concern for national policy: continued population growth and the remaining gap between AIAN populations and other Americans.

Population growth fuels housing needs. The non-Hispanic AIAN alone population grew substantially in Indian Country in the 2000s (these areas accounted for three-quarters of the growth of that population nationally over the decade).

Gaps in well-being between the AIAN populations in Indian Country and other Americans remain sizable. Compared with non-Indians nationally, AIAN people living in tribal areas in 2006–10 had a poverty rate and an unemployment rate that were at least twice as high. Compared with the national average, AIAN households in large tribal areas were more than three times as likely to live in housing that was overcrowded and more than 11 times more likely to live in housing that did not have adequate plumbing facilities.

Our household survey will include resident perceptions and more information about physical housing conditions so that we can draw final conclusions about the extent of housing problems and needs in Indian Country. However, data presented here suggest that the housing problems of the AIAN population in tribal areas remain severe.

Another notable finding in this report was the explosive growth of two other subgroups who identified their race as Indian: AIAN multirace (41 percent growth in the 2000s) and AIAN alone Hispanic (64 percent growth). Two-thirds of the growth of these groups took place outside of Indian Country, mostly in metropolitan areas. Even though there may have been some improvements and a narrowing of gaps along the way, recent data show that the well-being of AIAN populations living outside of Indian Country is also still considerably below that of their non-Indian counterparts across a number of dimensions. Our upcoming study of Indians living in urban areas will explore the nature of these gaps and their possible causes.

For both Indian Country and the rest of the United States, this report demonstrates the value of examining issues by type of area and by region to understand the diverse contexts in which Indians live. Geography, governance, cultural context, and land use vary and affect the housing needs of residents. The report provides an important backdrop for the remaining data collection activities of this assessment. Combining our observations from the secondary data with the insights from the primary data will offer a full picture of the housing needs of American Indians and Alaska Natives.



# 1. Introduction

This document is the Interim Report of the congressionally mandated assessment of Native American, Alaska Native, and Native Hawaiian Housing Needs. This project is being conducted by the Urban Institute and its subcontractors for the Office of Policy Development and Research of the U.S. Department of Housing and Urban Development (HUD–Contract No. C-CHI-01092/GS-23F-8198H).<sup>2</sup> As specified in HUD’s Statement of Work:

The study will consider a wide range of issues by using the Census information describing the needs of the Native American, Alaska Native and Native Hawaiian populations—the study will consider not only their housing conditions, but their socioeconomic situations as well, to give a broader context to housing needs. The passage of the Native American Housing Assistance and Self-Determination Act (NAHASDA) of 1996 fundamentally changed the way federal funding is delivered to tribal people. Thus issues surrounding the changes NAHASDA introduced are a key part of the study.

The Urban Institute conducted a similar assessment in 1996 (Kingsley et al. 1996). HUD’s Statement of Work also noted this earlier work and stated: “That report

presented a complete overview of the housing situation of most American Indians and Alaska Natives. It is proposed that the current study update that work.”

The 1996 study (which we often refer to in this text simply as “the 1996 report”) presented measures showing that “the housing problems of American Indians and Alaska Natives were substantially more severe than those of non-Indians in all parts of America.” It also showed that although earlier HUD programs serving AIAN households (now often referred to as the 1937 Act programs) had indeed made important contributions to housing conditions, they nonetheless had serious defects.

The goal of the current study is to provide clear, credible, and consistent information that can guide policy decisions in ways that enable tribes to more effectively use resources to improve housing conditions.

## This Report and the Overall Study

This report presents an overview analysis of the circumstances of the American Indian and Alaska Native (AIAN)<sup>3</sup> population as of 2010 and how those circumstances have changed over the past two decades. It relies primarily on data from products of the U.S. Census Bureau: the decennial census of 2000 and 2010, and the American Community Survey (ACS) for various

<sup>2</sup> Urban Institute staff are conducting the work with support from three subcontractors: NORC at the University of Chicago, Econometrica Inc., and Support Services International.

<sup>3</sup> Matthew Snipp (1989, 36–40) explains why the term “American Indians and Alaska Natives” is the preferred racial designation for the populations that are the subject of this study (precise definitions consistent with census surveys are presented in Section 2). However, we also use its acronym—AIAN—and sometimes fall back on the terms Native Americans and Indians to refer to this same population.

years in the 2000s. (See Appendix 1 for descriptions of the various U.S. Census Bureau products used and how they differ from each other. This appendix also includes a discussion of the quality of the data, including the undercount of American Indians on reservations.)

There has been comparatively little nationwide research on trends in AIAN well-being in recent years, and this report fills an important gap in that regard. The study reviews trends in demography, spatial patterns, social and economic conditions, and economic development (all critical to understanding the housing problems and needs) as well as in basic housing conditions themselves.

Still, Census Bureau surveys are limited both with respect to the topics they cover and the depth in which they cover them. To do justice to the mandate of this study, additional, richer information must be collected, particularly with respect to the housing conditions and socioeconomic situations of AIAN families living on reservations and other tribal areas. Furthermore, the Census Bureau products offer no information at all on the nature and administration of HUD assistance and local housing programs. To meet the full mandate, the overall study includes several other data collection and research efforts pertaining to the AIAN population.<sup>4</sup>

- **Background interviews and literature reviews** involve reviews of relevant research literature published since 1996, and interviews with people knowledgeable about conditions and trends in Indian Country, defined in this study to include all AIAN tribal areas and the counties that surround them—see further definitions in Section 2.
- A major **in-person household survey** in 40 sampled AIAN tribal areas (target 1,280 households interviewed). These interviews will be conducted by tribal members who have been recruited and trained for this purpose by NORC at the University of Chicago, a project subcontractor and respected survey firm. The interviews will entail “walk-through” observations of housing conditions, and household interviews focused on how household members view their own housing conditions and their views on assisted housing programs.
- A **telephone survey of tribal housing offices and Tribally Designated Housing Entities (TDHEs)** (national sample of 104 entities that administer the Indian Housing Block Grant program under NAHASDA) emphasizing experience with programs and policies but also covering views on changing problems and needs.
- More indepth **in-person interviews with local housing officials, tribal leaders, and community leaders** in 24 of the 40 tribal areas selected for the household survey. These interviews will also emphasize experience with programs and policies but will include views on changing problems and needs.
- A **telephone survey of lenders** that originate home loans in Indian Country (sample of 35, weighted toward those that have been the most active lenders in tribal areas).
- **Site visits to five urban areas with concentrations of Native American populations and telephone interviews with staff at Urban Indian Community Centers** and other informed individuals in 25 other urban areas.

<sup>4</sup> The overall study will also include research on the housing needs of Native Hawaiians, which will be published as a separate stand-alone report.

Detailed designs were developed for all components in this project in the first half of 2011, and preliminary research to support this interim report was begun shortly after that. It was decided, however, that the overall study would benefit from a series of formal, government-to-government consultations about its content and approach with tribal leaders across the country before the other components of the work were implemented. Accordingly, consultation sessions between tribal leaders and HUD were held in each of the six regions of HUD's Office of Native American Programs in spring 2012, and ideas for improving the study discussed in those sessions were incorporated in revised research designs and implementation plans.

Work on the other components of the study, therefore, was still in early stages as this report was being completed. The field work for all of the other surveys is planned for completion in early 2014, and the final report on the overall study will be published in late 2014.

## The Structure of This Report

The next three sections of this report address research questions posed by HUD for this study on “Demography, Geography, and Economy” (see box below). These topics are all important determinants of the nature and magnitude of AIAN housing demand and need.

The subsequent section reviews Census Bureau data pertaining to the central purpose of the larger study: AIAN housing problems and needs. However, because Census Bureau products have only limited measures of housing conditions, we cannot assess housing needs in full using only those sources. A full exploration of that topic cannot occur until the full survey for this study is complete.

Before saying more about the content of these sections, it is important to note that in each of them we respond to one of the most striking features of the AIAN experience

## Research Questions—Demography, Geography, and Economy

- What is the extent of population growth (change) since the previous study?
- Where do most AIAN people live? On reservations, near reservations, central cities, suburbs, etc.? How has this changed over time?
- What are the current social and economic conditions for the population (age, household composition, education, employment, poverty, etc.?) How have they changed over time?
- What kinds of diversity in living and economic conditions are observed using the 2000 Census and 2010 (ACS) data? How do they compare to what was observed in the 1996 report, which used the 1990 Census data?
- What kinds of economic diversity exist across tribal areas? What are the major industries that employ people in and near tribal areas? How do they differ across tribal areas? In urban areas? How has this changed over time?
- How do housing and socioeconomic conditions vary by the presence of gaming? How important is this industry as compared with other economic activities? How has this changed over time?

in America: the dramatic diversity of circumstances for the AIAN population. The 1996 study showed that socioeconomic as well as housing experiences varied markedly depending on where people lived. Governance, cultural context, and land use of areas also vary and affect the housing needs of residents.

In each of the sections of the current report, we again examine variations using the same four basic geographic divisions we used in the earlier work. These will be defined in detail in Section 2. In summary, they include:

- *Tribal Areas*: reservations and other areas with concentrations of tribal population and activity as recognized by the U.S. Census Bureau.
- *Surrounding Counties*: the portions of all U.S. counties in which any tribal area is located and that are outside of tribal area boundaries.
- *Other Metropolitan*: all metropolitan counties that do not contain any part of a tribal area in their boundaries.
- *Other Nonmetropolitan*: all nonmetropolitan counties that do not contain any part of a tribal area in their boundaries.

In the remainder of this report, we refer to these geographic breaks as area types. Again, as in 1996, we present data for these categories within each of nine regions whose definitions are derived from the six administrative regions of HUD's Office of Native American Programs (ONAP).

## Section 2—Population Growth and Distribution

This section describes how the AIAN population has grown over the past century and then examines the shifts in individual components of change (births, deaths,

migration, and other factors) in determining the totals. Differing population trends for the geographies defined above over the past two decades are then compared. We also examine data for those who chose AIAN as their only race (AIAN alone) compared to the AIAN multiracial population (those who identify as being AIAN in combination with other races) and look at the shares who characterize themselves as Hispanic within each category. This section relies most extensively on decennial census data for 2000 and 2010.

## Section 3—Social and Economic Conditions

This section reports on social and economic characteristics of the AIAN alone population and how they compare across geographies and time and against those of the non-AIAN population in the same categories. Topics include age of the structure, household size and type, educational attainment, employment levels, and income and poverty. Throughout this section, we note differences between the Hispanic and non-Hispanic components of the AIAN alone population for selected indicators.

Change over the 2000 to 2010 period is noted for some indicators. For others, 2010 decennial census data are not available, so comparisons are made with circumstances as reported in the 2006–10 ACS data, which represent an average of surveys collected monthly over the 5 years from 2006 to 2010. For a few indicators, we rely on 1-year ACS data that, although not available in as much geographic detail, do enable us to note changes in conditions for the AIAN population before and after the onset of the Great Recession as compared to the rest of the U.S. population.

## Section 4—Economic Development

The analysis discussed above relates to the changing economic circumstances (employment, income, etc.) of AIAN households. A separate topic, however, is how the productive economies in Indian Country (AIAN tribal areas and surrounding counties) have themselves been changing; that is, the growth of business establishments located in these areas and the jobs offered by those establishments. This section looks at data on the expansion of AIAN-owned businesses nationwide but focuses on the County Business Patterns data series from the U.S. Census Bureau, showing the industries and employment changes in the counties that contain tribal areas. We also discuss the nature of new tribally owned businesses in Indian Country. This includes an examination of the influence of gaming in the economies of tribal areas, using available information from the National Indian Gaming Commission and other sources. Finally, we review the role played by Native Community Development Financial Institutions (CDFIs) that have emerged in tribal areas over the past decade to further economic development.

## Section 5—Initial Review of Housing Conditions and Needs

Our analysis of U.S. Census Bureau data on housing in this report begins by looking at trends in housing stock and vacancy in tribal areas and AIAN counties overall. We then discuss tenure and structure type for AIAN households for all tribal areas. We move to descriptions of the age and size of AIAN housing for larger tribal areas. Finally, we present data pertaining to housing problems for larger tribal areas (measures available from the Census Bureau surveys include overcrowding, affordability problems, and lack of adequate kitchen and plumbing facilities). We present national totals for

AIAN households compared with non-Indians or the total population and then explore variations in these relationships across area types and regions.

## Section 6—Conclusions

Our conclusions are presented in two parts because U.S. policy toward the AIAN population varies markedly by geography. The first part deals with circumstances in Indian Country, the areas where the NAHASDA is the dominant framework for the delivery of housing assistance. The second part deals with the rest of the Nation, where approaches to housing assistance are generally the same for Indians as for other Americans.

## 2. Population Growth and Distribution

### Introduction

To assess the housing needs of AIAN people, we need to understand the size of the population, where people live, and how these characteristics have changed over time. This section first reviews trends in the overall size of the AIAN population in the United States. Next, we use the typology developed in the 1996 report (as noted in Section 1) to portray the changing spatial distribution of the AIAN population (across area types and regions). We then briefly look at the size, growth, and spatial distribution of the AIAN multiracial population. Finally, we discuss the implications of the findings in this section for our broader examination of AIAN housing needs.

### Defining the American Indian and Alaska Native Population

How the AIAN population is defined is clearly important to interpreting the findings in this report, particularly because the population is defined in different ways for different purposes. In almost all sections of this report, we rely on the definition used in the decennial census and other surveys

conducted by the U.S. Census Bureau. In these surveys respondents self-report on their race and ethnicity. These data are uniformly defined nationwide and provide both the racial and geographic detail required for our research questions.

Because this is a study of housing conditions and needs, however, it is important to note the definition set forth in the NAHASDA,<sup>5</sup> the law that establishes the terms and conditions under which federal housing assistance is provided in Indian Country. The Act states that “The term ‘Indian’ means any person who is a member of an Indian tribe” and specifically authorizes the Secretary of HUD to make “grants under this section on behalf of Indian tribes.” The Act also states that “the term ‘Indian tribe’ means a tribe that is a federally recognized tribe or a State-recognized tribe,” but further clarifies that the only State-recognized tribes that qualify are those that received HUD 1937 Act assistance before the effective date of NAHASDA.<sup>6</sup>

The Act further describes the formula by which grant funds under NAHASDA are to be allocated and specifies that one of the key “factors for the determination of need” must be “the extent of poverty and economic distress and the number of Indian families within Indian areas of the tribe.” However, even though NAHASDA defines Indians in terms of tribal membership, there are no nationally

<sup>5</sup> Native American Housing Assistance and Self-Determination Act of 1996 (P.L.104-330 as amended). Definitions are drawn from sections 4, 101, and 302.

<sup>6</sup> Specifically, the text refers to tribes that have been “recognized as an Indian tribe by any State,” and “for which an Indian Housing Authority has, before the effective date under section 705, entered into a contract with the Secretary pursuant to the United States Housing Act of 1937 for housing for Indian families and has received funding pursuant to such contract within the 5-year period ending upon such effective date.”

available, reliable, or uniform data about the number of tribal members for the relevant geographies. Accordingly, in operationalizing the allocation formula, HUD relies on the census definition of AIAN, which is based on self-identification of race. It is important for the reader to keep the difference in definitions in mind as we discuss the heterogeneity in the size and circumstances of the AIAN population across the geographic area types.

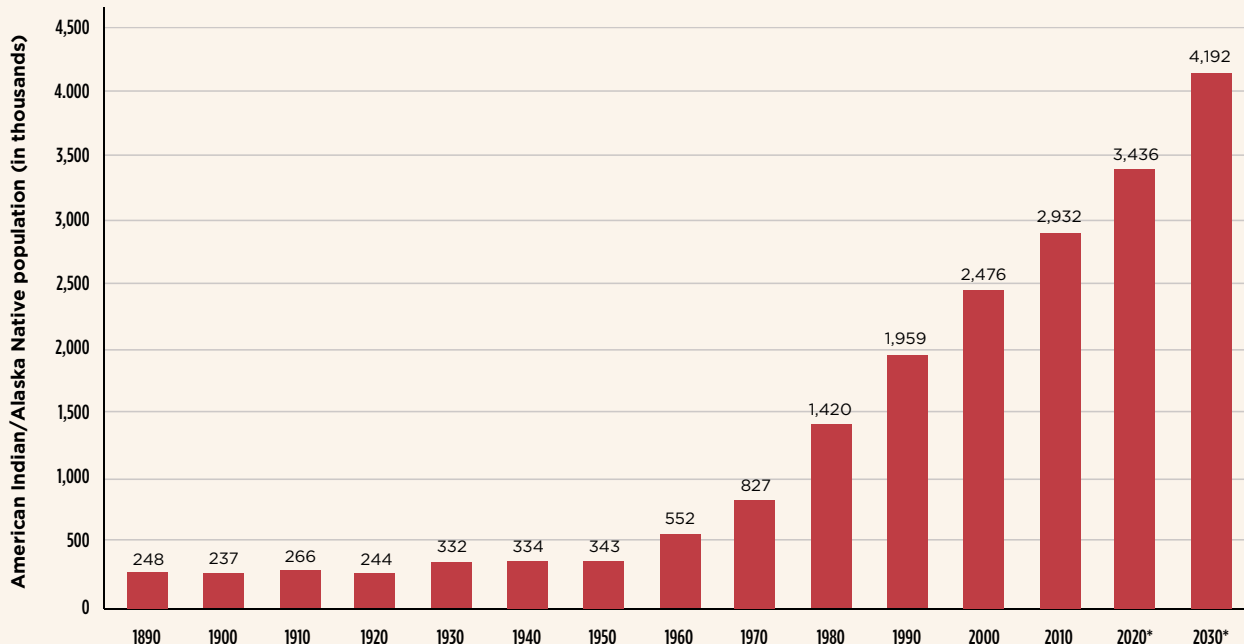
## American Indian and Alaska Native Population Trends

The 1996 report noted the rapid increase of people who self-identified as AIAN since 1970. The analysis below updates the previous analysis with information from the 2000 and 2010 decennial censuses. The decennial census, while intended as a

100-percent count of the population, has historically undercounted hard-to-reach populations. (See Appendix 1 for more details.) Although imperfect, census data are the most complete national source of population counts by race. This analysis uses the published statistics and does not attempt to adjust for the undercount on reservations.

Comparisons among the 1990 and later decennial censuses are complicated because, starting with the 2000 decennial census, the questionnaire permitted people to identify themselves as belonging to more than one race. In most of this section (and this report), we focus on the population that identified AIAN as their only race (the “AIAN alone” population).<sup>7</sup> We find that the population that said they were AIAN and belonged to one or more other races as well (the “AIAN

**Figure 2.1. American Indian and Alaska Native Population, 1890 to 2030**



\* Indicates population projections.

Note: Beginning in 2000, individuals could choose more than one race. For 2000 and later years, these figures represent the AIAN alone population.

Sources: U.S. Census Bureau, Decennial Censuses 1890 to 2010 and Population Projections as published in December 2009

7 This compromise is not ideal, but research comparing survey responses that contain both single-race and multiple-race questions show that American Indians of multiple races were generally more likely to choose the other race. In particular, for the largest multiracial combination of AIAN and white, only 21 percent of the group chose AIAN when asked to choose only one race (Parker, et al. 2004). But Ingram et al. (2003) did find that bridging races increased the AIAN population in 2000 by 12 percent. Using this 12 percent as a rough multiplier for the 2000 and 2010 populations, the growth rate would have risen to 42 percent instead of 26 percent from 1990 to 2000 but would still decline to 18 percent from 2000 to 2010.

multiracial” population) differs from the AIAN alone group in important ways. We look at the size and growth of the AIAN multiracial population at the end of this section.

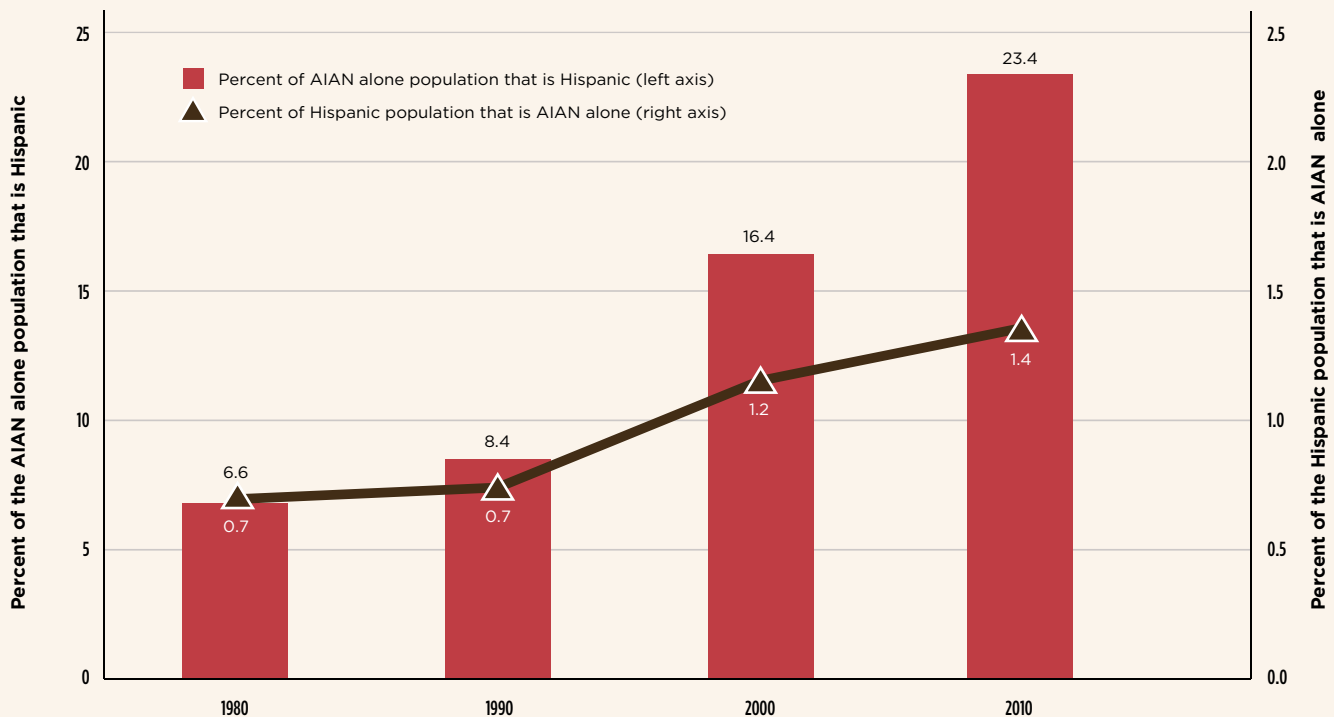
In 2010, 2.9 million people reported their only race as American Indian or Alaska Native (Figure 2.1). This AIAN alone population is continuing to rise, but at a much slower pace than before. The growth rate was 38 percent from 1980 to 1990, but fell to 26 percent for the 1990 to 2000 period, and dropped again to 18 percent from 2000 to 2010. The absolute growth from 2000 to 2010 of 456,000 also represented a decline from the increase of 517,000 from 1990 to 2000.

Even with the growth deceleration, the AIAN alone population still grew faster than the

total U.S. population from 2000 to 2010 (18 percent for AIAN compared with 9.7 percent overall). Because of this, the AIAN alone share of total population has increased slightly over the past 10 years from 0.88 percent to 0.95 percent. The Census Bureau projects that this trend will continue, with the share of the AIAN population rising to 1.2 percent of the total population by 2030, or 4.2 million people.<sup>8</sup>

The intersection between race and ethnicity was not discussed in the 1996 report, but over time, it has emerged as a larger issue.<sup>9</sup> The Hispanic share of the AIAN population was 6.6 percent in 1980, climbed to 8.4 percent by 1990, and then grew rapidly to reach 23 percent of the AIAN alone population in 2010 (Figure 2.2).

**Figure 2.2. Trends in AIAN Alone and Hispanic Populations, 1980 to 2010**



Source: U.S. Census Bureau, Decennial Censuses 1990 to 2010

8 The 4.2 million population projection for 2030 is based on the data released from the U.S. Census Bureau in December 2009. More current projections were released in December 2012 and have a considerably higher figure—4.889 million. We use the 2009 data because we believe that the vital statistics method of allocating births that are classified as Hispanic and “some other race” incorrectly inflates the number of AIAN births. This has more of an influence in the post-decennial census projections than in the 2009 projections because the share of the AIAN population that was also Hispanic rose sharply between 2000 and 2010.

9 In the decennial census, the question about race (white; African American; Asian; Pacific Islander and Native Hawaiian; Native American and Alaska Native) is separate from that of ethnicity (Hispanic or Latino/not Hispanic or Latino).



The additional 278,000 Hispanic AIAN alone population drove much of the AIAN growth from 2000 to 2010, accounting for 61 percent of the total AIAN population increase. The shift in ethnic composition is critical to understanding the shifting growth patterns of Native Americans, which are described in detail below.

The overall Hispanic population, however, has shown relatively small changes in how often they identify as AIAN. In 1980 and 1990, about 0.7 percent of Hispanics self-identified as AIAN alone. By 2010, 1.4 percent of Hispanics self-identified as AIAN alone, twice the rate of 20 years earlier but still small relative to the entire Hispanic population. Even with this low share of Hispanics that self-identify as AIAN, the large size of the Hispanic population in the United States (50.5 million) and its rapid growth (43 percent from 2000 to 2010) explains the jump in percentage of self-identified AIAN people who are Hispanic. Interestingly, the Hispanic AIAN alone population is not primarily driven by recent immigration—7 out of 10 were born in the United States and only about 2 out of 10 of the Hispanic AIAN alone immigrants moved to the United States after 1990.

## Geographies

In this section we look at key geographic divisions that help describe a diverse, growing population. In it, we see a story of substantial ethnic change that brings a shift away from traditional tribal areas and toward metropolitan areas. The 1996 report introduced a typology based on tribal area status, adjacency to tribal areas, and metropolitan status to illustrate how the characteristics and needs of the AIAN population vary across the United

States. Since this breakdown revealed several meaningful differences relevant to AIAN housing needs, we adopt the same categories for this analysis.<sup>10</sup>

- ***AIAN Counties:*** At least part of the county is considered to be an American Indian or Alaska Native area by the U.S. Census Bureau. In 2010, 523 out of the 3,138 counties included in ONAP regions fell into the “AIAN Counties” group.<sup>11</sup> We divide this category into two subgroups:
  - ***Tribal Areas:*** AIAN counties or parts of AIAN counties considered to be reservations and other areas with concentrations of tribal population and activity. For this study, we use boundaries as defined by the U.S. Census Bureau. The 2010 decennial census identifies a total of 617 AIAN tribal areas nationwide (221 of which are Alaska Native Villages). Appendix 2 defines the different types of tribal areas included in the Census Bureau data and presents counts pertaining to each type. It also explains the methods we used to define tribal area geographies that are comparable in 2000 and 2010.
  - ***AIAN Surrounding Counties:*** The parts of AIAN counties outside of tribal areas. A major finding of the 1996 report is the importance of areas outside of tribal land but near enough for residents to have ties to the tribal area. American Indians in surrounding counties may have left the tribal area for economic, personal, or other reasons but are close enough to have interactions with a reservation. Of the 523 AIAN counties, 453 counties are only partially tribal and, thus, contain areas that fall into the “surrounding counties” category.

<sup>10</sup> Since Hawaii is not included in the ONAP regions, the population totals in this section exclude the 4,164 AIAN people in that State, which represents only 0.1 percent of the total population.

<sup>11</sup> The counts for each geographic type exclude tribal areas and counties in Hawaii and Puerto Rico.

- **Non-AIAN Counties:** The remaining counties that do not contain tribal areas. These are divided between counties within and outside of officially defined metropolitan areas, 947 and 1,668 counties in each category, respectively. For the remainder of this report, we refer to these county types as “other metropolitan counties” and “other nonmetropolitan counties,” respectively.<sup>12</sup>

As noted above, in this study we use the 617 “American Indian and Alaska Native Areas” as defined by the U.S. Census Bureau in 2010.<sup>13</sup> Official AIAN tribal area boundaries are not static, and boundaries can change for several reasons. As geographic information system technology has advanced, tribes, States, and the U.S. Census Bureau have been able to clarify AIAN boundaries, resulting in minor changes to the official Census Bureau boundary lines over time. Land disputes between the tribes or a modified legal status may also cause tribal boundaries to be changed. New tribal areas are also being recognized; 31 new AIAN areas were added to the Census Bureau list this past decade alone. One of the goals of this report is to explore the changing characteristics of AIAN areas over the past decade. To reflect change for a consistent set of boundaries, we created a geographic crosswalk from tribal areas as defined in 2000 to the 2010 tribal areas. For notes on this methodology, see Appendix 2.

There is another aspect of the geography that also needs to be recognized: region. Native Americans living in tribal areas generally have more economic and housing challenges than those living in metropolitan areas, but even among tribal areas, the level of household problems differs widely across

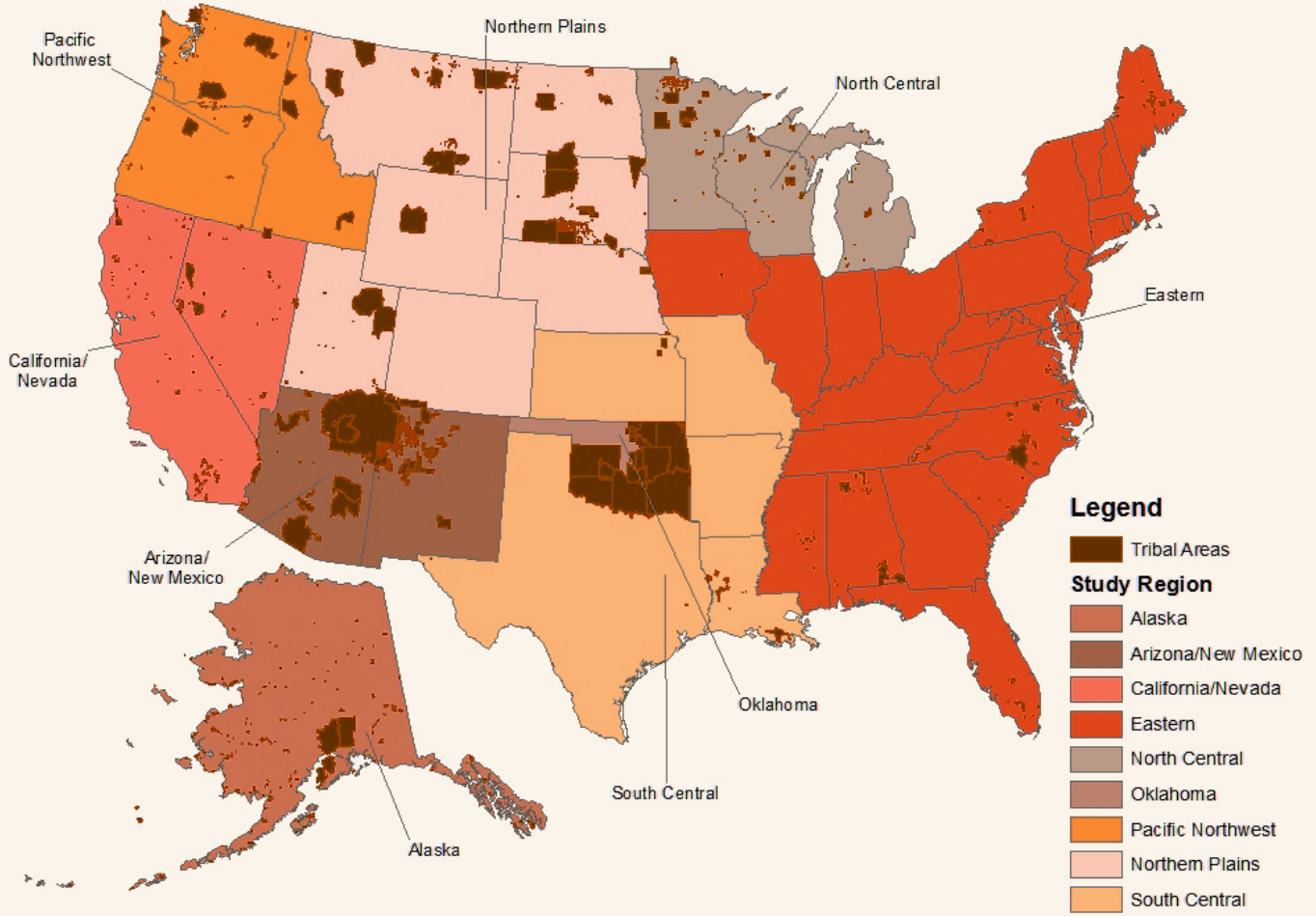
regions. Accordingly, this report reviews demographic, social, economic, and housing conditions in each of the above geographic categories, further subdivided by region. As in the 1996 report, our study regions are based on the service areas of HUD’s six ONAP areas. For the purposes of this study, three of these areas were considered to be too heterogeneous and were split, which results in a total of nine study regions (Figure 2.3).

1. North Central (Chicago Office—Eastern/Woodlands)
2. Eastern (Chicago Office—Eastern/Woodlands)
3. Oklahoma (Oklahoma City Office—Southern Plains)
4. South Central (Oklahoma City Office—Southern Plains)
5. Northern Plains (Denver Office—Northern Plains)
6. Arizona/New Mexico (Phoenix Office—Southwest)
7. California/Nevada (Phoenix Office—Southwest)
8. Pacific Northwest (Seattle Office—Northwest)
9. Alaska (Anchorage Office—Alaska)

<sup>12</sup> In a separate report on American Indians and Alaska Natives living in urban areas as a part of this project, we will describe patterns of concentrations of the AIAN population living in metropolitan areas and their characteristics.

<sup>13</sup> These areas are identified by summary level 280 in census data files, but we exclude Hawaiian Home Lands from analysis in this report. Appendix 2 defines the five different types of tribal areas: Federally Recognized Reservations, State-Recognized Reservations, Joint-Use Areas, Tribally Designated Statistical Areas, and Alaska Native Village Statistical Areas.

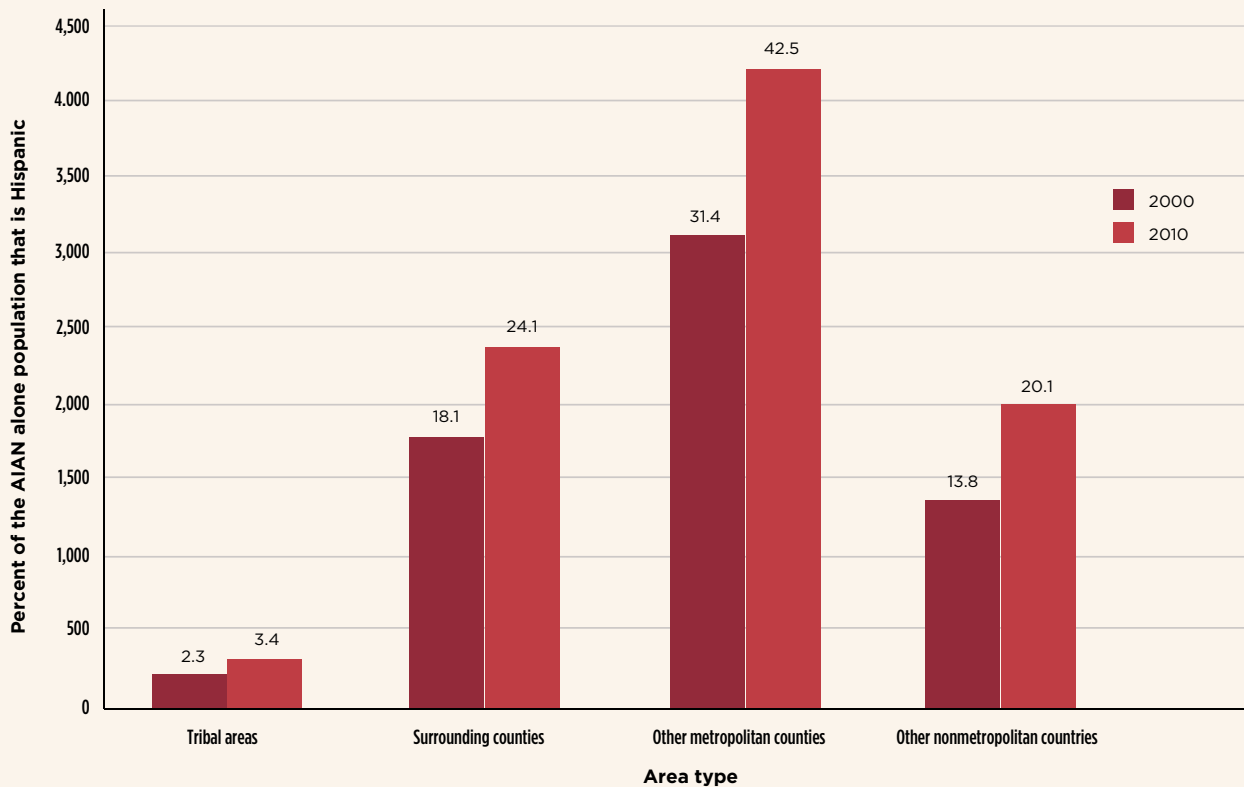
Figure 2.3. Tribal Areas Map



### Spatial Patterns of the AIAN Population

At 59 percent a majority of the almost 3 million AIAN alone people lived in AIAN counties. The Hispanic makeup of the AIAN alone population described above varies considerably based on geographic location. The other metropolitan counties have the largest share and growth in share, with Hispanics accounting for 42 percent of the

AIAN alone population in 2010 (Figure 2.4). The share of Hispanic AIAN alone population also rose in the other geographic area types, but to a lesser extent. The Hispanic share of AIAN alone on tribal land rose only slightly since 2000 and was still quite small at 3.4 percent in 2010. The Hispanic presence is much higher in the surrounding counties, where they made up almost one-quarter of the AIAN alone population.

**Figure 2.4. Share of AIAN Alone Population That Is Hispanic, 2000 to 2010**

Source: U.S. Census Bureau, Decennial Censuses 2000 and 2010

The change in ethnic makeup of the AIAN alone population drove shifts in the overall spatial and growth patterns. As mentioned earlier, the American Indian population is growing at a faster pace than the rest of the country in all area types. However, AIAN population growth from 2000 to 2010 of 8.2 percent in the tribal areas, where there were very few Hispanics, is the slowest of all

the area types (Table 2.1). This is well below the 33-percent population growth reported for tribal areas between 1980 and 1990, illustrating a significant change in growth patterns of the AIAN population.<sup>14</sup> Now, surrounding counties and non-AIAN counties are experiencing three times the growth rate seen in tribal areas, largely driven by the increase in the Hispanic AIAN population.

<sup>14</sup> As noted before, we cannot directly compare the geographic area of tribal land from 2010 to 1980, but this still appears to be a major change in trends.

**Table 2.1. AIAN Alone Population and Growth by Hispanic Origin and Area Type, 2000 to 2010**

	AIAN Alone Population, 2010			Percent Change in AIAN Alone, 2000 to 2010		
	Total	Non-Hispanic	Hispanic	Total	Non-Hispanic	Hispanic
Total	2,928,084	2,244,275	683,809	18.4	8.6	68.4
AIAN Counties	1,728,677	1,512,380	216,297	14.5	9.8	63.8
Tribal areas	967,135	934,383	32,752	8.2	7.0	59.7
Surrounding counties	761,542	577,997	183,545	23.6	14.6	64.6
Non-AIAN Counties	1,199,407	731,895	467,512	24.6	6.3	70.6
Other metropolitan	1,012,320	582,459	429,861	25.9	5.6	70.5
Nonmetropolitan	187,087	149,436	37,651	17.6	9.0	71.3

Note: Data for 2000 have been adjusted for 31 tribal areas with significant boundary changes between 2000 and 2010. See Appendix 2  
Source: U.S. Census Bureau, Decennial Census 2000 and 2010

The non-Hispanic and Hispanic AIAN population growth from 2000 to 2010 reinforced existing residential spatial patterns (Table 2.2). About two-thirds of the non-Hispanic AIAN population lived in AIAN counties, 42 percent in tribal areas and 26 percent in surrounding counties. This area was also where more than three-quarters of the population growth occurred. In contrast, the non-AIAN counties were home to about two-thirds of the Hispanic AIAN population and accounted for 70 percent of its growth. Only 5 percent of

Hispanic AIANs lived in tribal areas and 27 percent in surrounding counties.

The non-Hispanic AIAN trend is similar to what was observed from 1980 to 1990 for the total AIAN population, when AIAN counties accounted for almost 80 percent of the population growth. The growth patterns from 2000 to 2010 resulted in almost a 1 percentage point decline in the share of Hispanic AIAN alone people living in Indian Country and a similar size increase in the non-Hispanic AIAN share in those areas.

**Table 2.2. Distribution of AIAN Alone Population and Growth by Hispanic Origin and Area Type, 2000 to 2010**

	Percent of AIAN Alone Population, 2000			Percent of AIAN Alone Growth, 2000 to 2010		
	Total	Non-Hispanic	Hispanic	Total	Non-Hispanic	Hispanic
Total	100.0	100.0	100.0	100.0	100.0	100.0
AIAN Counties	59.0	67.4	31.6	48.1	75.8	30.3
Tribal areas	33.0	41.6	4.8	16.1	34.4	4.4
Surrounding counties	26.0	25.8	26.8	32.0	41.4	25.9
Non-AIAN Counties	41.0	32.6	68.4	51.9	24.2	69.7
Other metropolitan	34.6	26.0	62.9	45.8	17.3	64.0
Nonmetropolitan	6.4	6.7	5.5	6.1	6.9	5.6

Note: Data for 2000 have been adjusted for 31 tribal areas with significant boundary changes between 2000 and 2010. See Appendix 2.  
Source: U.S. Census Bureau, Decennial Census 2000 and 2010

Altogether, one-third of the AIAN alone population lives in tribal areas and another 26 percent live in counties surrounding tribal areas (Table 2.2). Of those living in non-AIAN counties, most live in in metropolitan areas: 35 percent of the entire AIAN population alone live in other metropolitan areas where only 6 percent live in non-AIAN, nonmetropolitan areas. Although the distribution of the AIAN alone population in 2010 is generally similar to a decade earlier, the Hispanic AIAN growth resulted in slight shifts of the population away from tribal areas and toward other metropolitan areas.

Extending the analysis, we find more nuance among the AIAN counties when examined by region (Table 2.3). The Hispanic share of

the AIAN alone population in AIAN counties ranged from 2.1 percent in the Alaska region up to 42 percent in the California/Nevada region in 2010. Unlike the national picture, the share of Hispanic AIAN population does not necessarily correspond to the level of overall growth. The AIAN growth rate from 2000 to 2010 in the North Central and Oklahoma AIAN counties was similar to the national average of 15 percent even with relatively low shares of Hispanic AIAN population. They did drive the growth in regions such as the Pacific Northwest and California/Nevada, where they account for 64 percent and 94 percent of the total AIAN growth, respectively.

**Table 2.3. AIAN Alone Population Ethnicity and Growth by Study Region, 2000 to 2010**

Study Region	AIAN Counties			Tribal Areas		
	Hispanic AIAN as a Percent of All AIAN, 2010	"Percent Change in AIAN, 2000 to 2010	Hispanic AIAN Share of AIAN Growth, 2000 to 2010	Hispanic AIAN as a Percent of All AIAN, 2010	Percent Change in AIAN, 2000 to 2010	Hispanic AIAN Share of AIAN Growth, 2000 to 2010
Total	12.5	14.5	38.5	3.4	8.2	16.7
North Central	6.8	15.0	23.1	3.4	12.0	11.2
Eastern	13.5	17.7	45.4	2.6	11.7	12.4
Oklahoma	4.0	17.7	12.0	3.4	17.5	10.3
South Central	18.8	14.9	16.4	6.2	14.0	22.6
Northern Plains	4.3	11.1	18.4	2.6	6.4	12.1
Arizona/New Mexico	10.9	14.0	36.2	3.2	-0.1	NA
California/Nevada	42.3	17.0	94.4	12.2	11.7	32.6
Pacific Northwest	14.1	11.8	63.5	6.4	6.7	36.0
Alaska	2.1	6.1	12.1	1.1	3.2	5.1

NA: Not applicable.

Note: Data for 2000 have been adjusted for 31 tribal areas with significant boundary changes between 2000 and 2010. See Appendix 2.  
Source: U.S. Census Bureau, Decennial Census 2000 and 2010

The Hispanic share of AIAN alone population in tribal areas is more uniform, with the share exceeding the national average in only three regions—the Pacific Northwest (6.4 percent), South Central (6.2 percent), and the California/Nevada region (12 percent). Tribal areas in the latter two regions did experience higher than average AIAN alone growth rates from 2000 to 2010, but the Pacific Northwest showed a much lower rate. Population grew by a substantial amount in tribal areas in the North Central, Eastern, and Oklahoma regions, with only about one-tenth of the growth due to increases in Hispanic AIAN.

### Population Trends in Tribal Areas

Tribal areas are an essential geographic area of focus when evaluating the challenges faced by the American Indian population. A complex web of historical and political

events has affected the way that the United States has determined which areas legally belong to Indian nations and which areas do not. As these events are closely intertwined with American expansionism and interact with an incredibly diverse American Indian population, characteristics of tribal areas vary remarkably in different regions of the country.

The number and nature of tribal areas differ greatly by region (Table 2.4). Oklahoma, for example, accounts for the largest tribal land area of all regions, while Alaskan tribal areas are the most numerous, relatively small and more sparsely populated. The South Central region has the fewest number of tribal areas and the smallest total land area, but with an average of 169 people per square mile, it is the most densely populated.

**Table 2.4. Geographic Characteristics for Tribal Areas by Study Region, 2000 to 2010**

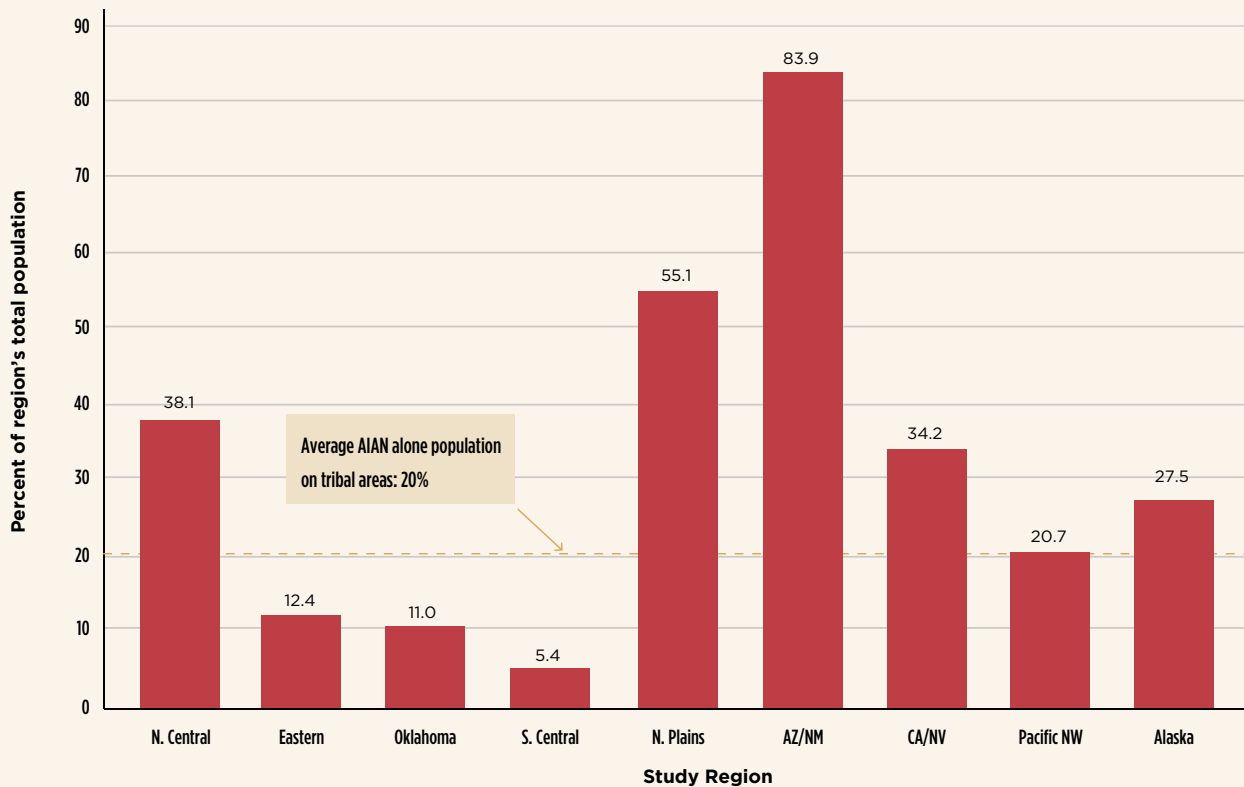
Study Region	Number of Tribal Areas	Land Area (Sq. Miles)	Density (Population/Sq. Mi.)	AIAN Alone Population	
				2010	Percent Change, 2000 to 2010
Total	617	187,121	25.8	967,135	8.2
North Central	36	4,780	23.2	42,238	12.0
Eastern	68	5,286	156.7	102,482	11.7
Oklahoma	30	52,145	49.0	280,069	17.5
South Central	17	1,483	169.0	13,429	14.0
Northern Plains	31	46,929	5.0	128,429	6.4
Arizona/New Mexico	42	43,731	7.2	265,888	-0.1
California/Nevada	130	2,826	26.3	25,425	11.7
Pacific Northwest	42	9,423	21.6	42,110	6.7
Alaska	221	20,518	11.9	67,065	3.2

Note: Data for 2000 have been adjusted for 31 tribal areas with significant boundary changes between 2000 and 2010. See Appendix 2. Thirteen tribal areas cross study regions. For the count of areas, these areas are assigned to the region containing the majority of their population. For the other indicators, the values are apportioned across regions.  
Source: U.S. Census Bureau, Decennial Census 2000 and 2010

Population growth rates of tribal areas in different regions also vary greatly (Table 2.4). In 2000, Arizona/New Mexico was the region with the largest AIAN population in tribal areas, but it experienced a slight loss in population over the decade. Over this same time period, Oklahoma areas saw an 18-percent AIAN growth, making Oklahoma the region with the largest AIAN population at the end of the decade. Tribal areas in the Northern Plains region, Alaska, and the Pacific Northwest experienced slow AIAN population growth, ranging from 3.2 to 6.7 percent, whereas the remaining four regions saw double-digit growth.

In addition to total AIAN population, looking at the proportion of the total population that is AIAN sheds light on racial diversity of the tribal areas (Figure 2.5). In Arizona/New Mexico, the home of Navajo, Hopi, and other large tribes, 84 percent of the population on tribal areas were AIAN alone. The Northern Plains region, at 55 percent, has the next highest rate. On the other hand, AIAN residents make up less than 13 percent in tribal areas in the Eastern, Oklahoma, and South Central study regions.



**Figure 2.5. Share of Tribal Population that is AIAN Alone by Study Region, 2010**

Source: US Census Bureau, Decennial Census 2010.

## The Multiracial AIAN Population

As noted above, starting in 2000, respondents have been able to identify themselves as belonging to more than one race in surveys conducted by the U.S. Census Bureau. In 2010, 2.3 million people selected AIAN in combination with one or more other races—a number equal to 77 percent of the AIAN alone population. And this group is growing very rapidly: from 2000 to 2010, it increased by 39 percent, more than twice the 18 percent growth rate for AIAN alone.

The residential patterns of the AIAN multiracial and AIAN alone populations differ markedly (Table 2.5). In 2010, only 8 percent of the multiracial group lived in tribal areas, compared with 33 percent for AIAN alone. About two-thirds of the AIAN multiracial population lived in non-AIAN counties, and most of that group lived in metropolitan areas. In contrast, only 41 percent of the AIAN alone population lived outside of AIAN counties.

**Table 2.5. Multiracial AIAN Population by Area Type, 2010**

	Population	Percent of Total		Percent Hispanic	
	Multiracial AIAN	Multiracial AIAN	AIAN Alone	Multiracial AIAN	AIAN Alone
Total	2,259,025	100.0	100.0	22.0	23.4
AIAN Counties	740,335	32.8	59.0	20.2	12.5
Tribal areas	180,417	8.0	33.0	8.0	3.4
Surrounding counties	559,918	24.8	26.0	24.1	24.1
Non-AIAN Counties	1,518,690	67.2	41.0	22.9	39.0
Other metropolitan	1,284,004	56.8	34.6	24.9	42.5
Nonmetropolitan	234,686	10.4	6.4	11.8	20.1

Source: U.S. Census Bureau, Decennial Census 2010

Parallel to the AIAN alone population, the share of the AIAN multiracial population that also identified as Hispanic rose from 16 percent in 2000 to 22 percent in 2010. The overall distribution of Hispanic AIAN individuals among the area types also looks very similar for both single-race and multiracial AIAN. However, the 20 percent Hispanic share for AIAN multiracial people was considerably higher in the AIAN counties than the 13 percent for the AIAN alone population. In contrast, the Hispanic share in non-AIAN counties for the AIAN multiracial population (23 percent) is much lower than the share of AIAN alone (39 percent).

Nationally, about 16 percent of AIAN residents on tribal areas are multiracial, but the prevalence of AIAN people identifying with multiple races varies across regions. At one extreme, almost one-third of AIAN tribal area residents in Oklahoma identify with more than one race. Among the other regions, the number of AIAN tribal area residents identifying as multiracial ranges from 2 percent in Arizona/New Mexico to 19 percent in South Central.

## Mobility

The sections above examine residence as of April 2010, but we know households move because of changes in family or financial status or to move closer to amenities or employment opportunities. About 81 percent of the AIAN population in the 2006–10 ACS reported that they lived in the same house they had 1 year before (a rate slightly less likely than for non-AIAN households). AIAN people living on tribal areas are less likely to move than AIAN people overall, 88 percent reporting that they lived in the same house as a year before.

Although we cannot differentiate move-in dates by race, a greater share overall of homeowners on tribal lands (58 percent) moved into their homes before 2000 than did overall (55 percent). For renters, the difference is negligible—15.1 percent of renter households moved into tribal areas before 2000, less than one-half of one percentage point different than the rate for all households. The limited ACS tables do not answer the more important questions about where and why AIAN households move. The

AIAN household survey for tribal lands will have richer information that will allow us to explore those questions.

## **Implications**

The American Indian population in the United States continues its pace of high growth but not at the same rate in all areas of the country. On tribal lands in particular, the wide variation in population trends by region demonstrates the need to understand local housing markets and strengthens the argument for policies tailored to different levels of housing demand.

Consistent with the findings of the 1996 report, it is clear that ties to AIAN counties—land just outside of tribal areas—remain strong. However, an examination of AIAN housing needs should also consider how the challenges may differ for those living outside of AIAN counties, an increasing share of which will be Hispanic. In both cases, the housing needs of the AIAN population will be influenced by an intersection of both location and cultural factors. The following section begins to explore these issues by examining some social and economic similarities and differences among our area types and between the Hispanic and non-Hispanic AIAN population.

## 3. Social and Economic Conditions

### Introduction

Population growth is an important driver of change in housing needs, and the last section has shown that there is considerable diversity in growth rates in Indian Country. However, growth tells only a part of the story. The nature of the housing needs in two places with similar growth trajectories would differ substantially if one has a much higher unemployment rate, share of young children, or marriage rate than the other, as we will explain in more detail throughout this section.

In the first part of this section, we explore variations in a number of socioeconomic characteristics like these that help shape an area's housing need. As noted in Section 1, the main topics include age structure, household size and type, educational attainment, employment levels, and income and poverty. Throughout, we compare conditions and trends for the AIAN alone population against those for non-Indians. We also look at variations across area types and study regions as in the preceding section. Consistent with the previous chapter, we exclude Hawaii from our analysis in this

chapter, so all estimates for the Nation exclude Hawaii unless otherwise noted.

For some variables, we can compare changes over the 2000 to 2010 period because decennial census data for both years are available (age structure, household size and type). For the others (educational attainment, employment levels, and income and poverty), we are limited to comparing 2000 decennial census long-form values to the 5-year averages in the 2006–10 American Community Survey (ACS). The ACS has a smaller sample size than the 2000 long-form, and thus wider confidence intervals, particularly for smaller or more rural geographies like many tribal areas.<sup>15</sup> Our methodology of summing the tribal areas together should minimize the error involved, but any small changes in indicators should be viewed with caution.<sup>16</sup>

For most of this section, using the decennial census long-form and the ACS limits our detailed geographic analysis to the entire AIAN alone population, which includes both Hispanic and non-Hispanic Native Americans.<sup>17</sup> The implications of including both Hispanics and non-Hispanics will vary for the different geographic areas. As discussed in Section 2, Hispanics account for a small share of the AIAN alone population in tribal areas, so the statistics presented for tribal areas largely reflect conditions for the non-Hispanic AIAN

<sup>15</sup> See DeWeaver (2010) for more information on the limitations of the ACS in providing complete, timely, and reliable data for Indian Country.

<sup>16</sup> We are not able to accurately calculate the margin of error (MOE) by geographic area types because the Census Bureau advises that the approximation formula provided to calculate MOEs for calculated indicators seriously breaks down when aggregating more than four estimates (Alexander 2011).

<sup>17</sup> We do not distinguish between the Hispanic and Non-Hispanic AIAN alone populations in the majority of the analysis in this section because the Census Bureau only publishes summary tables for the standard 2006–10 ACS for the total AIAN alone population.

alone population. In contrast, the growth of the Hispanic AIAN population could have more influence on the changes in the AIAN social and economic characteristics in non-AIAN counties. To help interpret the patterns and trends by geographic area, we note differences between Hispanic and non-Hispanic AIAN alone populations nationally for selected indicators.

An important question not answered by the analysis that uses 2000 as the benchmark is how the AIAN population fared before and after the onset of the Great Recession. The 5-year ACS data cannot be used to answer this question because they represent surveys collected monthly from 2006 to 2010, which spans both the period of economic expansion and the recent recession. More recent data are available from the 1-year ACS, although data from that source cannot be presented in much detail geographically. We examine the

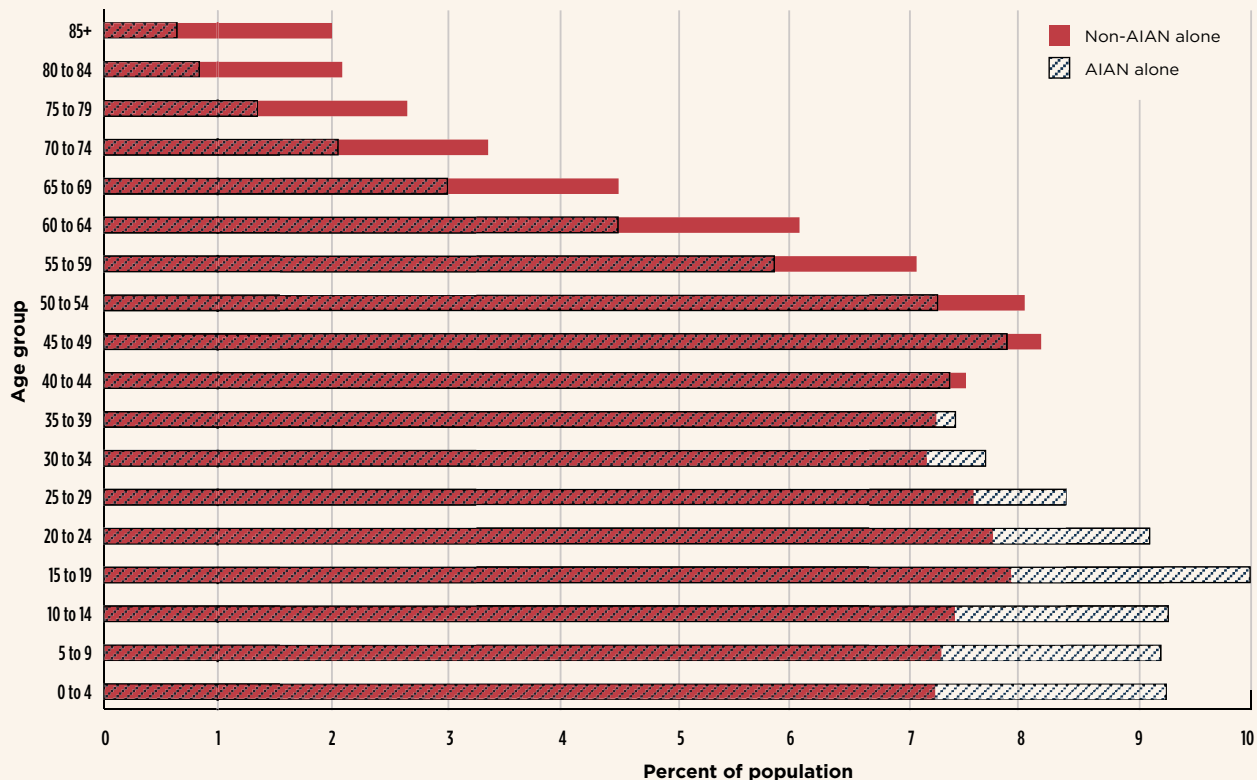
time period from 2008 to 2010 to look at the impact of the Great Recession on the AIAN alone population, compared to non-Indians for the Nation as a whole and the four main census regions. This analysis includes Hawaii due to the aforementioned data limitations.

### Age Structure

The age structure of a population, along with different household type patterns, which we discuss later, affects household formation and housing need because it is tied to major life-cycle events (for example, moving out on one's own, getting married, having children) (Pendall et al. 2012). The 1996 report noted that American Indians and Alaska Natives were younger, on average, than the non-AIAN population. The most recent decennial census confirms that this is still the case.

As shown in Figure 3.1, the AIAN alone population is more heavily concentrated in

**Figure 3.1. Share of Population by Age Group and Race, 2010**



Source: U.S. Census Bureau, Decennial Census 2010.

younger age groups as compared with the non-AIAN population. Up to age 40, the AIAN population share for each age group exceeds that of the non-AIAN population, but after age 40, the non-AIAN population shares surpass the AIAN population shares.

Overall, 30 percent of the AIAN population in 2010 was younger than 18 as compared with 24 percent of the non-AIAN population. Having a higher share of children has important implications for AIAN housing needs. For example, households with children will require a larger house or apartment and also be concerned with access to quality schools and parks (McAuley and Nutty 1982).

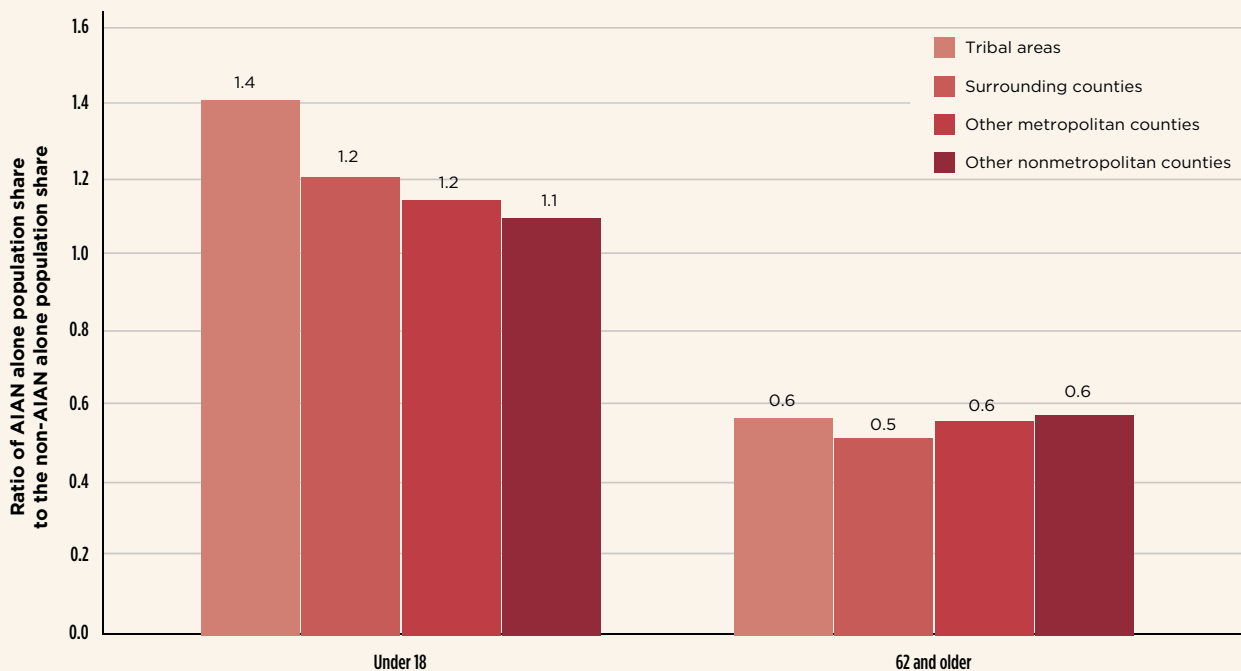
Although still higher than the non-AIAN share, the percentage of the AIAN population younger than 18 fell 4 percentage points from 2000 to 2010. This reflects the overall aging of the population; the under-18 shares dropped for both the AIAN and non-AIAN populations in the 2000s across all area types. The AIAN

decrease was larger than for the non-AIAN population, and as a result the gap narrowed. The percentage of the AIAN population younger than 18 fell from 1.33 times the non-AIAN level in 2000, to 1.26 times in 2010. The highest share of children is found in tribal areas (34 percent), but they also experienced the greatest shift in age distribution—a drop of 4.8 percentage points since 2000 (Figure 3.2).

When we look at the age differences by Hispanic origin, we find that the Hispanic AIAN population more closely mirrors the Hispanic non-AIAN population than non-Hispanic Native Americans. For example, about 10 percent of the Hispanic non-AIAN population is younger than 5, compared with 9.3 percent of Hispanic Native Americans and only 7.5 percent of non-Hispanic Native Americans.

Understanding the trends in the elderly is also important for assessing housing needs. The AIAN alone elderly population has high disability rates, increasing the importance

**Figure 3.2. Gap Between AIAN and Non-AIAN Population Under 18 and 62 and Older by Area Type, 2010**



Source: US Census Bureau, Decennial Census 2010.

of the accessibility of housing. In 2011, more than half (51 percent) of the AIAN alone population age 65 and older was disabled as compared with 47 percent for the Nation as a whole.<sup>18</sup> Frail or disabled elderly households may require adapted features (for example, safety features like grab bars in bathrooms). They also often live on fixed incomes, making the continued affordability of their housing an important factor (Spillman, Biess, and MacDonald 2012).

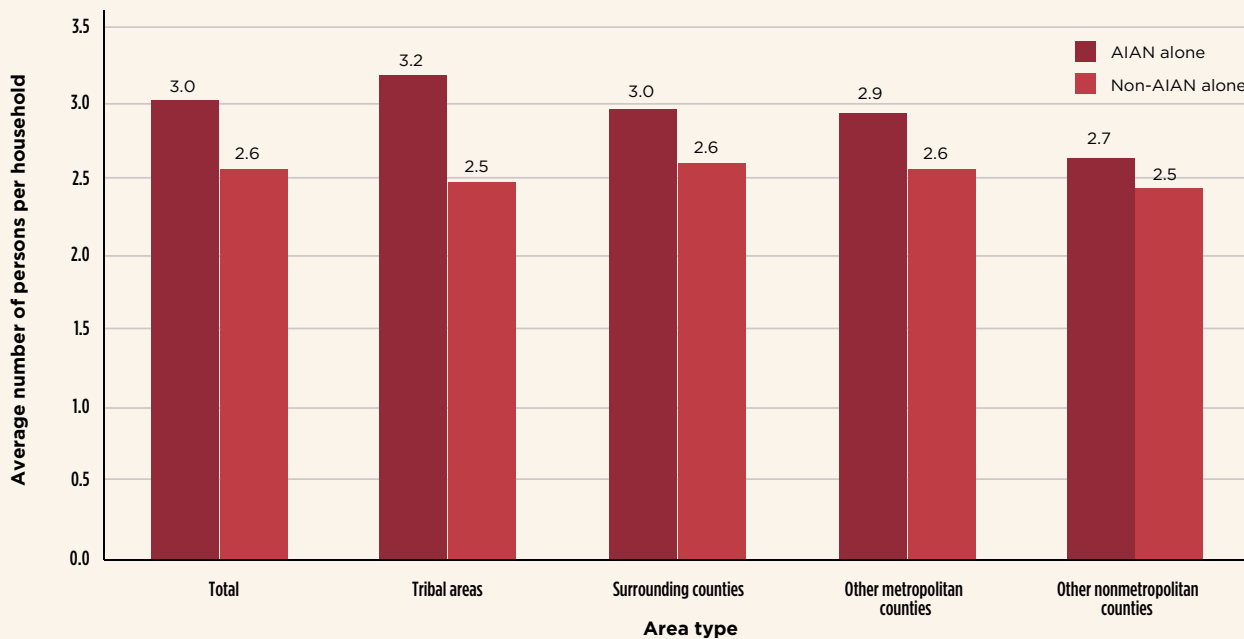
American Indians and Alaska Natives still had a considerably smaller share of their population age 62 and older than the non-Indian population. In 2010, 9.3 percent of the AIAN population was age 62 and older, compared with 16 percent for the non-AIAN population. Tribal areas and other nonmetropolitan counties had larger shares of both their AIAN and non-AIAN populations in this age group as compared with surrounding counties and other metropolitan counties.

The percentage of the population in the age 62 and older category increased over the past two decades across all area types for both the AIAN and non-AIAN population. The increase from 2000 to 2010 in elderly share for AIANs exceeded the growth in the non-AIAN share, so again the gap between the AIAN and non-AIAN populations narrowed. Overall, the ratio of AIAN to non-AIAN shares of people age 62 and older rose from 0.48 in 2000, to 0.57 in 2010. This pattern held across all area types.

### Household Sizes and Types

Household size has a direct link to what size housing units are in demand in a given area, and AIAN alone households tend to be larger than non-AIAN households.<sup>19</sup> In 2010, the average AIAN household size was 3 persons, while the average non-AIAN household size was 2.6 persons. This pattern persisted across all area types (Figure 3.3). From 2000

**Figure 3.3. Average Household Size by Race and Area Type, 2010**



Source: U.S. Census Bureau, Decennial Censuses 2010

<sup>18</sup> Disability statistics are from the 2011 ACS 1-year estimates.

<sup>19</sup> The indicators presented for household size and type define AIAN alone households as those with an AIAN alone householder.

to 2010, there was little change in the average household size of either AIAN or non-AIAN households in any of the area types.

The 1996 report found that large households (those with five or more people) made up a larger share of all AIAN households than in non-AIAN households. Consistent with higher average household sizes, the percentage of AIAN households with five or more people in 2010 (19 percent) was much higher than the comparable figure for non-AIAN households (11 percent).<sup>20</sup> The AIAN large-household share dropped 0.8 points from 2000 to 2010, while the non-AIAN share stayed about the same.

Although the patterns of household size changed little since the 1996 report, the mix of AIAN types of households has changed in absolute terms and in relation to non-AIAN households. As mentioned in the discussion of age structure above, household type has important implications for housing need, with housing demand and preferences varying by household type, particularly with the presence of children. Further, housing instability is particularly prevalent among low-income families with children (Phinney et al. 2007). In 2010, 70 percent of AIAN households were family households, in contrast to only 66 percent of non-AIAN households. The share of non-AIAN households in families varied little across area type—from 66 to 68 percent. In contrast, the family share of AIAN households ranged widely from 66 percent in other nonmetropolitan counties up to 75 percent in tribal areas. The family share of both AIAN and non-AIAN households decreased across all area types from 2000 to 2010, but the variation across area types was similar in both years. Correspondingly, AIAN households had lower shares in

nonfamily household arrangements (30 percent) than non-AIAN households (34 percent) in 2010. This varied by geography: AIAN households in tribal areas had the lowest share of nonfamily households (25 percent), and AIAN households in other nonmetropolitan counties had the highest share (34 percent). AIAN households are also less likely to live in single-person households than the non-AIAN population. Nationally, 23 percent of AIAN alone households consisted of a single person as compared with 27 percent of non-AIAN households in 2010.

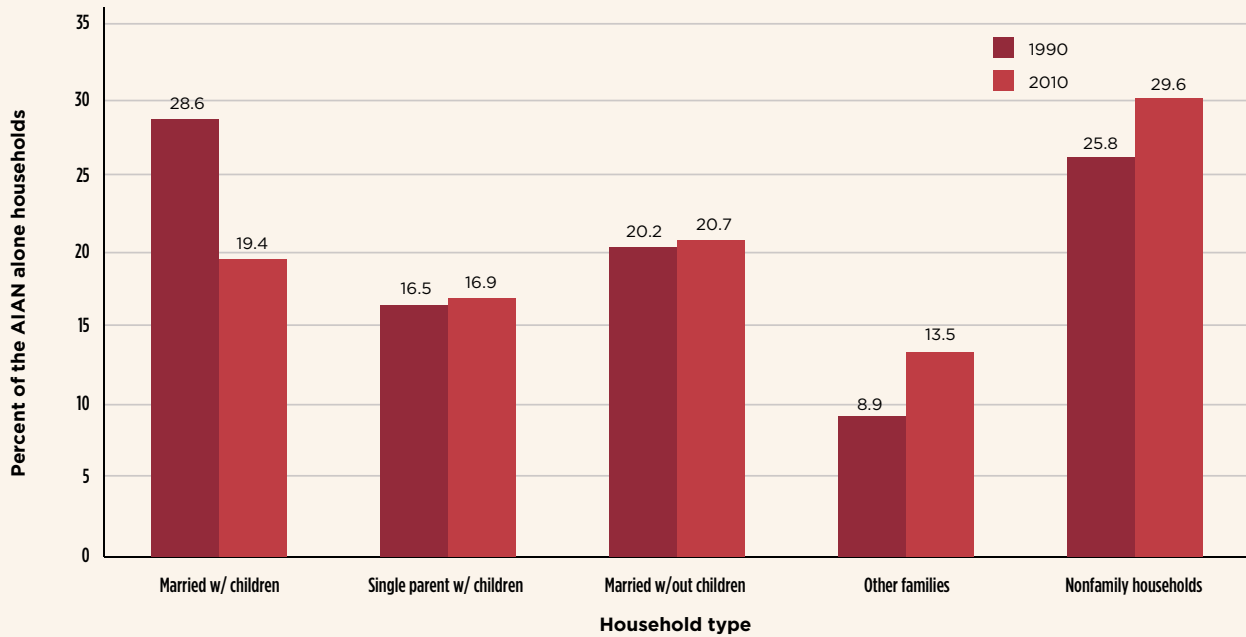
The most dramatic change among household types from 1990 to 2010 was the precipitous drop in the share of AIAN households that were married couples with children (Figure 3.4). In 1990, 29 percent of AIAN households consisted of married couples with children; this figure dropped to 19 percent by 2010. Although the comparable share for non-AIAN households also declined (from 26 percent in 1990, to 20 percent in 2010), the drop was not as large. By 2010, AIAN households were just about as likely to consist of married couples with children as non-AIAN households (Figure 3.5).

In 2010, the percentage of AIAN households that consisted of single-parent families (17 percent) was much higher than that of non-AIAN households (9.5 percent). This relationship held for both female-headed households and male-headed households. Overall, 12 percent of AIAN households consisted of female-headed families with children as compared to 7.1 percent of non-AIAN households, and 4.6 percent of AIAN households consisted of male-headed families with children as compared to 2.4 percent of non-AIAN households.

<sup>20</sup> The analysis of household type conducted for the 1996 report is not directly comparable to the analyses presented here, but the overall pattern holds. The previous analysis used a data source that defined AIAN households as households with an AIAN alone householder or AIAN spouse, whereas the data used in these analyses define AIAN alone households as those with an AIAN alone householder.

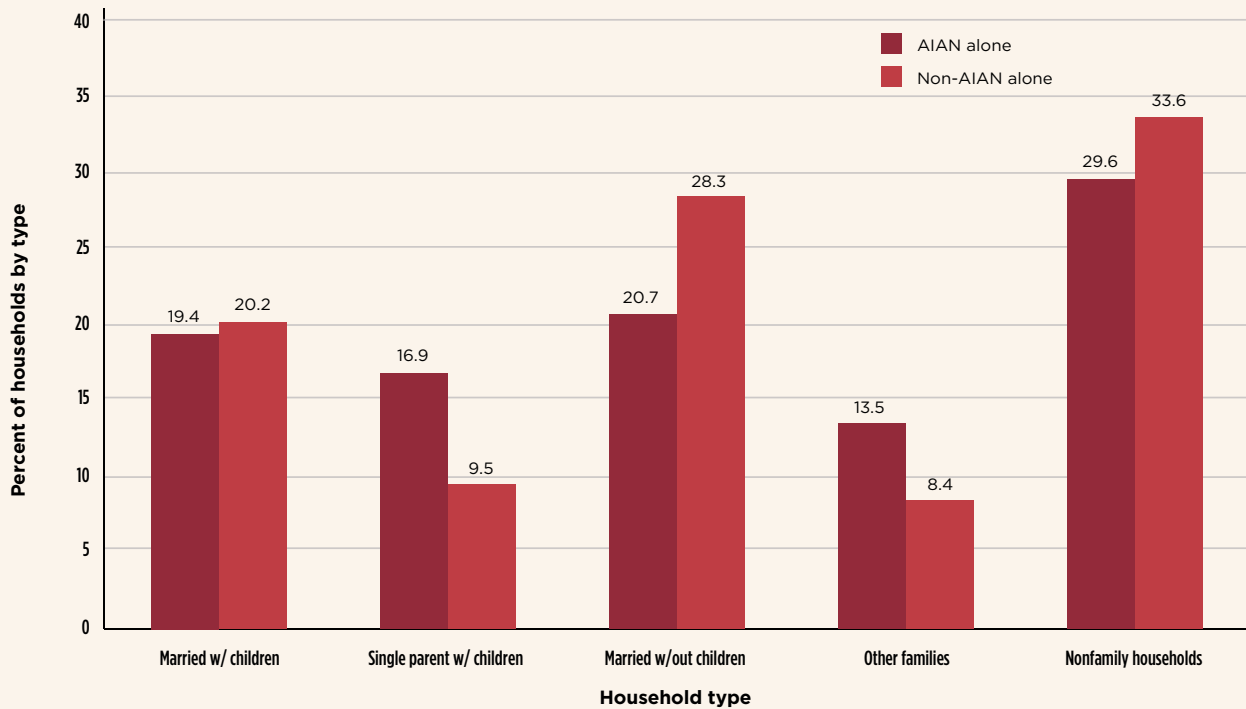


Figure 3.4. AIAN Households by Household Type, 1990 and 2010



Source: U.S. Census Bureau, Decennial Censuses 1990 and 2010

Figure 3.5. AIAN and Non-AIAN Households by Household Type, 2010



Source: U.S. Census Bureau, Decennial Censuses 2010

The relatively high share of AIAN female-headed households is of particular concern since they are more likely to experience housing hardship and instability than married parents (Manning and Brown 2006; Nelson 2004).

In 2010, the prevalence of single-parent families was higher in tribal areas and their surrounding counties than in non-AIAN counties. Single-parent families with children made up 18 to 19 percent of AIAN households on tribal areas and in surrounding counties, while they only accounted for 15 percent in other metropolitan counties and 13 percent in other nonmetropolitan counties. In contrast, the single-parent family share varied little by area type for non-AIAN households (ranging from 8.9 to 9.9 percent).

Since 2000, the percentages of AIAN single-parent family households decreased slightly, both overall and across all area types, while the percentages of non-AIAN households consisting of single-parent families increased slightly both overall (0.32 percent increase) and across all area types. Thus, the gap in single-parent family shares between AIAN and non-AIAN households narrowed over the 2000s. The AIAN single-parent share was 1.8 times the non-AIAN share in 2010, down slightly from 1.9 in 2000.

The “other family” category is defined as male- or female-headed family households without children under the age of 18. In 2010, these other families accounted for 14 percent of all AIAN households, much above the 8.4 percent rate for non-AIAN households. The share of households in this family arrangement increased from 1990 for all groups, but at a much faster

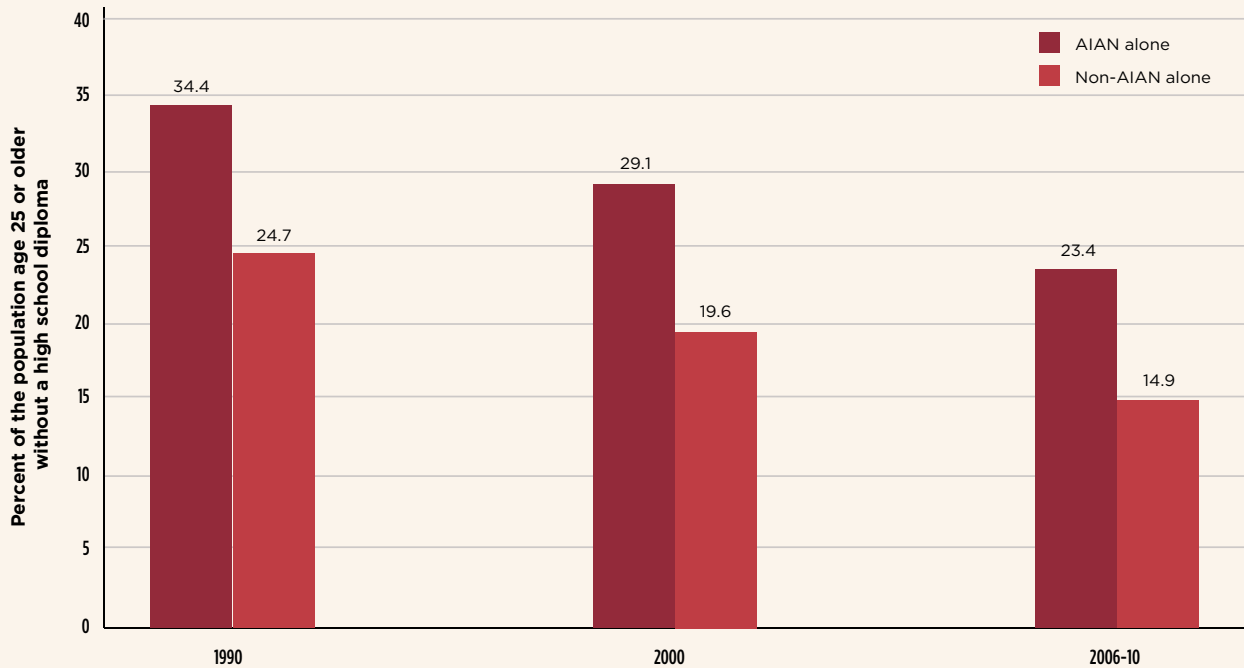
pace for AIAN households than non-AIAN households. As a result, the AIAN share in this category jumped from 1.3 times the non-AIAN share in 1990, to 1.6 times in 2010.

The increase in the share of other family households could be due to more intergenerational households—either with elderly family members moving into the household or children over the age of 18 continuing to live in the household or returning to the household. Other research has documented that AIAN households are more likely than the population in general to live in multigenerational arrangements. Using ACS 2009–11 three-year estimates, the U.S. Census Bureau finds that AIAN households have a larger share of families living in multigenerational households (about 11 percent) than the total population (5.6 percent) (Lofquist 2012).<sup>21</sup> Shares of AIAN families in multigenerational households are larger in States with large AIAN populations.

## Educational Attainment

Educational attainment impacts an individual’s ability to find and retain employment. Those with lower education levels are more likely to experience difficulties in these areas, which can lead to housing instability (Phinney et al. 2007). In general, the AIAN population has lower levels of educational attainment than the non-AIAN population. However, the proportion of AIAN adults (age 25 and over) without a high school degree has fallen significantly over the last decade. In 2006–10, this share was 23 percent, down 6 percentage points from the 2000 share (29 percent) (Figure 3.6).

<sup>21</sup> The U.S. Census Bureau defines multigenerational households in three ways: (1) a householder, child of householder, and grandchild of householder; (2) a householder, parent or parent-in-law of householder, and child of householder; and (3) a householder, parent or parent-in-law of householder, child of householder, and grandchild of householder. None of these definitions takes into account the age of the children in the household, so the report’s findings are not comparable to our findings with regard to “other families,” which do not include households with children under the age of 18. However, the general trend supports our hypothesis that multigenerational living arrangements account in part for the increase in “other families.”

**Figure 3.6. Share Adults Without a High School Diploma by Race, 1990 to 2006–10**

Sources: Kingsley et al. 1996; U.S. Census Bureau, Decennial Census 2010, and American Community Survey 5-Year Estimates, 2006–10

Despite these gains, the 2006–10 rate was still much higher than the 15 percent for non-AIAN adults, and the gap is widening. In 1990, the share of the AIAN population without a high school diploma was 1.4 times the non-AIAN share. This figure increased to 1.5 times in 2000, and again to 1.6 times in 2006–10. The share of adults without a high school diploma was slightly higher in tribal areas and other nonmetropolitan areas, but the gap with non-AIAN rates persisted across all area types.

The growth of Hispanic AIAN population contributed to the growing gap in education. About 19 percent of AIAN non-Hispanics older than 25 in 2006–10 did not have a high school degree. The share for Hispanic AIAN adults is almost twice as high at 37 percent, close to the 36 percent rate for non-AIAN Hispanics.

Similarly, English proficiency provides another contrast among AIAN Hispanics

and non-Hispanics. About 30 percent of AIAN Hispanics do not speak English very well. This is lower than the 37 percent for non-AIAN Hispanics, which makes sense given the smaller share of AIAN Hispanics being new immigrants as mentioned in the first section. Comparatively, the share of AIAN non-Hispanics not speaking English very well is very small—about 4 percent.

There were noteworthy variations in educational attainment across regions. Overall, the shares without a high school diploma were highest in Arizona/New Mexico (27 percent) and the Eastern and California/Nevada regions (25 percent) and lowest in the Oklahoma and North Central regions (17 and 18 percent, respectively). The regional distributions of this measure were similar for AIAN and non-AIAN counties.

In 2006–10, the share of the AIAN adult population with a bachelor’s degree or higher was 13 percent overall, but this indicator varied considerably by area type. AIAN adults in tribal areas were least likely to have completed a college education (only 9.2 percent), while the percentage for AIAN population living in other metropolitan counties was much higher, at almost 17 percent. The 2006–10 share of AIAN adults with a bachelor’s degree was only slightly higher than the 2000 level—an increase of only 1.5 percentage points.

Even with these gains, the share of AIAN adults who had completed college is still far lower than the 28 percent for non-AIAN adults. Overall, the gap between the AIAN and non-AIAN population on this measure has shown little change since 1990. The 2000 and 2006–10 percentage of the AIAN population obtaining a bachelor’s or graduate degree was only 47 and 46 percent of the non-AIAN share, respectively, about the same as the 1990 comparison.

However, the gap between the AIAN and non-AIAN populations widened in some area types and narrowed in others from 2000 to 2006–10. In tribal areas the gap is widest, but it has improved the most: the percentage of the AIAN population with a bachelor’s or higher degree was 44 percent of the non-AIAN percentage in 2000, and 46 percent in 2006–10. In other nonmetropolitan areas, the gap is much smaller, but increased over that period. In 2000, the share of the AIAN population with at least a bachelor’s degree was 71 percent of the non-AIAN share and decreased to 68 percent of the non-AIAN share in 2006–10.

## Employment

Labor force participation and employment have clear effects on housing needs, including the obvious measure of earned income. Another example, the formation of

new households (for example, young adults moving out of their parents’ homes and starting their own households) is suppressed when unemployment is higher, which lessens housing demand (Masnick, McCue, and Belsky 2010). The employment situation of the AIAN population generally worsened over the 2000s. We examined three indicators related to employment in this section: the share of AIAN population older than 16 in the labor force—either working or looking for work (labor force participation rate), the percentage of population older than 16 that was employed (employment rate), and the share of the labor force that was unemployed (unemployment rate).

The labor force participation rate fell slightly from 61 percent in 2000, to 60 percent in 2006–10. The non-AIAN participation rate increased slightly over the same time period, from 63 percent to 65 percent. As a result, the gap widened, with the AIAN rate moving from 3 percentage points below the non-AIAN rate to 5 percentage points lower over this period. The AIAN labor force participation rates are considerably higher in other metropolitan counties (64 percent) and lower in tribal areas (55 percent) and other nonmetropolitan counties (54 percent).

By region, the AIAN labor force shares (across all area types) varied from a low of 54 percent (Arizona/New Mexico) to high in the 62–63 percent range in four regions (North Central, Oklahoma, South Central, and Pacific Northwest) (Table 3.1). Disparities with non-Indians also varied by region. Overall labor force participation was the same or almost the same for AIAN and non-AIAN populations in the Oklahoma and South Central regions, but the AIAN rate was 8 to 11 percentage points lower than the non-Indian rate in the Northern Plains, Arizona/New Mexico, and Alaska regions.

**Table 3.1. AIAN Employment Indicators by Study Region and Area Type, 2006–10**

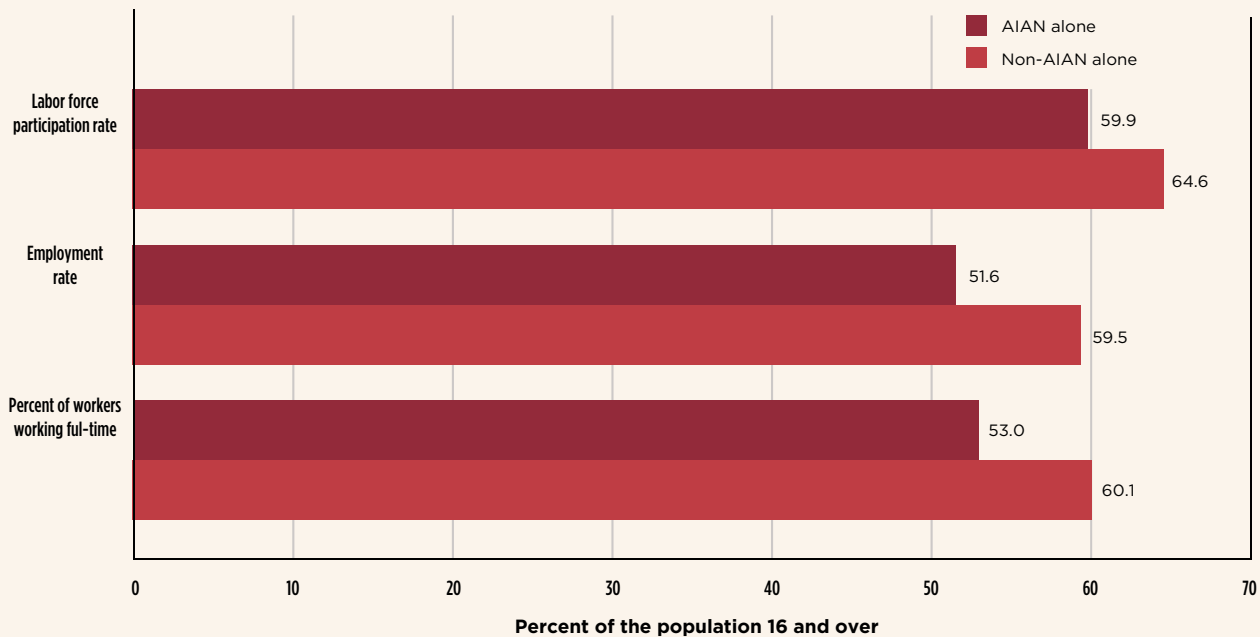
	Study Region									
	Total	N. Central	Eastern	Oklahoma	S. Central	N. Plains	AZ/NM	CA/NV	Pacific NW	Alaska
<b>AIAN Alone Labor Force Participation Rate (population 16 and older)</b>										
Total	59.9	62.1	60.4	62.1	62.9	60.5	54.0	61.1	62.3	59.3
Tribal areas	55.3	62.1	56.1	61.3	58.0	57.5	47.4	49.3	56.5	59.4
Surrounding counties	62.0	63.0	61.2	67.7	57.0	63.5	63.2	59.3	62.7	59.3
Other metropolitan counties	64.4	63.4	63.5	NA	65.3	65.5	59.0	64.5	69.1	58.1
Nonmetropolitan areas	53.7	53.2	51.4	58.7	56.7	54.3	48.3	55.7	58.3	NA
<b>AIAN Alone Employment Rate (population 16 and older)</b>										
Total	51.6	51.5	52.8	56.1	56.9	49.7	46.1	52.4	52.9	46.4
Tribal areas	46.5	48.8	49.3	55.5	53.4	44.7	39.1	40.1	45.8	45.1
Surrounding counties	53.6	53.2	53.4	60.3	53.2	54.1	55.6	50.5	53.5	49.4
Other metropolitan counties	56.2	52.8	55.7	NA	59.1	54.5	47.0	55.8	60.3	46.8
Nonmetropolitan areas	47.1	46.2	44.0	53.0	50.3	49.2	44.0	52.0	49.9	NA
<b>AIAN Alone Unemployment Rate (civilian labor force age 16 and older)</b>										
Total	13.9	17.0	12.5	9.7	9.6	17.9	14.7	14.3	15.1	21.7
Tribal areas	15.9	21.3	12.2	9.5	7.9	22.2	17.6	18.7	18.8	24.0
Surrounding counties	13.6	15.5	12.9	11.0	6.7	14.7	12.0	14.9	14.7	16.7
Other metropolitan counties	12.7	16.7	12.2	NA	9.4	16.8	20.4	13.4	12.7	19.3
Nonmetropolitan areas	12.3	13.1	14.3	9.7	11.3	9.4	9.0	6.7	14.4	NA

NA: Not applicable.

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2006–10

Looking at the second employment-related indicator, a little over half of the AIAN population 16 and older was employed, according to the 2006–10 data, compared with almost 60 percent for non-AIAN (Figure 3.7). This pattern of lower employment rates for AIAN compared with non-AIAN holds true in all of our geographic areas. AIAN employment rates

are lowest in the tribal areas and other nonmetropolitan counties (47 percent). Tribal areas also had the largest gap with the non-AIAN rate (about 10 percentage points). The employment rate in other metropolitan counties was 61 percent for non-Indians compared to 56 percent for AIAN alone in those counties.

**Figure 3.7. Employment Indicators by Race for Population 16 and Over, 2006–10**

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2006–10

AIAN workers are also less likely than non-AIAN workers to work full-time. Only 53 percent of AIAN workers reported full-time employment in 2006–10, compared with 60 percent of non-AIAN workers. These rates were similar across geographic areas.

Unemployment rate is the final indicator used to understand AIAN employment patterns. About 14 percent of the AIAN labor force was unemployed in 2006–10. The AIAN unemployment rate was highest in tribal areas (16 percent) in contrast to the 12 to 14 percent unemployment rates for AIAN people in other areas.

As with the other indicators, unemployment rates are worse for AIAN than non-AIAN people: the AIAN rate was about 6 points higher than the non-AIAN rate in 2006–10. However, the gap overall has been declining over the past two decades. In 1990, the

AIAN unemployment rate was 2.3 times of the non-AIAN rate. The ratio fell to 2.2 in 2000, and then again to 1.8 in 2006–10. The decline is mostly due to the increase in the non-AIAN unemployment rate (up 1.7 points over the 20 years) than the improvement in the AIAN rate (which fell only 0.29 points).

Additionally, these employment conditions together result in the AIAN alone population having higher rates of having no health insurance than the non-AIAN population. The share of the AIAN alone population that lacked health insurance was 28 percent, which is 13 percentage points higher than the non-AIAN share for the Nation as a whole in 2011.<sup>22</sup> This means that the AIAN alone population faces added healthcare costs on top of already lower income levels, as we will discuss in the next section, which leads to greater challenges in affording housing.

<sup>22</sup> Lack of health insurance estimates are from the 2011 ACS 1-year estimates.

## Income and Poverty

Household income determines both housing preferences and needs. For example, higher income households are more likely to prefer owning a single-family home and are more able to achieve that, while lower income households are more likely to rent (Katz and Turner 2007; Skaburskis 1999). Lower income households are also more likely to experience housing hardship (Nelson 2004). The average AIAN household income in 2006–10 was \$49,000, which was about \$22,000 less than the non-AIAN average. Although average income varied by geography for both groups, the average AIAN household income was below that of non-AIAN households across all geography types. The surrounding counties and other metropolitan counties exhibited the highest average income for both AIAN and non-AIAN households but also exhibited the largest disparity between the groups at \$20,000. Conversely, tribal areas and other nonmetropolitan counties had lower average income levels—\$42,000 and \$38,000, respectively—but they had the smallest gap between AIAN and non-AIAN households of about \$14,000.

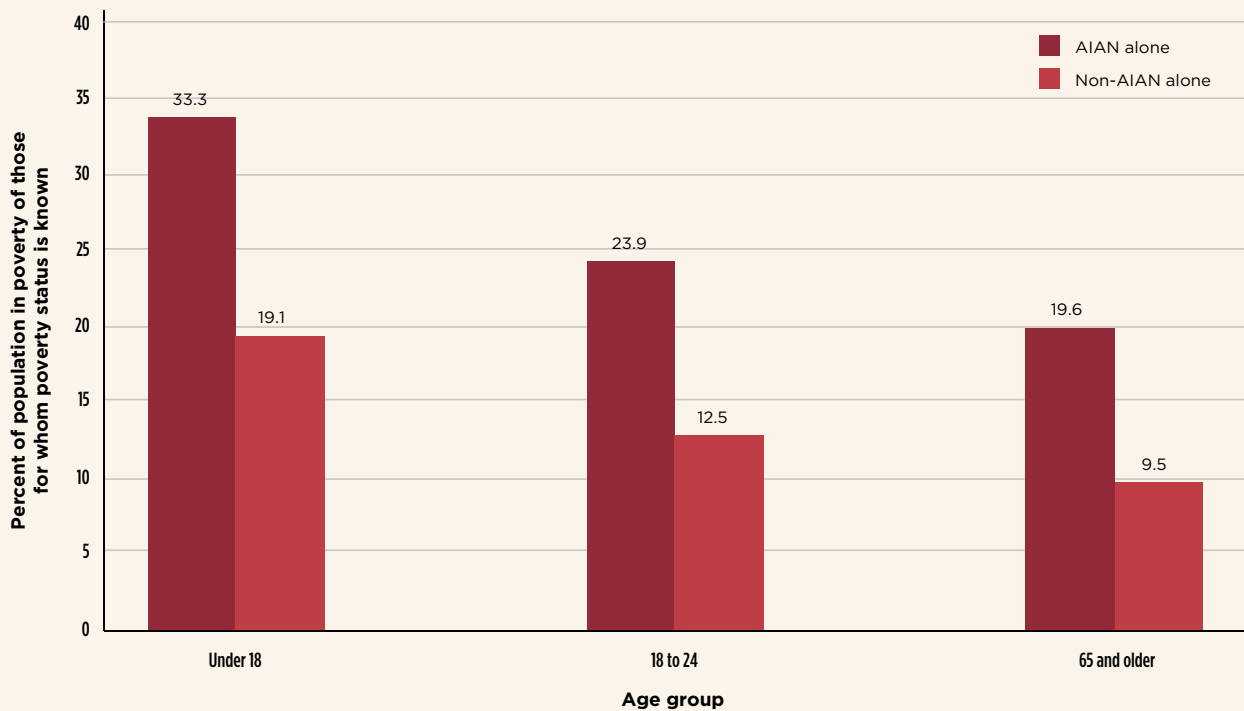
Average household income decreased since 2000 for both AIAN and non-AIAN households overall—by \$3,500 for AIAN households and \$3,300 for non-AIAN households, after accounting for inflation. The average household income also fell in each geography type; however, the size of the decrease varied. For AIAN households, average household income fell by the largest amount in other nonmetropolitan counties (\$9,500). In other metropolitan counties, average household income dropped by about \$6,000, and in surrounding counties

it fell by about \$2,900. Interestingly, in tribal areas the average household income fell by a much smaller amount—only by about \$130. For non-AIAN households, the average household income dropped by the smallest amount in tribal areas as well (about \$870), while the decrease in the other geography types ranged from \$2,700 in the surrounding counties to \$3,800 in other metropolitan counties.

The ratio of AIAN income to non-AIAN income fell slightly over the decade from 0.71 to 0.69 overall. AIAN households lost the most ground as compared with non-AIAN households in non-AIAN counties. In other metropolitan counties, the ratio fell from 0.78 to 0.74, and in other nonmetropolitan counties the ratio fell by an even larger margin—from 0.84 to 0.71.<sup>23</sup>

Among all gaps between Native American and non-Indian well-being, that in the poverty rate may be the most troubling. More than one-quarter (26 percent) of the AIAN population lived below the poverty line in 2000 and 2006–10, almost twice the rate for non-AIAN individuals in both periods. In 2006–10 the poverty rate for the AIAN alone population in tribal areas was 32 percent, substantially above the 14 percent national rate for non-Indians. The AIAN alone rate was 25 percent in surrounding counties and 22 percent in other metropolitan counties, compared to 14 and 13 percent for non-Indians in those areas, respectively. The poverty rate is even higher for AIAN children. One in three AIAN children was poor in 2006–10, compared to one in five non-AIAN children (Figure 3.8). Among geographic areas, AIAN children in tribal areas were most likely to be poor (39 percent).

<sup>23</sup> In contrast to education and language, economic indicators reveal similarities among the groups. AIAN households have similar income levels whether Hispanic or non-Hispanic (\$49,000 to \$50,000).

**Figure 3.8. Poverty Rates by Age and Race, 2006–10**

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2006–10

Poverty rates for AIAN working-age adults and elderly in 2006–10 were lower than for children (24 and 20 percent, respectively), but the difference in rates for AIAN and non-AIAN people in these groups are wider than the differential in child poverty rates. For example, the AIAN elderly poverty rate was more than twice (2.1 times) the non-AIAN rate overall and almost 2.5 times the non-AIAN rate in tribal areas.

Regional differences in AIAN poverty were substantial. Across all area types, the 2006–10 rates ranged from the 20 to 22 percent range at the low end (South Central, California/Nevada, and Alaska), to 36 percent (Northern Plains), and 33 percent (Arizona/New Mexico) at the upper end. In tribal areas, the rates varied from 23 percent (Oklahoma and Alaska), to 41 percent (Northern Plains), and 37 percent (Arizona/New Mexico).

There were also notable regional differences in the poverty gaps between the AIAN and non-AIAN populations. The AIAN poverty rate was 3.1 times the non-AIAN rate in the Northern Plains region and 2.9 times the non-AIAN rate in Alaska. At the other extreme, the AIAN rate was only 1.3 times the non-AIAN rates in the South Central region.

### How the AIAN Population Fared in the Great Recession

The earlier parts of this section have reported on socioeconomic conditions and trends for American Indians and Alaska Natives by comparing 2000 decennial census data to those from the 5-year 2006–10 ACS. This is an important base for understanding, but it does not answer the question of how America's AIAN population weathered the Great Recession of the last decade.



To respond to that question, we rely on the 1-year ACS estimates for 2008 and 2010 (the latest data available at the time of analysis). We summarize the main trends by looking at three indicators: labor force participation rates, unemployment rates, and poverty rates.

*The National Story.* The earlier parts of this section showed that trends for the AIAN alone population from 2000 to 2006–10 by these economic indicators were mixed. The period saw almost no change in the AIAN labor force participation rate, and the ratio of the AIAN rate to the non-AIAN rate had dropped slightly. However, modest improvements occurred in the AIAN unemployment rate and poverty rate and, in both cases, gaps between AIAN and non-AIAN levels narrowed significantly over the decade.

The Native American population was more economically vulnerable in 2008 at the start of the Great Recession than the non-AIAN population, putting them in a worse position in the face of the rising unemployment and falling earnings brought on by the economic downturn. However, the pace of the economic deterioration was not much worse than it was for the non-AIAN population, and over the decade as a whole, gaps between the AIAN and non-AIAN performance had been reduced on some measures.

- The AIAN labor force participation rate (as a percentage of the population older than 16) dropped slightly from 61 percent in 2008 to 59 percent in 2010. This represented 0.93 of the non-AIAN rate in both years, down modestly from the 0.95 ratio achieved in 2000.
- The AIAN unemployment rate went up sharply from 11 percent in 2008 to 18 percent in 2010, yet this measure for the non-AIAN population increased from 6.3 percent to 11 percent. Although the gap

between the two groups narrowed with the AIAN unemployment rate falling from 1.8 times the non-AIAN rate in 2008 to 1.7 times the non-AIAN rate in 2010 (a sizable improvement over the 2.2 ratio in 2000), the AIAN unemployment rate was still 7 percentage points higher than that of the non-AIAN population.

- The AIAN poverty rate also saw considerable deterioration, rising from 24 percent in 2008 to 28 percent in 2010, as compared with an increase from 13 percent in 2008 to 15 percent in 2010 for the non-Indian population. In this case the AIAN/non-AIAN gap increased slightly. The AIAN poverty rate went up from 1.85 times the non-AIAN rate in 2008 to 1.87 times the non-AIAN rate in 2010. Although this represented a substantial improvement in relation to the 2.1 ratio of 2000, disparities between the two groups persist.

*Regional Variations.* Because of sample-size limitations, reliable data are not available for the detailed geographies we examined earlier in this section. Accordingly, we review data only for the United States as a whole as well as for the four major census regions: Northeast, Midwest, South, and West. The pattern of 2008 to 2010 change for the four major U.S. regions seems consistent with what we might expect given discussion of the variations in AIAN conditions between regions earlier in this section. Most disturbingly, Native Americans in the West region (which contains the two most distressed study regions, Northern Plains and Arizona/New Mexico and 46 percent of the total AIAN population) were hit hardest by the Great Recession (Table 3.2). Though not directly comparable, Austin's (2009) analysis of the effects of the Great Recession on the AIAN population finds a similar pattern: The West experienced the largest increase in the employment rate disparity between the AIAN and white populations

between 2007 and 2009.<sup>24</sup> Alternatively, recession effects appear mildest in the South (which contains the Oklahoma and South Central study regions as well as the southern half of Eastern Woodlands).

**Table 3.2. AIAN Economic Indicators, 2008 to 2010**

	Percent 2010	Percentage Point Change 2008 to 2010	Ratio to Non-AIAN 2010	Change in Ratio 2008 to 2010
<b>AIAN Alone Labor Force Participation Rate (population 16 and older)</b>				
United States	59.26	-1.77	0.93	-0.01
Northeast	61.28	-1.43	0.95	-0.01
Midwest	60.14	-1.41	0.92	0.00
South	62.04	-0.27	0.99	0.02
West	56.92	-3.00	0.89	-0.03
<b>AIAN Alone Unemployment Rate (civilian labor force age 16 and older)</b>				
United States	17.88	6.73	1.66	-0.10
Northeast	14.67	5.65	1.48	-0.02
Midwest	18.58	5.22	1.76	-0.31
South	13.48	5.45	1.25	-0.02
West	21.15	8.56	1.81	-0.12
<b>AIAN Alone Poverty Rate</b>				
United States	28.44	4.20	1.87	0.02
Northeast	24.58	3.26	1.91	0.07
Midwest	33.02	2.59	2.29	-0.17
South	24.68	3.82	1.46	0.03
West	29.75	5.17	1.97	0.03

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates, 2008 and 2010

24 Austin (2009) uses different definitions of region than those used by the U.S. Census Bureau; he breaks the United States into eight regions, of which the West (California, Hawaii, Oregon, and Washington) and Southwest (Arizona, Colorado, Nevada, New Mexico, and Utah) are entirely contained within the U.S. Census Bureau's definition of the West region. Part of Austin's Northern Plains region (Idaho, Montana, and Wyoming) is also contained within the U.S. Census Bureau's West region, although he also includes Nebraska, North Dakota, and South Dakota in the Northern Plains region. The largest disparity increases were found in the Northern Plains and Southwest. Austin's West region had the third largest disparity increase.

- Over this 2-year period, the AIAN labor force participation rate in the West dropped by 3 percentage points to reach 57 percent. That decline was more than twice the next largest (minus 1.4 percent in the Northeast and Midwest), while the decline for the South was only 0.27 percent. In 2010, the rates for the other three regions were in the 60- to 62-percent range, well above that for the West. AIAN labor force participation was almost as high as for non-Indians in the South (0.99), but only 0.89 of the non-AIAN level in the West.
- The West also saw by far the largest spike in unemployment—an increase of 8.6 percentage points to reach a 21-percent rate at the end of the period. The 2010 rates for the other regions were 14 percent (South), 15 percent (Northeast), and 19 percent (Midwest)—increases for these three were all in the 5.2 to 5.6 point range. In 2010, AIAN unemployment rates were higher than non-AIAN rates in all regions, but there was quite a range: 1.3 higher in the South, 1.5 in the Northeast, and 1.8 in the Midwest and West. Those ratios, however, were slightly better than they had been in 2008 in all regions.
- The Great Recession yielded sizable increases in AIAN poverty in all regions, but again, the change for the West was most severe: an increase of 5.2 percentage points to reach an overall rate of 30 percent in 2010. The 2010 poverty level was actually higher in the Midwest (33 percent), but the increase there was not as large (2.6 points). Poverty rates in 2010 reached 25 percent in the Northeast (up 3.3 points from 2008) and in the South (up 3.8 points). With respect to poverty at the end of the Great Recession, the AIAN/non-AIAN gap was also highest in the Midwest (AIAN rate 2.3 times the non-AIAN rate). The comparable ratios were

2.0 in the West, 1.9 in the Northeast, and 1.5 in the South. In this case these ratios were modestly higher than they had been in 2008 in all regions except the Midwest, where the ratio dropped from 2.5 to 2.3.

## Implications

The social and economic conditions of Native American families are major drivers of the housing needs and challenges we discuss in Section 5. Larger families, additional children, and the multigenerational households all relate to the desired housing size and structure. Policymakers should track the significant shifts, such as the fall in the share of households with children younger than 18, to project future demand for various housing types. Education levels and resulting employment opportunities for AIAN adults determine the income available to pay for housing. Although it is good news that the AIAN community was not disproportionately hit by the Great Recession, the fact remains that the economic situation for AIAN families has worsened considerably in the past few years; and as will be shown in Section 5, this translates to high levels of housing problems.

## 4. Economic Development

### Introduction

The most important driver of economic well-being (and the ability to improve housing conditions) in any area is the state of the local economy. In this section we look more closely at economic development trends for that part of the AIAN population that traditionally has been most distressed: those living on reservations and in other tribal areas, and those living in the areas that immediately surround them.

We begin by reviewing research by others that examined how private enterprise progressed in Indian Country throughout the 1990s. We only have partial information on what has happened since then, but we are able to present some new evidence that offers updates in three topical areas and discuss implications of those findings. The areas are:

1. Business ownership
  - a. Changes in AIAN business ownership through 2007 nationwide and
  - b. Employment growth for AIAN counties, by region, through 2010 (AIAN counties are those that contain all or a part of one or more AIAN tribal areas—the data are not available separately for the tribal areas themselves.)

2. Tribally owned businesses, including gaming.
3. Native Community Development Financial Institutions (CDFIs)—expansion of new institutional infrastructure to support economic development in tribal areas.

### Background: Expansion of Economic Development in the 1990s

At the end of the 1980s, the status of economic enterprise in Indian Country was uneven. Some tribes had achieved considerable economic success by taking advantage of a rich resource base, and others had been successful in stimulating other forms of private business, but many generated very few private sector jobs (Cornell and Kalt 1989, 1992). A large number of tribal areas had significant dependent populations (high ratios of children to working-age adults), high unemployment, and federal jobs making up a large share of all employment. A good measure of independent economic health for an area is how many private employees<sup>25</sup> it has per 1,000 population. In 1990, the national average for this ratio was 255; for AIAN tribal areas it was only 158 (Kingsley, et al. 1996).

According to the Harvard Project on American Indian Economic Development (2008) (referred to, going forward, as the Harvard Project), changes occurred over the subsequent decade to the effect that “Economic development is taking root in

<sup>25</sup> Private employees include those working for private firms and self-employed workers.

Indian Country, albeit unevenly across tribes and industry sectors” (111). They note that

Past approaches to development by assimilation, by project-based job creation or by pursuing federal grants are on the wane, largely because of their repeated failure. Contemporary nation-building approaches are in the ascendancy, with tribes investing in their own capacities to govern and thereby improving local accountability and encouraging tribal and non-tribal investments in human and other capital. Over 1990–2000, for both Indian nations with gaming enterprises and those without such operations, real per capita income in Indian Country grew at two to three times the rate experienced by the general U.S. population (111).

In their view the shift in U.S. government policy furthering self-determination for Indian tribes (of which NAHASDA was a part) was vital among the underlying causes of this change. With expanded freedom to select their own path, many tribes have chosen to strengthen their own governance in ways that establish a foundation for entrepreneurialism. These include the following:

- ***Emphasizing the rule of law:*** This means ensuring an environment where the rules are clear about how collective decisions will be made and how disputes will be resolved and where there is confidence the rules will be enforced. The rule of law encourages private business investment.
- ***Separating politics from day-to-day administration and business affairs:*** Institutional change to reinforce the separation of powers in tribal governance—for example, ensuring an independent judiciary—or creating independent boards of directors for tribal enterprises.
- ***Creating an efficient tribal bureaucracy:*** This entails efficient and reliable

administration, good record keeping (taking advantage of today’s computer technology), and actions to facilitate business creation and operation (such as speeding up permitting processes).

Gaming has been one important force behind economic growth in Indian Country. Robinson (1995) estimated that there were only 81 active Indian gaming operations nationally in 1992. But the number went up rapidly after that, reaching 311 in 2000.

Gaming profits have often been reinvested in tribal enterprise, and significant shares have been distributed to tribal members through per-capita payments, creating substantial wealth in some places. However, proceeds have been very uneven. The Harvard Project (2008, 148) concludes:

A disproportionately large share of the total casino revenue in Indian Country accrues to tribes that represent a small share of the Indian population (near population dense metropolitan areas)... [gaming] is having only a limited effect on the economic fortunes of households among large tribes remote from customer markets.

Furthermore, the focus on gaming in the press has created a distorted view of Indian economic development over this period. Tribal area economies have also seen substantial expansion of other types of private enterprise.

Nongaming enterprises are proliferating rapidly in Indian Country. Some of these are large and visible (developed by tribes)... But development is also founded on businesses owned by private tribal citizens—from Burger King franchises and Hampton Inns to paving companies, construction firms, automobile repair shops, and cattle ranches (Harvard Project 2008, 117).

Total enterprise growth for the AIAN population has been impressive. Government reports showed a total of 102,000 Native-owned businesses nationwide in 1992. Over the subsequent decade, the number had doubled, reaching 201,000 in 2002. Native-owned businesses had increased at an annual rate of 7 percent, compared to 2.9 percent for all U.S. businesses (U.S. Minority Business Development Agency 2006).

### Employment Growth in the 2000s

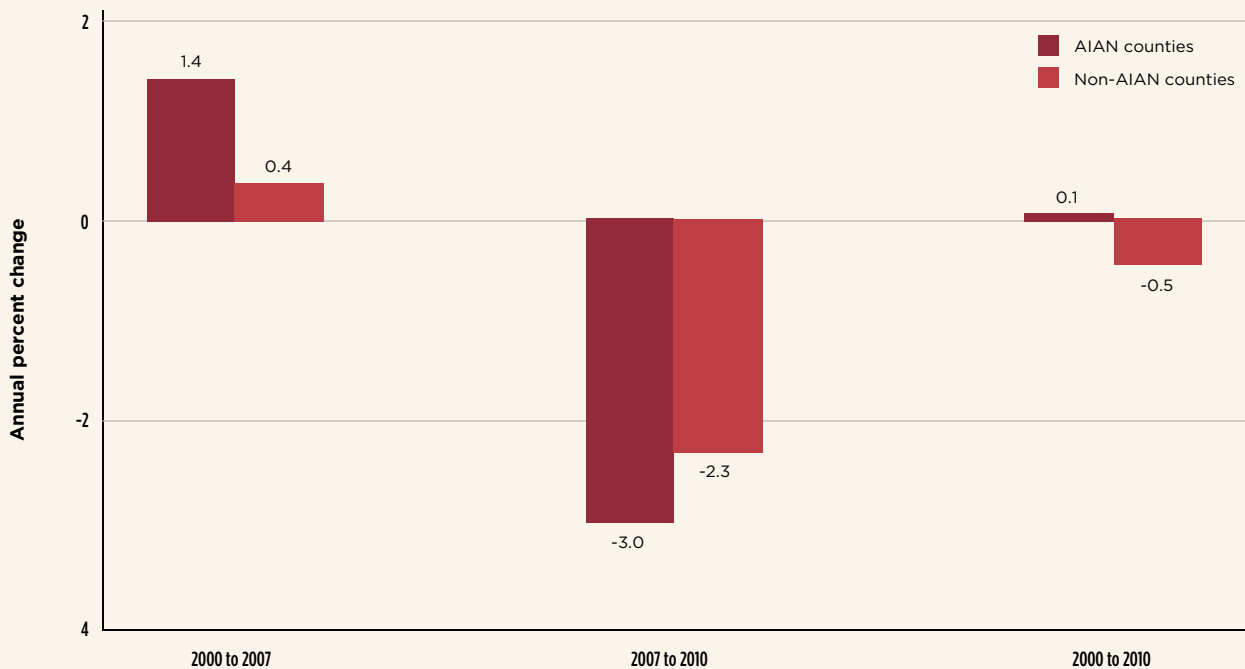
Available evidence suggests that the economic environment for the AIAN population continued to be strong through 2007, but then the Great Recession hit Indian Country<sup>26</sup> very hard, as it did the rest of the Nation.

The number of AIAN-owned enterprises continued to grow rapidly in the middle years

of the decade, reaching 237,000 by 2007. The 2002 to 2007 annual growth rate of 3.3 percent was clearly below the comparable AIAN rate for 1992 to 2002, but equal to the average for all U.S. businesses for that period (U.S. Census Bureau 2011; U.S. Minority Business Development Agency 2006).

Other evidence comes from the U.S. Department of Commerce County Business Patterns series. This series shows total U.S. employment at 113.1 million in 2000; 20.7 million (or 18 percent) of those jobs were located in AIAN counties. However, from 2000 to 2007, employment in AIAN counties grew by 303,000 per year, 48 percent of total U.S. job growth. The AIAN county growth rate was 1.4 percent per year, dwarfing the 0.36 percent average for all non-AIAN counties (Figure 4.1).

**Figure 4.1. Employment Trends in AIAN Counties From 2000 to 2010**



Source: U.S. Census Bureau, County Business Patterns 2000, 2007, 2010

26 Again, as used in this report, the term “Indian Country” refers to the tribal areas and their surrounding counties (see Section 2).

Most (87 percent) of the AIAN county jobs in 2000 were within the boundaries of metropolitan areas, and these grew much faster over the 2000 to 2007 period than

those outside of metro areas: an annual rate of 1.5 percent compared to 0.68 percent (Table 4.1).

**Table 4.1. Employment in AIAN and Non-AIAN Counties by Study Region, 2000, 2007, and 2010**

	Study Region									
	Total	N. Central	Eastern	Oklahoma	S. Central	N. Plains	AZ/NM	CA/NV	Pacific NW	Alaska
<b>Number of Employees (thousands)</b>										
Total, 2000	113,138	8,863	63,966	1,194	14,039	4,591	2,450	13,760	4,071	203
Total, 2007	117,597	8,635	65,248	1,282	14,961	5,022	2,955	14,756	4,496	241
Total, 2010	109,083	7,878	60,566	1,221	14,431	4,767	2,588	13,240	4,146	247
AIAN counties, 2000	20,690	2,159	6,992	1,154	411	679	2,284	4,223	2,609	178
AIAN counties, 2007	22,810	2,226	7,207	1,238	441	772	2,751	5,104	2,861	211
AIAN counties, 2010	20,822	2,085	6,660	1,176	439	732	2,397	4,458	2,655	220
Non-AIAN counties, 2000	92,448	6,704	56,974	40	13,628	3,912	166	9,537	1,462	25
Non-AIAN counties, 2007	94,787	6,410	58,041	45	14,520	4,250	204	9,652	1,636	30
Non-AIAN counties, 2010	88,261	5,793	53,906	44	13,992	4,035	191	8,782	1,491	27
<b>Percent of Employees, 2010</b>										
Total	100.0	7.2	55.5	1.1	13.2	4.4	2.4	12.1	3.8	0.2
AIAN counties	100.0	10.0	32.0	5.7	2.1	3.5	11.5	21.4	12.8	1.1
Non-AIAN counties	100.0	6.6	61.1	0.1	15.9	4.6	0.2	10.0	1.7	0.0

Source: U.S. Census Bureau, County Business Patterns 2000, 2007, 2010

During the Great Recession, the patterns reversed. Places that performed best earlier in the decade typically faced the sharpest reversals later on. The total number of jobs in AIAN counties dropped by 3 percent per year from 2007 to 2010, compared with a drop of 2.3 percent annually for non-AIAN counties. Among AIAN counties, annual rates of decline were 3.1 percent in metro areas and 2.5 percent in other areas.

This national picture, however, masks sizable variations in performance across regions.

Over the 2000 to 2007 period, annual employment growth was by far fastest in AIAN counties in Arizona/New Mexico and California/Nevada—averaging 2.7 percent, more than three times the average national rate. The next closest among AIAN counties was Alaska (2.4 percent), but the absolute numbers there were quite small. After that were the Northern Plains States (1.8 percent) and the Pacific Northwest (1.3 percent). The lowest rate for AIAN counties was in the North Central and Eastern regions (0.44 and 0.43 percent, respectively) (Table 4.2).

**Table 4.2. Employment Trends in AIAN and Non-AIAN Counties by Study Region, 2000 to 2010**

	Study Region									
	Total	N. Central	Eastern	Oklahoma	S. Central	N. Plains	AZ/NM	CA/NV	Pacific NW	Alaska
<b>Percent Employment Change per Year, 2000 to 2007 (Growth Period)</b>										
Total	0.6	-0.4	0.3	1.0	0.9	1.3	2.7	1.0	1.4	2.4
AIAN counties	1.4	0.4	0.4	1.0	1.0	1.8	2.7	2.7	1.3	2.4
Non-AIAN counties	0.4	-0.6	0.3	1.4	0.9	1.2	3.0	0.2	1.6	2.7
<b>Percent Employment Change per Year, 2007 to 2010 (Great Recession)</b>										
Total	-2.5	-3.0	-2.5	-1.6	-1.2	-1.7	-4.3	-3.5	-2.7	0.9
AIAN counties	-3.0	-2.2	-2.6	-1.7	-0.2	-1.8	-4.5	-4.4	-2.5	1.4
Non-AIAN counties	-2.3	-3.3	-2.4	-0.2	-1.2	-1.7	-2.2	-3.1	-3.0	-3.2

Source: U.S. Census Bureau, County Business Patterns 2000, 2007, 2010

Among non-AIAN counties during this period, the fastest rate of expansion was 3 percent per year in Arizona/New Mexico. Interestingly, those in California/Nevada did not fare nearly as well (0.17 percent). Intermediate growth rates were realized in the Pacific Northwest (1.6 percent) and the Northern Plains (1.2 percent)—not much different from the rates for AIAN counties in those regions. Non-AIAN counties in the North Central region (the main rust-belt States) actually lost employment, even over this pre-recession growth period (by 0.64 percent per year).

Over the Great Recession, there was similar variation across regions, and the rule generally held that those that had performed best earlier in the decade had the worst record in the recession years. Among AIAN counties, annual employment loss rates in Arizona/New Mexico and California/Nevada were in the 4.4- to 4.5-percent range. Alaska actually registered a modest increase, but again the amount was small (1.4 percent or 9,100 jobs). Rates of decline almost

everywhere else were above 2 percent. The best record was registered by AIAN counties in the South Central region (a decline of 0.16 percent per year) and Oklahoma (a decline of 1.7 percent per year).

But what has been the net effect of these changes on employment from 2000 to 2010? Over the full decade, employment in AIAN counties had grown slightly (by about 0.65 percent), whereas the number of jobs in non-AIAN counties had actually declined (by almost 4.5 percent).

### **Tribally Owned Businesses and Enterprises**

The expansion and diversification of tribally owned businesses noted earlier for the 1990s continued into the 2000s. This has occurred both on and off the reservations. Types of businesses include hotels and resorts, golf courses, manufacturing, oil extraction companies, mining, coal and natural resources, timber, and wild game hunting. Examples include:



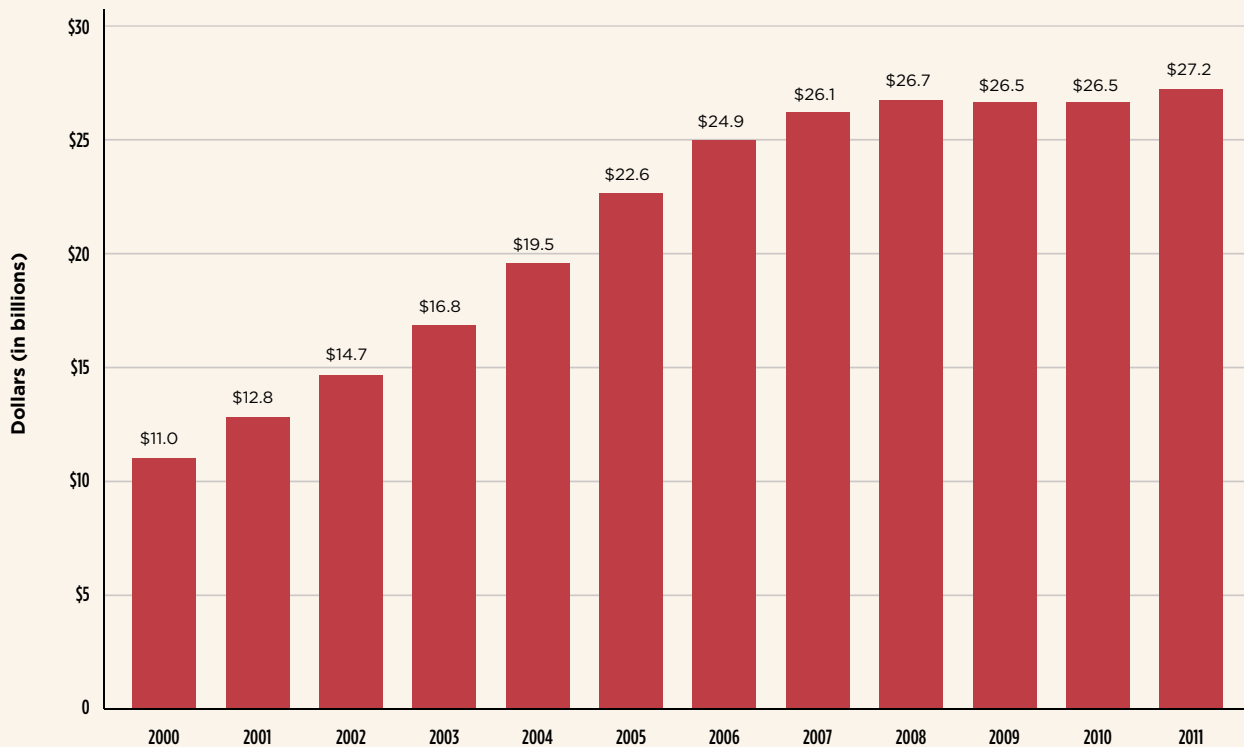
- The Seminole Tribe of Florida purchased the Hard Rock Hotel Café and Restaurant chain for \$965 million—the first time an Indian tribe had ever purchased a major international corporation. The tribe continued to make news when it announced that it is expanding globally, focusing on Latin America, Eastern Europe, and Asia (De la Merced 2006; Stuts 2012).
- Tulalip Tribes in Washington built Quil Ceda Village, a highly successful commercial development that includes outlets, anchor stores such as Home Depot and Walmart and a number of other retail businesses (Harvard Project 2003).
- Menominee Tribal Enterprises (MTE), a lumber production company operating since 1908, employs about 300 people. MTE practices sustainable yield forestry and operates a mill. In recent years, the tribe has been branching out, exporting some products as far as China, and using sophisticated logging machinery to ensure that all parts of the tree are used. MTE is also planning a biomass electrical plant that will use forest waste to produce electricity (Thornton n.d.; Trooper 2007).
- The Chickasaw Nation owns and operates a wide variety of businesses. In 2000, the tribe purchased Bedré Fine Chocolate. The production facility in Davis, Oklahoma, uses state-of-the-art machinery to ensure the ingredient mix is controlled, guaranteeing a superior and more consistent product. The Chickasaw Nation opened Bank2, a full-service community bank, in 2002. Headquartered in Oklahoma City since January 2002, the bank's assets have grown from \$7.5 million to more than \$100 million (Chickasaw Nation 2013; Bank2 n.d.; Bedré Fine Chocolate 2006).

The institutional infrastructure supporting the expansion of tribally owned enterprise has also strengthened since 2000. This includes new supports for networking and collaboration. One advance was the establishment of the American Indian Business Network (AIBN). The AIBN provides an opportunity for tribal businesses to showcase their products and interact with other business owners and potential customers. It also allows for networking among tribal leaders, Indian entrepreneurs, and other tribal government businesses.

Indian gaming—where tribes own and operate casinos—also continued to play an important role in the 2000s. In 2001, 201 of the 561 federally recognized tribes (36 percent) operated one or more gaming operations (Hillabrant, Earp, Rhodes, Pindus 2004). According to the National Indian Gaming Association (NIGA) (2009), by 2006, 224 tribes (40 percent) operated gaming facilities. By the end of 2009, that number increased to 237 (42 percent).

The total number of gaming operations has also grown. The National Indian Gaming Commission (NIGC) reported in 2000 that there were about 311 tribal gaming enterprises throughout the United States; by the end of 2006, the number rose to 394 nationwide. The number had reached 421 at the end of fiscal year 2011 (NIGC 2012b).

Gaming revenues have flourished as well. By the end of fiscal year 2000, NIGC found that gaming enterprises generated about \$11 billion in total revenues. Six years later, NIGC reported that revenues increased to about \$24.9 billion for the 394 gaming facilities. The most recent figures show that the 421 gaming operations generated about \$27.2 billion in total revenues (NIGC 2012b). Figure 4.2 illustrates the growth in tribal gaming revenues from 2000 to 2011, indicating a leveling off in the \$26 billion to \$27 billion range since 2007.

**Figure 4.2. Growth in Gaming Revenues, 2000 to 2011**

Source: NIGC 2010; NIGC 2012b

From 2000 to 2007, the total sector's revenues increased by at least 10 percent from year to year. However, in 2008, revenues started to slow, with annual increases at 2 percent. By 2009, the sector saw its first decline, though marginal (0.7 percent). From 2009 to 2010, revenues remained the same, and in 2011, revenues saw a modest upturn of 3 percent (NIGC 2012b).

We noted earlier that gaming operations and revenues were very uneven across tribal areas in the 1990s. That continued to be the case in the 2000s. Table 4.3 shows that a small number of enterprises have been highly successful, while the great majority has not been as fortunate. Of the 421 gaming facilities operating in 2011,

one in every three generated less than \$3 million in gaming revenues. Close to one-half generated between \$10 million and \$100 million, and less than one-fifth generated more than \$100 million in gaming revenue.

Among the tribal gaming facilities, the 23 largest tribal enterprises (5 percent) generated about 38 percent of the total Indian gaming revenues, and the 78 largest (18 percent) accounted for close to 75 percent of all tribal gaming revenues.

NIGA (2011) conducted a more indepth analysis and found that in addition to the \$26 billion generated from gaming revenue in 2009, tribal governments also generated billions in other gaming-related services and taxes. For example, they report that

tribal governments generated about \$3.2 billion from gaming-related hospitality and entertainment services (that is, resorts, hotels, restaurants, golf, entertainment complexes, and travel centers); approximately \$9.4 billion in federal taxes and revenue savings (including employer and employee Social Security taxes, income taxes, excise taxes, and savings on

unemployment and welfare payments); and about \$2.4 billion in State taxes, revenue sharing, and regulatory payments (including State income, sales, and excise taxes; regulatory payments; and revenue sharing pursuant to tribal-state compacts).

**Table 4.3. Gaming Operations by Revenue Size Category, 2011**

Gaming Revenue Range	Number of Tribal Gaming Operations	Revenues (in Thousands of Dollars)	Percent		Dollar Amount (in Thousands)	
			Operations	Revenues	Mean	Median
Total	421	27,153,808				
\$250 million and over	23	10,421,992	5.5	36.4	453,130	378,397
\$100 to \$250 million	55	9,065,678	13.1	33.4	164,831	156,252
\$50 to \$100 million	52	3,639,595	12.4	13.4	69,992	66,151
\$25 to \$50 million	55	1,902,860	13.4	7.0	34,597	32,784
\$10 to \$25 million	98	1,629,551	23.6	6.0	16,628	15,753
\$3 to \$10 million	70	413,441	16.6	1.5	5,906	5,525
Under \$3 million	68	80,691	16.2	0.3	1,187	1,010

Note: Data are compiled from gaming operation audit reports received and entered by the NIGC through June 20, 2012. Source: National Indian Gaming Commission 2012a

Tribal governments allocated the largest share of gaming revenues (20 percent) toward education, children and the elderly, culture, charity, and other purposes; 19 percent to economic development; 17 percent for both healthcare and police and fire protection; and 16 percent for infrastructure. Housing received the smallest share (11 percent) (NIGA 2009).

A few examples illustrate the range of activities supported by tribal gaming revenues:

- Eleven Native American tribes in Minnesota that own and operate 18 casino-resorts throughout the State

brought much needed funding to tribal government programs (Ryan 2009).

- In the Sierra Nevada foothills, the Chukchansi Indians allocated gaming revenues toward cultural activities; the tribe gave \$1 million to California State University, Fresno to preserve its language (Onishi 2012).
- In 2007, as mentioned above, the Seminole Tribe of Florida used \$965 million in gaming revenues to purchase the Hard Rock Hotel Café and Restaurant chain (NIGA 2009).
- In that same year, the Mississippi Band of

Choctaw Indians contributed \$43 million to a new justice center that houses all of the law enforcement offices, tribal courts, and a 47-bed jail. This effort was matched with a federal grant for \$56 million to the center (Williams 2007).

Gaming has also had an impact on employment. Tribal gaming created more than 628,000 direct and indirect jobs for tribal and surrounding communities (NIGA 2009). These numbers are based on estimates derived from economic models of regional economies that use multipliers to estimate the impacts of inputs such as dollars invested. These jobs include level one jobs (jobs that are directly created by Indian gaming facilities themselves, the ancillary businesses connected to the gaming facilities, and other tribal government and enterprise positions); level two jobs (those supported by tribal employees spending their wages); and level three jobs (those created indirectly, assuming that 75 percent of goods and services were purchased locally and 25 percent outside the region).

The benefits from Indian gaming may not be as secure as in the past, however, as the future appears to hold more competition. In some places, it seems likely that State government prohibitions will be relaxed to permit the expansion of private casino-style gaming outside of Indian areas. More threatening, perhaps, may be the movement toward legalizing Internet gaming (which would give States the ability to regulate and tax online gaming, even on reservations). This would allow people to play games like poker on their mobile devices whenever and wherever they want. In June 2012, Delaware became the first State to legalize casino-style gambling on the Internet. These shifts highlight the importance of efforts to diversify tribally owned enterprises and encourage entrepreneurship among the AIAN population more broadly.

## Expansion of Community Development Financial Institutions

During the late 1990s, the U.S. Department of the Treasury (Treasury) commissioned the congressionally mandated Native American Lending Study (2001), which found that Native people were experiencing considerable difficulty accessing capital and financial services. Hillabrant, Earp, Rhodes, and Pindus (2004) also found that tribal communities have complex legal, administrative, and political barriers. Poor coordination of business-related activities within the tribe and with neighboring cities and counties created more challenges for economic development in Indian Country. A 1997 study by the First Nations Development Institute estimated that Indian Country “faced between \$17.6 billion and \$56.6 billion in annual capital needs for basic infrastructure, community facilities, housing and economic development” (Harvard Project 2008, 130). Since the release of these findings, the federal government has developed a set of programs and initiatives to address these barriers, including Native CDFIs, a Native Initiatives Strategic Plan, Native Individual Development Accounts (IDAs), and Native Entrepreneur and Education Development.<sup>27</sup>

*Native Community Development Financial Institutions.* One approach, which continues to gain momentum in tribal communities, was the creation of Native CDFIs. As defined in the Code of Federal Regulations, Title 12, Section 1805.200,

A CDFI is a financial institution that provides credit and financial services to underserved markets and populations. CDFIs include community development banks, community development credit unions, community development loan funds, community development

<sup>27</sup> See [http://www.cdfifund.gov/what\\_we\\_do/programs\\_id.asp?programID=3](http://www.cdfifund.gov/what_we_do/programs_id.asp?programID=3).

venture capital funds, microenterprise development loan funds, community development corporations, among others.

A Native CDFI is “controlled or sponsored by, or whose target market is, more than 50 percent of any combination of Native

American, Alaskan Native, or Hawaiian Native groups” (CDFI Fund 2012b). In addition to providing access to capital or credit, some provide training and technical assistance to ensure that the credit is used effectively. CDFIs also provide housing and home repair loans.

**Table 4.4. Share of Native CDFIs by Study Region, 2012**

	Number of Native CDFIs	Percent
Total	61	100
Northern Plains	15	25
North Central	10	16
Oklahoma	10	16
Arizona/New Mexico	9	15
<b>Alaska</b>	6	10
Eastern	4	7
Pacific Northwest	4	7
California/Nevada	3	5
South Central	0	0

Note: Total percent does not sum to 100 percent due to rounding. Database of Certified CDFIs and Native CDFIs current as of July 31, 2012. Source: U.S. Department of the Treasury, Community Development Financial Institution 2012a

Certified Native CDFIs are dispersed across regions (Table 4.4). Fifteen CDFIs (the largest number) are in the Northern Plains, 10 are in North Central, and 10 are in Oklahoma. Nine are in Arizona/New Mexico and none are located in South Central to date.<sup>28</sup>

In 2000, there were three certified Native CDFIs. By the end of 2006, their number had grown to 38 (Kristin Eagan email to Kassie Bertumen, October 22, 2012). And, as of July 2012, 72 Native CDFIs had been certified (11 of which were located in Hawaii) (U.S. Department of the Treasury Community Development

Financial Institutions 2012a). Since 2002, the Treasury’s CDFI Fund has awarded more than 175 grants totaling \$31 million to certified Native CDFIs, which serve nearly 100 tribal communities. With the support of the CDFI Fund’s technical assistance grants and “know-how” or “best practices” from the Native CDFIs Network, it appears that Emerging Native CDFIs and Sponsoring Entities will likely obtain certification at a steady or increased rate.<sup>29</sup>

**Native Initiatives Strategic Plan.** In response to the financial barriers faced by AIAN people, the CDFI Fund developed its Native

<sup>28</sup> These numbers do not include the 11 Native CDFIs in Hawaii.

<sup>29</sup> An Emerging Native CDFI is an entity that primarily serves a Native Community and that demonstrates to the satisfaction of the Fund that it has a reasonable plan to achieve Native CDFI certification within a reasonable timeframe. A Sponsoring Entity is an entity (typically a tribe or tribal entity) that proposes to create a separate legal entity. That entity will emerge and eventually become certified as a Native CDFI.

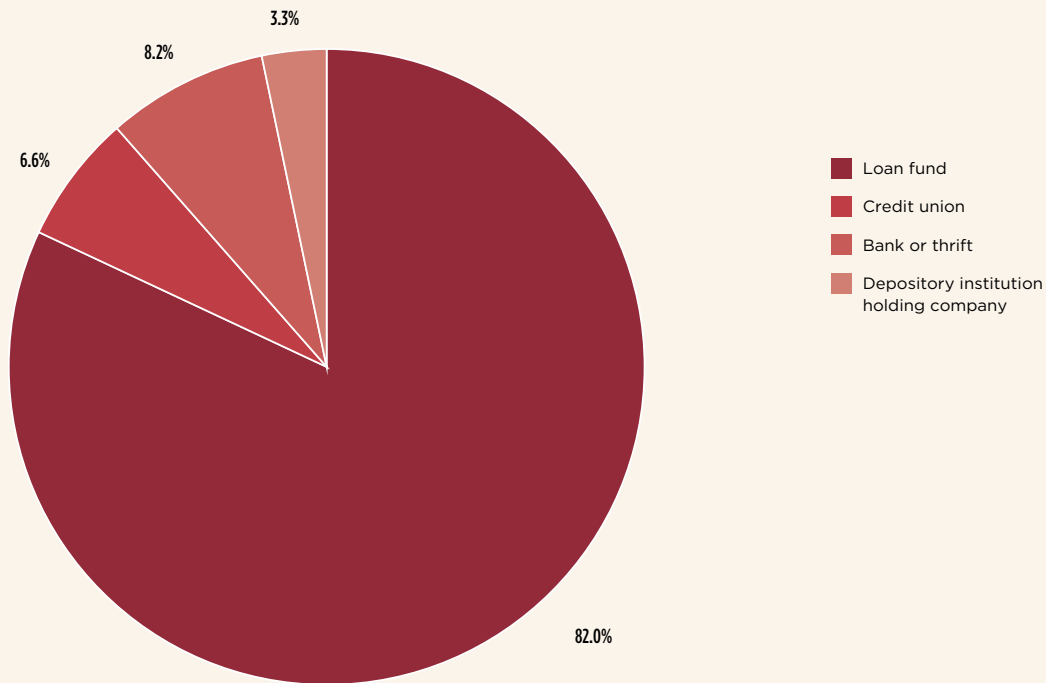
Initiatives Strategic Plan for Fiscal Years 2009–14 to guide the implementation of its activities over the next 5 years. Its initiatives include conducting training to help the development of new Native CDFIs and provide capacity and guidance to important programming through its Expanding Native Opportunities (ENO) program and providing financial and technical assistance support to build the capacity of certified Native CDFIs, Emerging Native CDFIs, and Sponsoring Entities through its Native American CDFI Assistance (NACA) program.

Of the 61 certified Native CDFIs, a significant majority are loan fund financial institutions (82 percent), some are credit unions (7 percent), a handful are banks or thrifts<sup>30</sup>

(8 percent), and a few are depository institution holding companies (3 percent). None of the Native CDFIs are venture capital funds<sup>31</sup> (Figure 4.3). This distribution reflects the primary scope of most Native CDFIs—providing individual and small business loans. A much smaller number of Native CDFIs are engaged in securing financing for large projects, using the flexibility afforded to CDFIs. Although most CDFIs have tribal or regional footprints, a small number are national in the scope of their activities.

Based on their case study research, Dewees

**Figure 4.3. Breakdown of Native CDFIs by Financial Institution Type, 2012**



Source: U.S. Department of the Treasury, Community Development Financial Institution 2012a

<sup>30</sup> As defined in the CDFI Fund’s 2012 CIIS Glossary, “Any entity the deposits of which are insured by the Federal Deposit Insurance Corporation (FDIC).”

<sup>31</sup> As defined in the CDFI Fund’s 2012 CIIS Glossary, “An organization that predominantly invests funds in businesses, typically in the form of either equity investments or subordinated debt with equity features such as a revenue participation or warrants, and generally seeks to participate in the upside returns of such businesses, via such equity investments in equity features in an effort to at least partially offset the risk investments.”

and Sarkozy-Banoczy (2008) suggest that Native CDFIs are slowly working to change attitudes and culture in Native communities to create a more positive social environment for formal business development and that “...contributions made by Native CDFIs represent a critical strategy for meeting the local demand for capital that has not been met by mainstream financial markets, while also addressing the broader social, cultural, and political issues related to economic development in Native communities” (18). For example, Native CDFIs can become eligible lenders under the Indian and Economic Development Loan Program and can apply for New Markets Tax Credit (NMTC) allocations. The potential of Native CDFIs to build financial and management capacity as well as entrepreneurial attitudes holds promise for economic development in Indian Country.

*Examples of Native CDFIs.* Native CDFIs

vary in the types of services they provide, the footprint in which they work, and the capacity of their work. Below are two examples—the first is a CDFI that provides direct services, and the second is a CDFI that is an intermediary. Both have a national footprint, working with tribal communities across the country.

Native American Capital, LLC (NAC) is a Native CDFI that has a national footprint. It has a history of advocating for Indian Country in the legislative, business, and academic spheres. It has direct experience winning and distributing various federal funding, such as the NMTC program, SBA Super 8(a), HUBZone, Tribal Economic Development Bond (TEDB), among others, as well as corporate funding. NAC has also provided technical support both to tribes and to organizations that are providing services to tribal communities. Recently, NAC helped Lower Brule Community

### **Four Bands Community Fund**

(Four Bands) is a nonprofit organization that supports economic development activities on the Cheyenne River Indian Reservation. The CDFI Fund has played a significant role in allowing Four Bands to help families build strong and sustainable small businesses and increase their capability to enter the financial mainstream.

As of 2010, Four Bands has:

- Trained nearly 2,000 people in personal financial skills and entrepreneurship, including many youth;
- Distributed more than \$1,500,000 in micro, small business, and credit building loans;
- Committed \$230,000 in matched savings for Individual Development Accounts;
- Supported more than 70 new and existing businesses resulting in the creation of 150 jobs;
- Built or rehabilitated 30 storefronts;
- Conducted a reservation-wide “buy local” campaign; and
- Worked with the Cheyenne River Sioux tribal government to make policy improvements to support private business and personal financial skills development among tribal members.

Source: U.S. Congress House Committee on Financial Services 2010. “Community Development Financial Institutions (CDFIs)—Their Unique Role and Challenges Serving Lower-Income, Underserved and Minority Communities.”

Development Enterprise, LLC (LBCDE), a certified community development entity in South Dakota, win an \$18 million NMTC allocation. LBCDE's first NMTC transaction of \$9 million, closed in mid-2012, brought KernPosits manufacturing company to the Mississippi Choctaw on-reservation TechParc. The company brings manufacturing training and jobs to the community. LBCDE used its remaining allocation as part of the \$52.5 million Terra-2 project—a project that brings broadband Internet infrastructure to remote native villages on the Alaskan Slope northeast of Anchorage.

First Nations Oweesta Corporation (Oweesta) is a Native CDFI intermediary that provides training, technical assistance, and investments to Native communities across the country. It has focused a large share of its services and investment on the Cheyenne River Indian Reservation. As of 2010, Oweesta received more than \$2 million from the CDFI through its NACA program. These funds, along with a range of other sources, enabled it to develop its own organizational capacity and provide much-needed services to support Native communities in their efforts to build local economies. Some examples of innovative products and services that Native CDFIs offer their local communities include 1) providing culturally sensitive business development and financial education classes; 2) awarding small business loans through the Bureau of Indian Affairs loan guarantee and insurance programs; 3) conducting trainings on credit building and loans; 4) offering youth entrepreneur internships; 5) assisting members to complete their federal income taxes and access certain tax credits; and 6) educating tribal leadership (U.S. Congress House Committee on Financial Services 2010).

In a testimony before the House Committee on Financial Services (2010), Vice President of Programs and Operations Tanya Fiddler described the CDFI Fund's work and

investments as “critical” to Native economic development. She shared information about the numerous benefits that her organization and other Native CDFIs, organizations, and communities have accrued. Among these, she described how the CDFI Fund's investments allowed them to reach a broader audience at a more frequent rate and how the investments helped them expand the number and capacity of Native CDFIs.

***Effects on Native CDFIs During the Economic Downturn.*** During the Great Recession, Native CDFIs experienced an increase in competition for federal and State funds, a loss of private revenue from individuals and corporations, and the need to do more with less. On the other hand, Native CDFIs, because they are federally subsidized, were cushioned from the full effects of the downturn. Congress saw that Native CDFIs were struggling with matching nonfederal funds for their NACA grants and responded by waiving the grant requirement. Stimulus spending on energy and infrastructure also benefitted some Native CDFIs.

***Native Individual Development Accounts.*** Another approach for expanding opportunities for housing investments is through IDAs. IDAs emerged in the United States in the 1990s as an asset-building strategy. IDAs provide matching funds to low-income recipients to promote savings that can be spent later on eligible uses such as postsecondary education, business development, and homeownership. IDAs help Native people access financial education and capital, and save and build assets.

In 2006, the CDFI Fund supported a Native IDA Initiative (NIDAI) that provided a series of trainings in seven regions throughout the country, including Hawaii and Alaska. Three prominent tribal organizations provided technical assistance to help Native



organizations start, implement, and sustain IDAs in their communities. A total of 69 Native Community programs attended the NIDAI trainings. Of the 62 communities that participated, 9 started IDA programs, 47 are working on developing IDA programs, and 13 enhanced their IDA programs. From 2007 to 2008, IDAs have supported about 350 tribal members.

#### *Native Entrepreneur and Education*

Development. Finally, the CDFI Fund has provided a third strategy for expanding economic development in Indian Country, known as the Native Entrepreneur and Education Development (NEED) program. NEED provides training and technical assistance to enable Native CDFIs to create entrepreneurship development systems in their own communities. The program is tailored specifically to the needs of Native communities and entrepreneurs seeking to start businesses. In 2007, the CDFI Fund conducted trainings and provided one-on-one technical assistance to Native CDFIs, tribes, and other Native organizations. Seventy representatives across 38 organizations in 24 Native communities have participated in NEED.

Overall, despite strides in increasing access to capital, there are still hurdles, including slow housing development in Indian Country. As with the other social and economic indicators presented in this report, there is a great deal of variation in resource availability and access across Indian Country.

## 5. Housing Conditions and Needs

### Introduction

In this section, we present available U.S. Census Bureau data relating to the central purpose of this study: learning about the housing problems and needs of the AIAN population and how they have changed since the prior (1996) report. The section opens by examining the housing markets for tribal areas and surrounding counties. It then describes a number of basic characteristics of AIAN-occupied housing units: tenure (owner versus renter), number of bedrooms, structure type, the year the structure was built, and housing values and rents.

We then analyze indicators pertaining to housing problems and needs. Available U.S. Census Bureau products do include important measures—on overcrowding, affordability problems, and lack of adequate kitchen and plumbing facilities—and those are included here. As noted in Section 1, however, these measures are partial. Only when we have the data from our household surveys—covering other topics like structural quality, heating and electrical systems, and how residents of tribal areas assess their own housing conditions and opportunities—will we be able to fully complete the assessment (to be released in the project’s final report in 2014).

For each of the indicators currently available from U.S. Census Bureau sources, we present national totals for AIAN households compared to non-Indians or the total population, and then explore patterns across regions and area types to the extent possible. The cautions about the decennial census and the American Community Survey (ACS) data for tribal areas that were mentioned in the introductions of Sections 2 and 3 also apply to the housing indicators. Major changes in Census Bureau data collection—particularly related to the change from the decennial census long-form sample to the ACS—have meant that data on most of the housing indicators are not available as comprehensively as they were for the socioeconomic measures in Section 3.

Complete data are available from the 2010 decennial census and the 2006–10 ACS for all geographies for total housing units, housing vacancies, AIAN tenure, and AIAN housing structures. But for all of the other housing indicators noted above, the latest and most comprehensive data available for the AIAN population are from the 2006–10 ACS Selected Population Tables.<sup>32</sup> The data for the AIAN alone population are provided only for the tribal areas and the counties where there is a population of at least 50 AIAN alone individuals. We refer to these as larger tribal areas, selected AIAN counties, and selected non-AIAN counties to distinguish these area types from those used in earlier analysis.

<sup>32</sup> The Census Bureau does not release any data for these housing indicators even at the national or regional levels in the 1-year ACS series so we cannot present 2000/2008/2010 comparisons for them similar to what we were able to do for selected economic indicators in Section 3.

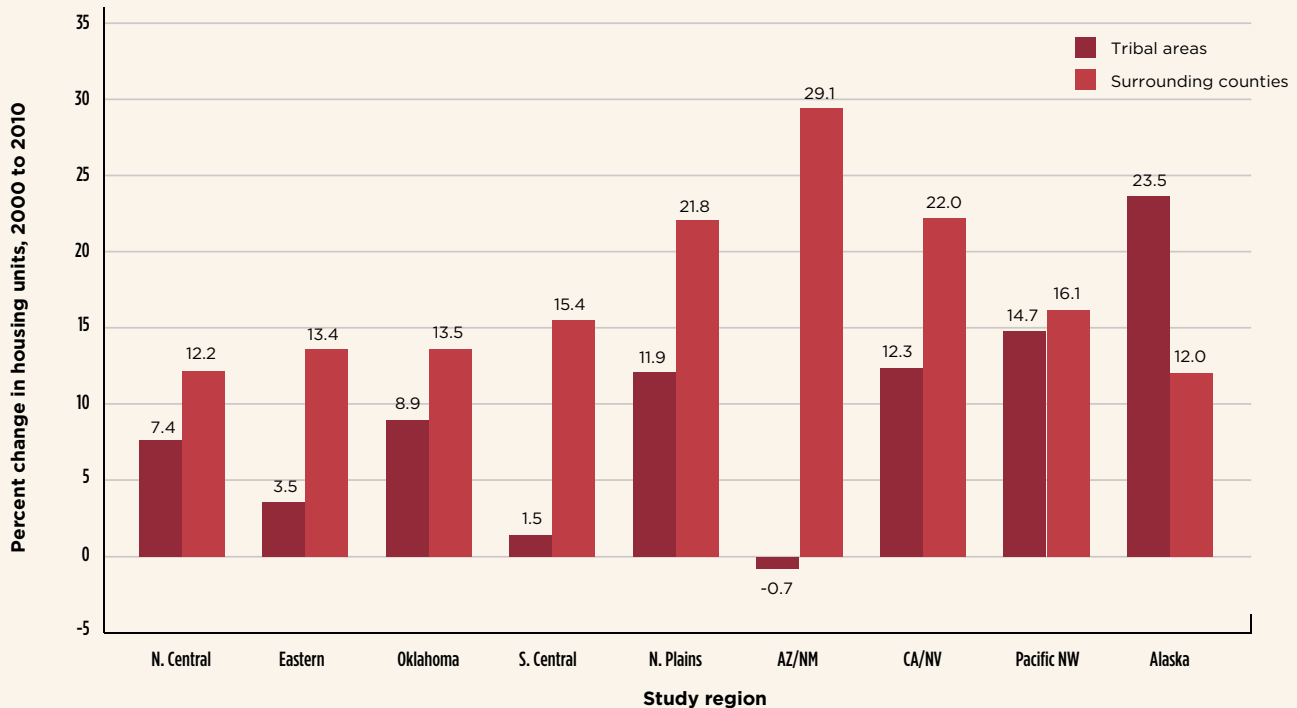
The larger tribal areas account for 93 percent of AIAN alone households in all tribal areas in 2006–10. The selected AIAN counties and non-AIAN counties account for 95 percent and 64 percent, respectively, of the AIAN alone households in all counties in their categories. Thus, the indicators from this source capture the housing conditions for the majority of AIAN households, but they do not necessarily reflect the conditions in tribal areas and counties with smaller AIAN populations.

### Housing Characteristics in Tribal Areas and Surrounding Counties

Since 6 out of 10 AIAN people live in tribal areas or the surrounding counties, understanding AIAN housing conditions should begin with reviewing the context of the overall housing markets in those areas.

According to the decennial census, the amount of housing available grew relatively slowly in tribal areas compared to overall U.S. experience. The number of housing units in tribal areas totaled 2.1 million in 2010, a sluggish 8.1-percent increase since 2000 (compared to a nationwide increase of 14 percent). Though the overall housing increase in tribal areas was generally slow, tribal areas in some regions did experience higher rates of housing construction (Figure 5.1). The number of tribal area housing units in Alaska increased by a rapid 23 percent. At the other extreme, about 1,000 units were lost in Arizona/New Mexico tribal areas, a 0.7 percent reduction. The growth rates for tribal areas in the remaining regions ranged from 7.4 to 15 percent, closer to the national average.

**Figure 5.1. Percent Change in Housing Units by Area Type and Study Region, 2000 to 2010**



Source: U.S. Census Bureau, Decennial Census 2000 and 2010

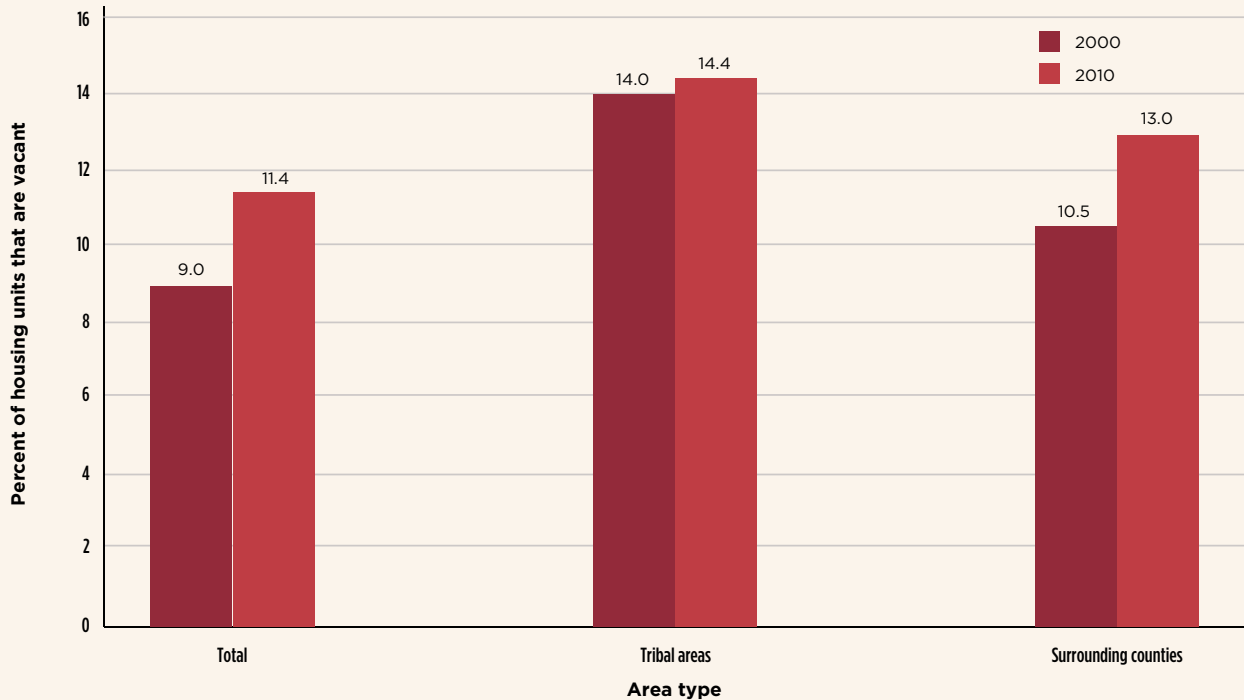
In contrast to the slower tribal area increases, the surrounding counties experienced higher growth than the national average. In these counties, units increased by 15 percent, climbing to a total of 25 million housing units in 2010. The high growth rate of housing in surrounding counties was largely driven by growth in three regions. These counties in the Northern Plains and California/Nevada saw growth rates of 22 percent, and those in the Arizona/New Mexico region rose by 29 percent.

The decennial census measures vacant housing units, defined as those habitable units that are absent of occupants as of April 1, 2010. The vacancy rate for tribal areas reached 14 percent in 2010, higher than the average U.S. rate of 11 percent. The vacancy

rate for surrounding counties fell in between at 13 percent. The tribal areas' slow building rate over the decade may have cushioned them somewhat from the severe damage felt in many areas due to the U.S. housing market crash. Their vacancy rate went up a very small 0.4 percentage points from 2000 to 2010, while the surrounding counties and the U.S. rates rose by about 2.4 percentage points (Figure 5.2).

Like changes in housing stock, the vacancy rates for tribal areas vary widely by region (Table 5.1). The highest vacancy rate for tribal areas in 2010 was found in California/Nevada, where 31 percent of housing units stood empty (a slight decline from 34 percent in 2000). The lowest vacancy rates occurred in South Central tribal areas: 9.3 percent, which was lower than the national average.

**Figure 5.2. Vacancy Rates by Area Type, 2000 to 2010**



Source: U.S. Census Bureau, Decennial Census 2000 and 2010

South Central was one of four regions where vacancies decreased over the decade. Tribal areas in Arizona/New Mexico present the most extreme case—the vacancy rate dropped by 5.4 points to a still high 19 percent in 2010. This improvement went counter to the overall experience in this

region, where the average vacancy rate rose by 2.2 percentage points. On the other hand, the vacancy rates rose for tribal areas in the North Central region (up nearly 2 points to 24 percent). This region also saw the highest overall increase in vacancy rates, up by 3.4 points to 13.

**Table 5.1. Housing Market Indicators by Area Type and Study Region, 2000 to 2010**

	Study Region									
	Total	N. Central	Eastern	Oklahoma	S. Central	N. Plains	AZ/NM	CA/NV	Pacific NW	Alaska
<b>Housing Units (in thousands), 2010</b>										
Tribal areas	2,104	54	355	1,139	103	94	115	44	90	110
Surrounding counties	25,309	2,569	8,273	462	513	858	3,280	5,978	3,221	155
<b>Percent Change in Housing Units, 2000 to 2010</b>										
Tribal areas	8.1	7.4	3.5	8.9	1.5	11.9	-0.7	12.3	14.7	23.5
Surrounding counties	17.8	12.2	13.4	13.5	15.4	21.8	29.1	22.0	16.1	12.0
<b>Vacancy Rates, 2010</b>										
Tribal areas	14.4	24.1	10.4	13.3	9.3	19.9	18.6	31.3	16.6	21.8
Surrounding counties	13.0	17.4	13.9	9.4	9.6	12.2	15.4	11.1	9.2	12.6
<b>Percentage Point Change in Vacancy Rates, 2000 to 2010</b>										
Tribal areas	0.4	1.9	-0.7	1.2	-1.8	2.0	-5.4	-2.5	2.7	1.0
Surrounding counties	2.5	2.8	2.9	0.4	-0.8	1.2	2.9	2.6	1.8	0.1

Source: U.S. Census Bureau, Decennial Census 2000 and 2010

A high vacancy rate in a given area does not preclude there being a shortage of housing for particular groups in that area. The units that are vacant may not be useable by low-income AIAN families for cost, structural, or locational reasons. The vacant units may be too expensive, too small for larger households, of poorer quality than other housing stock in the area, or far from employment centers. In fact, analysis later in this section indicates a shortage of affordable housing for the low-income AIAN

population in tribal areas. This finding is consistent with the evaluation of the Indian Housing Block Grant (IHBG) program that found that 70 percent of the tribal areas in their study reported vacancy rates of less than 5 percent for IHBG housing (Van Otten et al. 2009). The interviews of local housing officials and community leaders that will be conducted as part of this study should shed some light on the vacancy issue. However, understanding the dynamics of tribal housing markets may inform plans

on how to address AIAN housing problems discussed later in the section and merits additional indepth research.

## Homeownership

As of 2010 more than 509,000 AIAN households owned their homes nationwide. This number increased significantly from 2000 to 2010, up by 16 percent compared to an 8-percent increase for non-AIAN households. However, the AIAN homeownership rate of 54 percent is still considerably lower than the non-AIAN rate of 65 percent.

As discussed in the 1996 report, the lower homeownership rate is due to many barriers experienced by Native Americans and Alaska Natives. These include economic and geographic isolation, legal issues stemming from limited rights over land, reluctance of private lenders to engage a tenuous market, low incomes and poor credit histories, and lack of financial literacy, among others (Kolluri and Rengert 2000, Todd and Burlon 2009, Listokin, Leichenko, and King 2006).<sup>33</sup>

The causes of lower homeownership vary greatly by region and area type. For example, research found that in the Ninth Federal Reserve District, the ownership rate is explained only in part by low incomes among Native American households. Even when controlling for income and housing quality, there remain gaps in the homeownership rates between reservations in the District and those in other areas, and large and small reservations. (Todd and Burlon 2009).

The diverse legal, economic, and cultural circumstances lead to different homeownership outcomes. For example, AIAN homeownership rates in tribal areas overall are quite high—67 percent in 2010. The tribal area rate dropped by about 1 percentage point from 2000 to 2010,

similar to the overall change for the Nation. In other nonmetropolitan counties, AIAN households also have greater opportunity for homeownership, with 58 percent owning their homes in 2010. This rate surprisingly fell very little in the 2000s (0.3 points, compared to 2 points for all households in those counties). In contrast to tribal areas, only 47 percent of AIAN households in the surrounding counties and other metropolitan counties own their homes. Rates for both types of counties fell slightly from 2000 to 2010.

Although AIAN homeownership rates decreased in the United States as a whole, rates actually increased in some areas. The AIAN homeownership rates in tribal areas ranged from 54 percent in the Northern Plains region to 77 percent in the Arizona/New Mexico region. The homeownership rate fell most sharply for tribal areas in the South Central region, where rates dropped by nearly 6 points to 71 percent. Tribal areas in the North Central, Eastern, Pacific Northwest, and Alaska regions also experienced significant reductions.

Within regions, homeownership rates in surrounding counties are lower than the tribal area rates. In seven of the regions, less than half of the AIAN households own their homes. A notable increase in homeownership rates was seen in counties surrounding tribal areas in Oklahoma, where the rate went up 4.5 points to 53 percent.

## Subprime Lending

As we suggest above, greater access to homeownership is typically a positive economic signal for households and communities. Over the past several decades, one reason for increased access to ownership was the availability of subprime loans, many of which are characterized by adjustable rates,

<sup>33</sup> A range of strategies has been developed to overcome these barriers and improve ownership rates over the past two decades, including the lease-to-own Mutual Help program, flexible funds in the form of the Indian Housing Block Grant, loan guaranties, financial literacy programs, and improved economic conditions. See Kolluri and Rengert 2000 for more details.

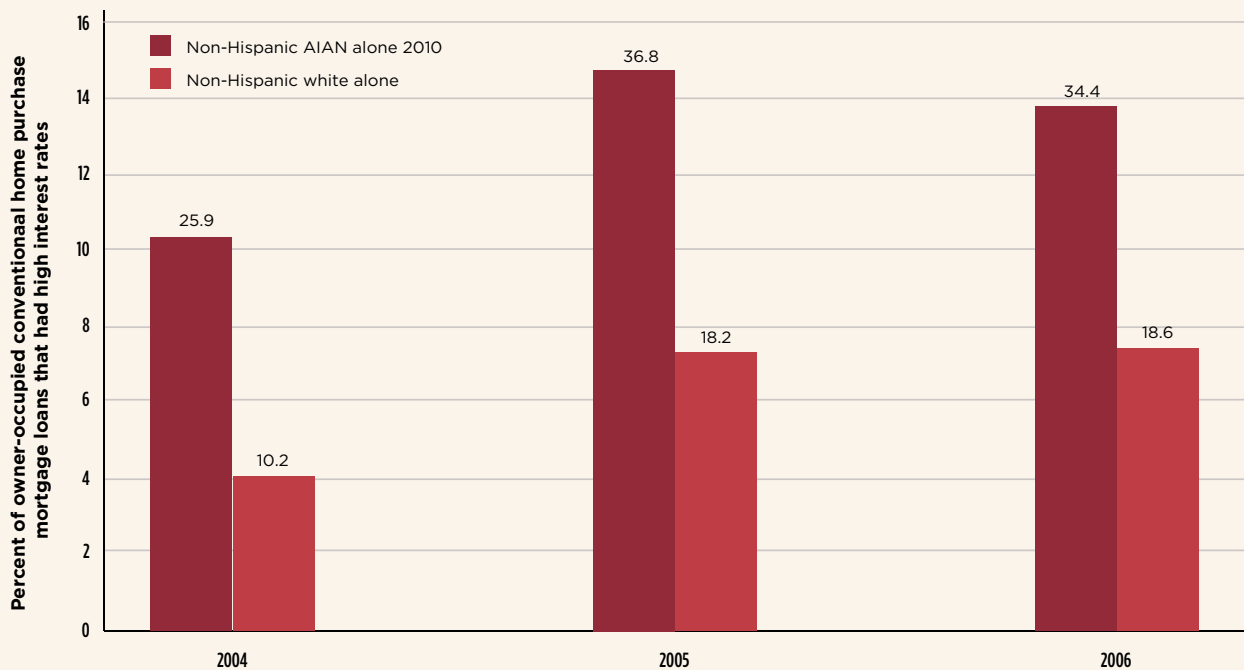
looser approval and underwriting guidelines, and limited long-run affordability checks and requirements (First Nations Development Institute 2008). As a result these loans have a much higher incidence of foreclosure. Several studies have shown minority groups were issued a disproportionate share of subprime mortgage loans (Bocian et al. 2006, Goldstein 2008, Jorgensen et al. 2008) and Native Americans were no exception. Detailed data on mortgages from the Home Mortgage Disclosure Act (HMDA) reveals stark differences in prevalence of loans with high interest rates (one way of measuring subprime lending) between Native American and white mortgage borrowers.

In 2004, 26 percent of all owner-occupied conventional home purchase mortgage

loans made to non-Hispanic AIAN alone borrowers had high interest rates, compared to just 10 percent to non-Hispanic white borrowers.<sup>34</sup> As the housing bubble inflated, the share increased for both populations by about 8 points. By 2006, 34 percent of owner-occupied purchase loans to AIAN borrowers had high interest rates, compared to 19 percent to whites (Figure 5.3).

The same pattern is noted for refinanced loans. In 2004, 27 percent of owner-occupied conventional refinance loans to non-Hispanic AIAN alone owner-occupants had high interest rates, compared to 13 percent to non-Hispanic whites. By 2006, both shares increased by approximately 12 points: Native American borrowers to 39 percent and white borrowers to 26 percent.<sup>35</sup>

**Figure 5.3. Home Purchase Mortgage Loans With High Interest Rates by Race, 2004 to 2006**



Source: Home Mortgage Disclosure Act data, 2004 to 2006

<sup>34</sup> Loans with high interest rates in 2004 to 2006 have Annual Percentage Rates exceeding the comparable Treasury yield by 3 percentage points or more for first-liens. Conventional refers to a loan not insured by a government program, like Federal Housing Administration or the Department of Veterans Affairs. These indicators include any loans to borrowers in Hawaii.

<sup>35</sup> A forthcoming report on lending practices in Indian Country will be a substantial portion of this assessment of Native American housing conditions and will include indepth analysis of secondary data sources as well as interviews with housing practitioners and lenders in Indian Country.

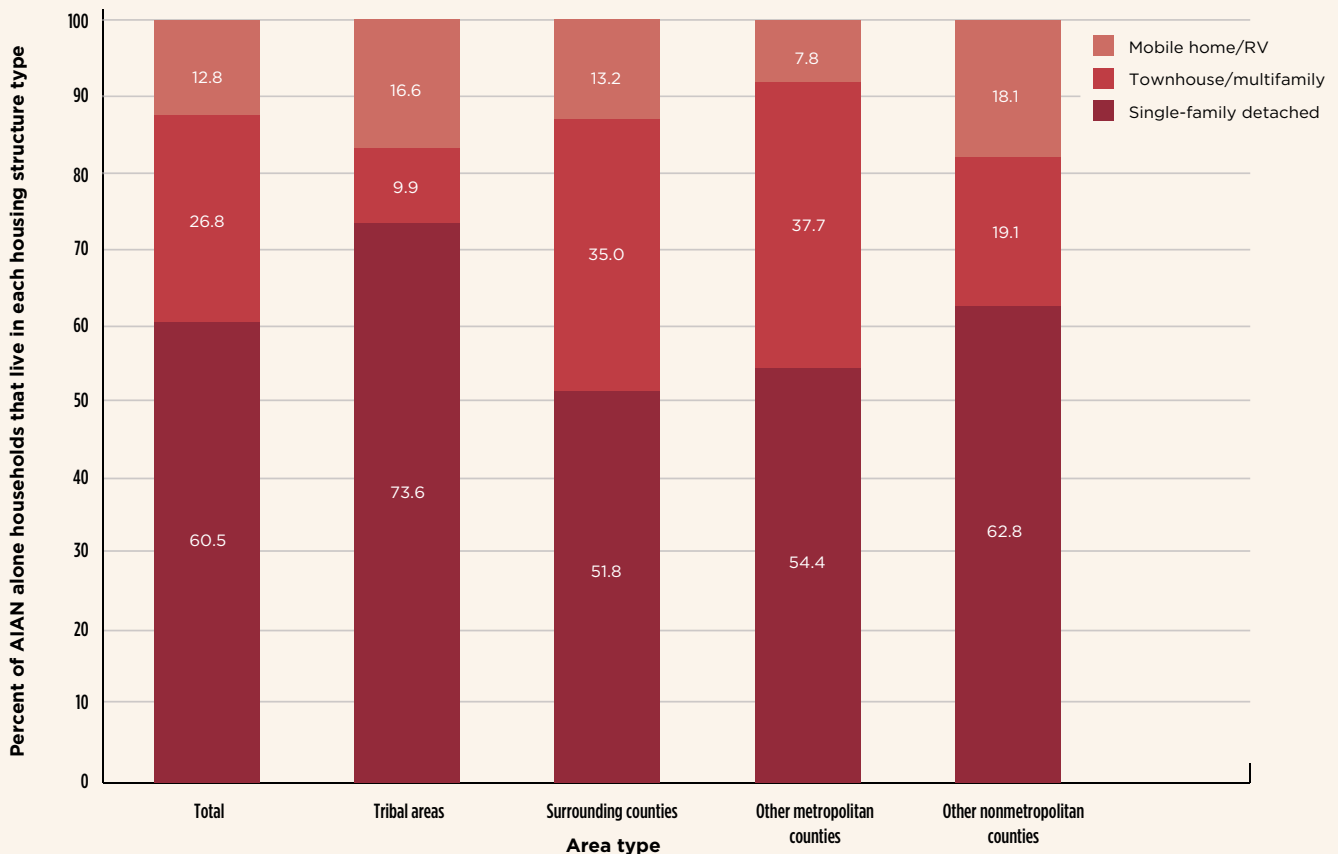
### Housing Structure Type

Across the area types and racial groups, more households reside in single-family, detached homes than other types of housing, and this rate has grown over the past decade. About 63 percent of all U.S. households live in detached homes in 2006–10, while about 60 percent of AIAN households do so. This rate has risen by 2.6 percentage points for AIAN and 1.8 for non-AIAN households since 2000.

Nationally, the gap between AIAN and non-AIAN likelihood of living in single-family detached homes is relatively small, but the overall values mask major geographic

differences. In tribal areas, almost three-quarters of both AIAN and non-AIAN households live in single detached homes (Figure 5.4). In the surrounding counties and other metropolitan areas, a little more than half of the AIAN households live in single-family detached homes. The greatest difference is between AIAN households and non-AIAN households in surrounding counties, where the AIAN rate is about 12 percentage points below the non-AIAN rate.

**Figure 5.4. AIAN Alone Housing Structure Type by Area Type, 2006–10**



Sources: U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2006–10



Another striking difference in housing type between AIAN and non-AIAN households is in the shares that live in other types of housing, which includes mobile homes and recreational vehicles (RVs). In 2006–10, 13 percent of AIAN households resided in these homes, twice the rate of non-AIAN households. Across area types, the share of AIANs living in mobile homes or other housing was highest in tribal areas (17 percent) and other nonmetropolitan counties (18 percent). The shares in surrounding counties and other metropolitan areas were lower at 13 and 7.8 percent, respectively. The rates of AIAN households living in these other structure types are higher than those for non-AIAN households in all area types, but the largest difference of 6.3 points is in the surrounding counties.

AIAN households residing in mobile homes or RVs have decreased by 1.6 percentage points overall and in all area types since 2000. The biggest decrease was seen in nonmetropolitan areas, where the percent residing in other types of housing dropped from 23 in 2000, to 18 in 2006–10. The rates in the remaining area types each dropped between 1 and 2 points.

Mobile homes are often the cheapest form of housing and are easiest to acquire in rural areas due to the limited availability of traditional housing contractors and developers (George et al. 2002). Further, the regulatory environment in tribal areas is not conducive to private land ownership; most land is held in trust by the U.S. government, so financing for housing construction is challenging. Nonpermanent housing structures offer a solution to this common problem. Although such housing may provide the population with needed

low-cost shelter, these homes are less valuable as an asset and more vulnerable to environmental elements (Cooper 2011).

## Housing Characteristics and Problems: Larger Tribal Areas

As mentioned in the introduction, the remainder of this section is based on data from the ACS Selected Population Tables, 2006–10. These summary tables for racial groups are only produced for geographic areas where there is a population of at least 50 individuals of a given race; and likewise, estimates are not produced for those tribal areas and counties not meeting the threshold. Although not ideal, we judged this data source to be acceptable for this analysis because the geographies that do meet the population threshold cover a large proportion of AIAN alone households. Even with the limitations, this data source gives us more information about the housing characteristics and problems than we could obtain from the decennial census and standard ACS 5-year data alone.

The coverage of the data set requires that we change our comparison geographies in this section (noted below and described in more detail in Appendix 1 for a full explanation).<sup>36</sup> In addition to the United States, the geographic levels available for this analysis are:

- **Larger tribal areas:** 230 tribal areas, accounting for 93 percent of AIAN households in tribal areas.
- **Selected counties:** 574 counties had large enough AIAN populations to have AIAN estimates. The AIAN households in these counties account for 83 percent of all AIAN households in all counties. For the analysis we split these counties in two groups:

<sup>36</sup> As before, we present data by region, but our methodology in this section for assigning the 13 tribal areas that cross study regions differs slightly from earlier analysis in this chapter. For the earlier sections, we used data published for summary level 280 (by State and tribal area), so could apportion the values for these tribal areas across multiple regions. For the analysis based on the ACS Selected Population data, we used the data for the tribal area summary level 250 (not divided by State) in order to minimize the exclusion of geographic areas due to low AIAN population. Unlike the earlier sections, the analysis based on the ACS Selected Population data assigns the values for each cross-region tribal area to the region that accounted for the majority of its population.

- o **Selected AIAN counties:** 333 counties that contain tribal areas, accounting for 95 percent of AIAN households in AIAN counties. Note these are entire counties, not the “surrounding counties” used in the earlier sections.
- o **Selected non-AIAN counties:** 241 counties that do not contain tribal areas, accounting for 64 percent of AIAN households in non-AIAN counties.
- **United States:** 100 percent of all AIAN households, including Hawaii.

The structure of the ACS Selected Population data also requires a change in the comparison race. In previous analyses, we subtracted the AIAN households from the total households to calculate values for non-AIAN. Since the AIAN households are suppressed in areas that do not meet the population threshold, performing the same calculation would result in a figure representing both the non-AIAN population and the AIAN population in the suppressed areas. Instead, for analysis based on this data source, we compare AIAN housing indicators to indicators for all households.

### Housing Age and Size

In 2006–10, one quarter of all AIAN households lived in buildings built before 1960. The share is much lower for larger tribal areas (15 percent) and selected AIAN counties (18 percent). In the selected non-AIAN counties, the rates of living in housing built before 1960 are very similar for AIAN and all households—about one-third. For AIAN households, these rates do not vary much by tenure; 23 percent of AIAN owners live in homes built before 1960, and 27 percent of renters do as well.

With larger household sizes, as discussed in Section 3, one might expect that AIAN households would live in larger housing

units. About 57 percent of AIAN households lived in units with three or more bedrooms in 2006–10, lower than the 62 percent for all households. About 74 percent of AIAN owners lived in the larger units, also lower than the rate for all households. However, AIAN renters were considerably more likely to live in these larger units than all households (37 percent versus 29 percent).

Across area types, AIAN housing unit size does not vary much for owners, but there is a considerable range for renters. Fifty-four percent of AIAN renters in larger tribal areas lived in units with three or more bedrooms, compared to 41 percent in the selected AIAN counties and 29 percent in other counties. This aligns with the general pattern of larger families in tribal areas. It also reflects the type of housing available in larger tribal areas since all households in these areas live in a similar higher share of large units.

### Housing Values and Rents

Given that American Indian and Alaska Native households have lower incomes than non-AIAN households, it makes sense that the home values for AIAN owners would be lower than for all households. The average home value for AIAN homeowners in 2006–10 was \$175,000—about 66 percent of the average for all households in 2006–10. The gap has increased since 2000, when the average value for AIAN owner-occupied homes was 69 percent of the average for all owner-occupied homes.

The values for AIAN homeowners in larger tribal areas and in AIAN counties overall were much lower than the U.S. average, \$112,000 and \$152,000 respectively. Given that these values are from a period that includes the end of the housing boom, values for all area types were lower in regions that were hard hit by the crash, such as California and other parts of the West.

Relatively slower growth in home values for AIAN households in the selected AIAN counties led to the widening of the gap relative to the average home value for all households. After adjusting for inflation, home values rose by 46 percent from 2000 to 2006–10 for all households in the selected AIAN counties, but only rose 29 percent for AIAN homeowners in the same areas. The growth rates in larger tribal areas and non-AIAN counties were similar for AIAN owners and all owners.

AIAN renter households on average paid \$700 in gross rent in 2006–10. Like home values, these rents were lower than for all renter households. However, AIAN gross rents were about 80 percent of those for all renters, a smaller difference than was the case with home values. Rents averaged a very low \$440 in the larger tribal areas, rising to \$630 in AIAN counties. AIAN households experienced a much smaller increase in rents than all renters, with an increase of 5.6 percent compared to 42 percent for all renters, after controlling for inflation.

## Housing Problems and Needs—Framework

The Urban Institute’s earlier report on AIAN housing (Kingsley et al. 1996) reviewed the history of America’s concern with housing conditions since the late 1800s and presented a framework for understanding the measures that together define “inadequate” housing. With few changes, that framework is again adopted for this report. It notes that there are three defining attributes: quantity, quality, and price.

**Quantity.** At the marketwide level, this attribute relates to whether the number of housing units can accommodate the number of households that will live in the area (taking into account vacancies and likely future growth). Within an existing unit, this

attribute relates to the relationship between the number of people living in the unit and the amount of space available, that is, the extent of overcrowding.

**Quality.** This attribute is most complex because it has three aspects, two of which are difficult to define and measure reliably:

- **Facilities problems:** This is the easiest to measure. Problems exist when a unit 1) lacks adequate plumbing, kitchen, electrical and/or heating facilities; or 2) such facilities do not function properly; or 3) they constitute a safety hazard.
- **Condition problems:** These occur when the unit was built inadequately (or has since deteriorated) such that it is structurally unsafe or offers inadequate protection from the elements. These have been traditionally hard to rate in an objective manner.
- **Design problems:** These relate to the physical arrangement and characteristics of external features and interior spaces, whether they are deemed to be attractive and functionally convenient. For several reasons—including the fact that tastes vary—an objective rating scheme for this aspect has never been devised.

**Price.** Under this attribute, problems exist when families are forced to pay higher housing expenses than they can reasonably afford, that is, such that they do not have enough money left over for adequate food, clothing, and other necessities of life.

The actual rating of housing conditions in an area requires defining specific standards related to each of the attributes above. In this study, we rely on well-accepted standards used by HUD in its recurrent “Worst-Case Housing Needs” reports to Congress (see Hardiman et al. 2010, and Steffan et al. 2011). These standards relate

to all elements of the framework presented above, except for “design problems,” for which as noted, an objective rating scheme has never been devised.

**Quantity Standards.** In the HUD standard, and in U.S. Census Bureau reports, a housing unit is defined to be overcrowded if it has more than 1 person per room, and severely overcrowded households have more than 1.5 persons per room. The denominator of total rooms include living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodger’s rooms.

**Quality Standards.** Census data are only available pertaining to a part of the facilities problems aspect of this item. The census and ACS surveys ask whether a unit has adequate kitchen and plumbing facilities, and we report on data derived from these questions for the AIAN population.

As noted in the introduction to this section, the census does not have information on two other critical aspects of housing quality: 1) the existence of adequate heating and electrical systems; and 2) structural quality measures (for example, leaks, holes, or cracks in the walls or ceiling)—now termed “upkeep problems” in HUD’s worst case

needs analyses (Steffen et al. 2011). We will be able to report on these aspects for tribal areas in this study’s final report, using results from our household survey.<sup>37</sup>

**Price Standards.** In the HUD standards, a household is deemed to pay an excessive amount for housing (have an excessive “housing cost burden”) if its outlays for housing exceed 30 percent of its income. HUD classifies housing expenses in excess of 50 percent of income as a “severe” housing cost burden.

### **Housing Problems and Needs—Quantity**

Though cultural standards play a role in whether the HUD definition of overcrowding indicates a housing problem, it provides one metric to assess housing need related to quantity of housing. In 2006–10, 65,000 households or 8.1 percent of all AIAN households were overcrowded, and about one-third of these households were severely overcrowded. AIAN households were much more likely to be overcrowded than all households (3.1 percent). AIAN renter households were more likely to be overcrowded (10.2 percent) than AIAN owner households (6.4 percent) (Table 5.2).

<sup>37</sup> The instrument for that survey uses the same questions and observational approaches used for the HUD reports (based on the American Housing Survey instrument).

**Table 5.2. Facility and Crowding Indicators by Race and Area Type, 2006-10**

	AIAN Alone Households				Total Households			
	Total U.S.	Larger Tribal Areas	Selected AIAN Counties	Selected Non-AIAN Counties	Total U.S.	Larger Tribal Areas	Selected AIAN Counties	Selected Non-AIAN Counties
<b>Percent of Households that are Overcrowded (more than 1.0 person per room)</b>								
Total	8.1	11.3	10.0	6.7	3.1	3.9	3.7	4.0
Owner	6.4	10.3	8.6	3.9	1.7	2.9	2.2	2.0
Renter	10.2	13.1	11.7	9.5	6.0	6.0	6.7	7.3
<b>Percent of Occupied Housing Units Lacking Complete Plumbing Facilities</b>								
Total	2.9	6.1	4.4	1.0	0.5	1.6	0.6	0.5
Owner	3.7	7.6	5.8	0.8	0.4	1.6	0.5	0.3
Renter	1.9	3.3	2.5	1.1	0.8	1.5	0.8	0.8
<b>Percent of Occupied Housing Units Lacking Complete Kitchen Facilities</b>								
Total	2.8	5.4	3.9	1.4	0.8	1.6	0.9	0.8
Owner	3.3	6.5	5.0	0.8	0.4	1.5	0.5	0.4
Renter	2.2	3.2	2.5	1.9	1.5	2.0	1.6	1.6

Source: U.S. Census Bureau, American Community Survey Selected Population Tables, 2006-10

The highest incidence of overcrowding was in larger tribal areas, where 11 percent of households were overcrowded, compared to 3.1 percent for all U.S. households. The 10 percent AIAN overcrowding rate for AIAN counties was nearly as high as for the tribal area rates. We cannot report reliably on trends since 2000, due to a change in the census questionnaire, but the 2006-10 disparity between AIAN and all households and among geographic types appear similar to 2000 patterns.

Selected AIAN counties in Arizona/New Mexico and Alaska exhibited the highest rates of AIAN overcrowding in 2006-10, 16 percent and 22 percent respectively. Overcrowding was also a serious problem in the Northern Plains AIAN counties (13

percent). AIAN counties in four regions (North Central, Eastern, Oklahoma, and South Central) all had lower than average AIAN overcrowding rates, ranging from 4.1 to 7.2 percent.

The limited sample size means that specific rates for larger tribal areas for some regions have wide margins of error, but examining the indicators in relation to the AIAN counties reveals a consistent pattern. Overcrowding in larger tribal areas is worse than for AIAN counties in every region, with the largest gap of 3 to 4 percentage points for Arizona/New Mexico and Alaska. The variation in overcrowding among regional tribal areas closely follows the variation among the AIAN counties (Pearson coefficient of 99 percent). This means a region with high rates for AIAN

counties also has high rates for their tribal areas relative to other regions.

### Housing Problems and Needs—Facilities

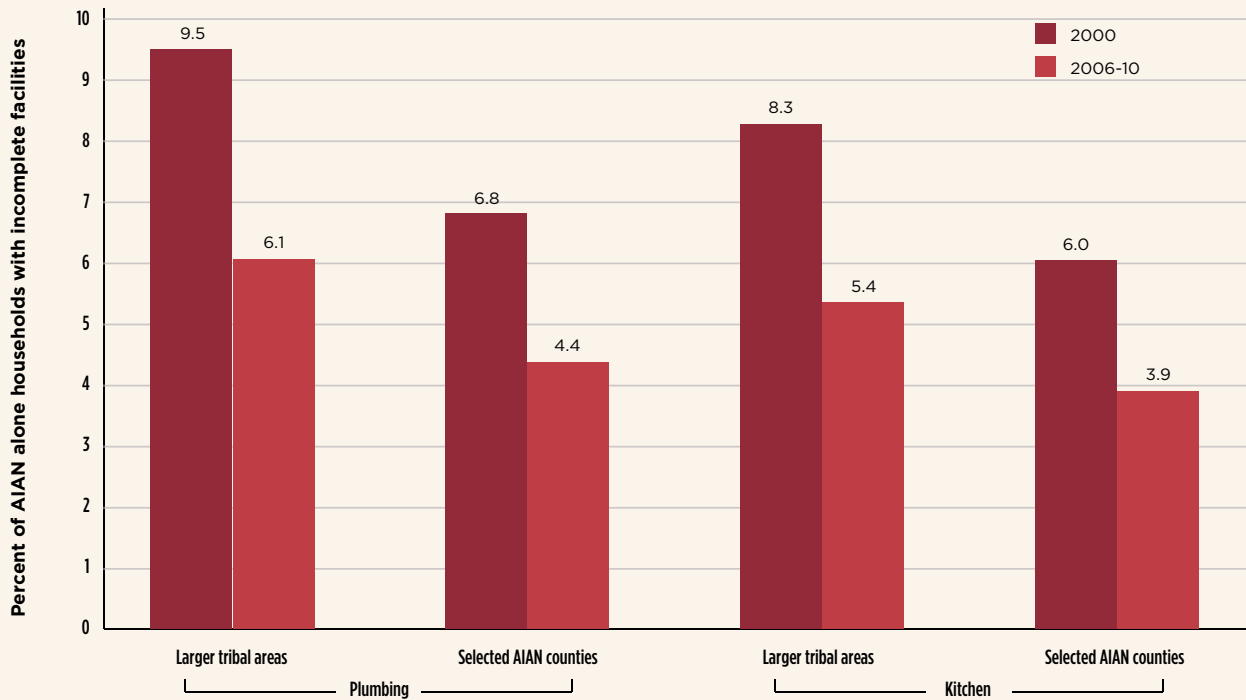
Almost 3 percent of AIAN households lacked complete plumbing facilities in 2006–10, more than five times the share for all households (Table 5.2). A similar share of AIAN households lacked complete kitchen facilities, a rate 3.5 times as high as for all households. Contrary to the pattern for overcrowding, owners are more likely to have incomplete plumbing (3.7 percent) than renters (1.9 percent). The incomplete kitchen patterns parallel those for plumbing; the rate for this problem for owners (3.3 percent) is higher than for renters (2.2 percent).

The spatial patterns for both plumbing and kitchen problems are very similar (Figure 5.5).

In 2006–10, the inadequacy rates were more than twice as high for AIAN households in larger tribal areas than in the United States as a whole; this was true for both incomplete plumbing (6.1 percent) and kitchen facilities (5.4 percent), as compared to 0.5 and 0.8 percent for all U.S. households, respectively. The problems for AIAN households were also high in the selected AIAN counties (4.4 for plumbing and 3.9 percent for kitchen facilities). Both indicators have improved for AIAN households over the last decade. The rates for incomplete kitchen and plumbing for AIAN households fell by about one-third from 2000 to 2006–10 in all area types.

As noted in the 1996 report, AIAN households living in AIAN counties in the Arizona/New Mexico and Alaska regions are more likely to have housing quality problems than in other areas of the country. In the AIAN counties of

**Figure 5.5. Facilities Problems by Area Type, 2000 and 2006–10**



Sources: U.S. Census Bureau, Decennial Census 2000, and American Community Survey, Selected Population Tables, 2006–10

Arizona/New Mexico, 9.8 percent of AIAN households have incomplete plumbing and 8.5 percent lack complete kitchen facilities. The comparable numbers for AIAN counties in the Alaska region were 18 percent for plumbing and 15 percent for kitchen facilities. Although the problems still far exceed those in any other region, the incomplete plumbing and kitchen rates decreased by 6 to 7 points between 2000 and 2006–10 for both regions. AIAN households in the remaining regions experience fewer facilities problems, ranging from 0.5 to 2.7 percent.

As with overcrowding, the relative rankings for larger tribal areas across regions for physical deficiencies mirror the selected AIAN counties (92 to 93 percent correlated). The largest apparent difference is in Arizona/New Mexico, where rates of incomplete plumbing and kitchens in larger tribal areas are 7 and 6 points higher, respectively, than the selected AIAN county rates.

Improvements to the quality of housing in the Arizona/New Mexico and Alaska regions have been the result of heightened interest and targeted infrastructure investments. Without accompanying maintenance efforts, however, the recent improvements may be temporary. Many improvements were made with one-time grants or development investments (All Things Considered 2012), and without ongoing repairs, conditions can quickly deteriorate. In the Alaska region, especially, housing and plumbing are vulnerable to extreme weather conditions. Pipes freeze during the winter and winds can damage siding and roofs. As a result, maintaining the integrity of housing and its support systems is expensive. If funding for maintenance is not incorporated into housing improvement investment, any gains in facilities could be lost.

## Housing Problems and Needs—Price

About 291,000 AIAN households paid more than 30 percent of their income on housing in 2006–10. This translates to almost 4 out of 10 AIAN households with excessive cost burdens, a slightly higher percentage than for all households. The share of AIAN and all households paying more than 30 percent of their income on housing was roughly equal, but AIAN households were more likely to be severely cost-burdened—paying more than 50 percent of their income on housing—than non-AIAN households (19 versus 16 percent).

Unlike the progress in facilities and overcrowding, housing affordability problems are on the rise. The cost-burdened rate went up 5.9 points for AIAN households from 2000 to 2006–10, a lower increase than the 8.4 points for all households.

Renter households median income in 2006–10 was about \$26,100, about half of that for owners. Thus, it is not surprising that renters have a harder time affording housing than owners in all area types. More than half of AIAN renters pay unaffordable housing costs, about the same share as all renters, and more than one-quarter are severely cost burdened. Only 3 out of 10 AIAN homeowners were cost-burdened, a slightly lower rate than for all owners, and much lower than for AIAN renter households (Table 5.3).

**Table 5.3. Housing Affordability by Race and Area Type, 2006–10**

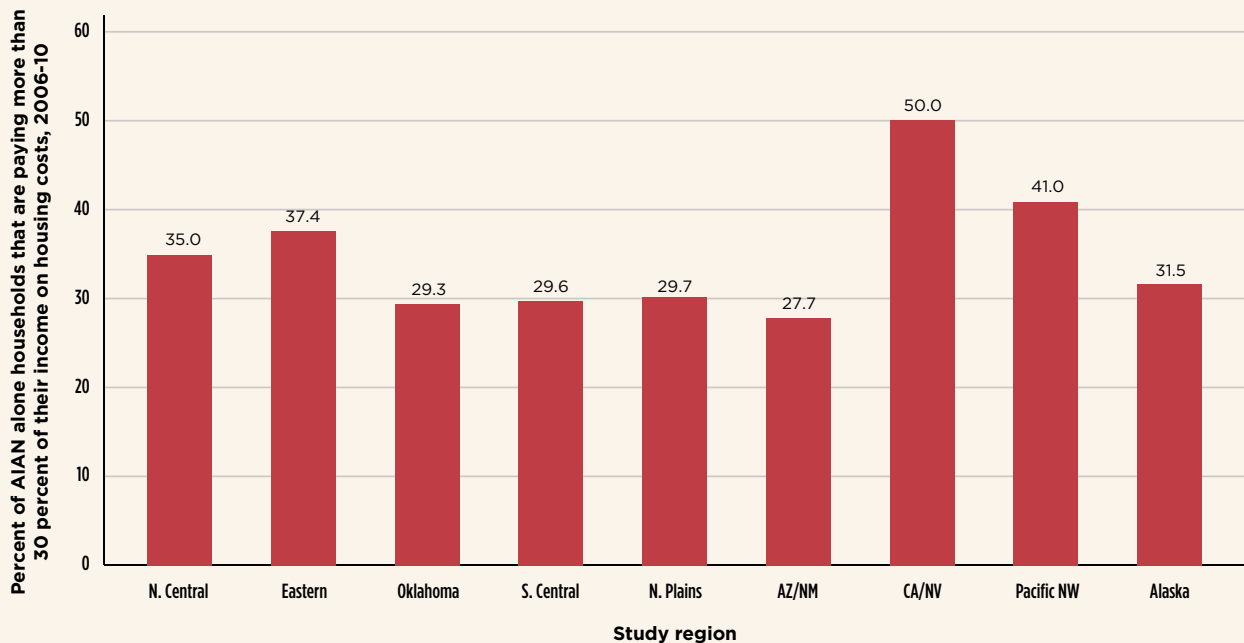
	AIAN Alone Households				Total Households			
	Total U.S.	Larger Tribal Areas	Selected AIAN Counties	Selected Non-AIAN Counties	Total U.S.	Larger Tribal Areas	Selected AIAN Counties	Selected Non-AIAN Counties
<b>Percent of Households by Share of Income Spent on Housing</b>								
Total								
30 percent or more	38.4	25.2	33.8	45.8	37.0	28.2	40.6	39.9
50 percent or more	18.5	12.0	15.9	22.8	16.4	12.1	18.2	18.2
Owner								
30 percent or more	29.1	19.6	24.9	37.3	30.6	22.1	34.6	33.1
50 percent or more	12.6	8.8	10.7	16.3	12.0	8.6	14.0	13.3
Renter								
30 percent or more	50.9	37.8	47.3	54.6	50.9	44.2	52.8	51.5
50 percent or more	26.5	19.2	23.7	29.5	25.9	21.3	26.6	26.4

Source: U.S. Census Bureau, American Community Survey, Selected Population Tables, 2006-10

Housing costs are more affordable than average in tribal areas and AIAN counties. Only about one-quarter of AIAN households on tribal areas and one-third in AIAN counties were cost-burdened in 2006–10. In both area types, these rates were lower than those for all households. Only in non-AIAN counties do AIAN households have higher rates of cost burden than non-AIAN households: in the selected non-AIAN counties, 46 percent of AIAN alone households paid more than 30 percent of their income for housing, compared to a 40-percent average for all households in those counties. The non-AIAN counties had the highest rates of cost burden (46 percent) and the greatest increase among the area types since 2000 (8.7 points).

By far, the households in the selected AIAN counties in the California/Nevada region suffer the greatest financial housing hardship (Figure 5.6). About half of AIAN householders in that region paid more than 30 percent of their income on housing, slightly more than the rate for all households in 2006–10. Selected AIAN counties in the Pacific Northwest and Eastern regions also had rates well above the average, 41 and 37 percent, respectively. Although AIAN counties in Arizona/New Mexico ranked among the highest on overcrowding and facilities, their cost-burdened rate was the lowest at 28 percent, well below the 34 percent for all households in the region. Oklahoma and South Central were very close behind at 29 and 30 percent, respectively.



**Figure 5.6. Percent of AIAN Alone Households That Are Cost Burdened in Selected AIAN Counties by Study Region, 2006–10**

Source: U.S. Census Bureau, American Community Survey, Selected Population Tables, 2006–10

Housing affordability rates for selected AIAN counties and larger tribal areas do not track across regions as they do for overcrowding and physical housing problems. (Pearson coefficient of 11 percent). Cost burden rates are lower in tribal areas than AIAN counties in every region. The most extreme differences are in regions that we have noted as having the worst affordability problems for AIAN counties. The cost burden rate for larger tribal areas in California is 26 points below the AIAN county rate, and the corresponding gap for the Pacific Northwest is 15 points. The higher incidence of housing quality problems in tribal areas described earlier likely contributes to the lower housing costs.

### Overall Incidence of Housing Problems

We have only limited information from published data on how the problems of overcrowding, physical deficiencies, and

affordability overlap. Although not directly comparable to the 2006–10 ACS Special Populations data above, the Consolidated Planning data set derived from the 2005–09 ACS can shed some light on the patterns of housing needs overall. This special tabulation produced for HUD reports on households with one or more housing problem (physical problems, overcrowding, or cost burden).

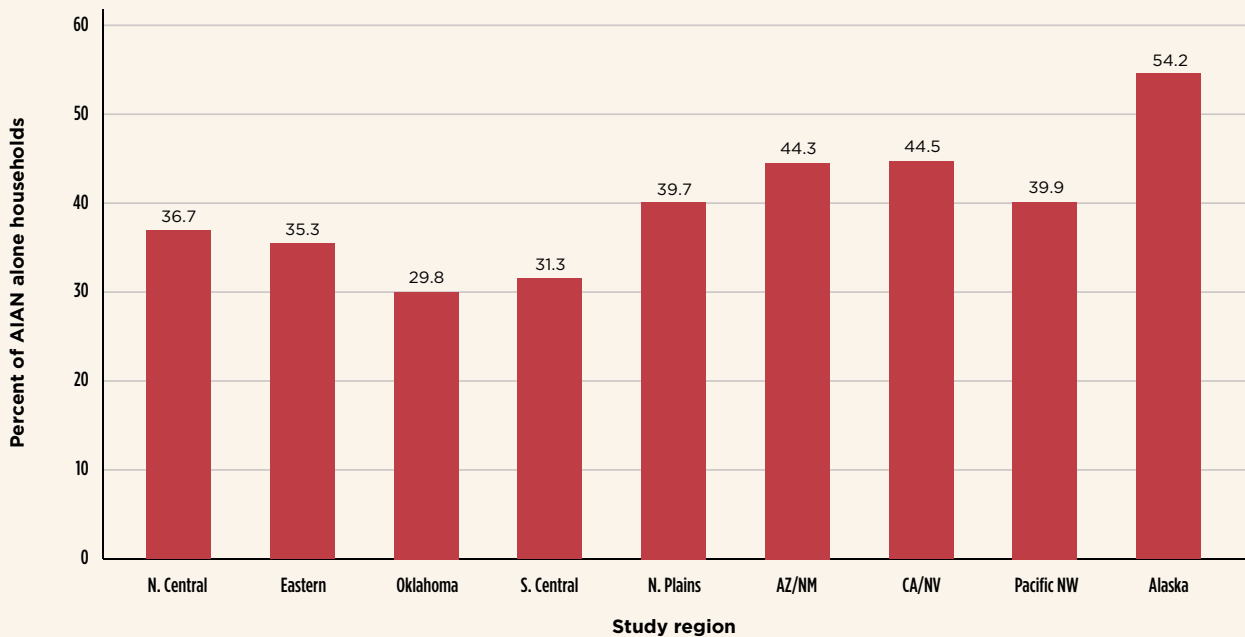
About 41 percent of AIAN households in 2005–09 had at least one housing problem, compared to 36 percent of all households. This rate exceeded the AIAN cost-burdened share of 33 percent, indicating that 7 percent of AIAN households have physical or overcrowding problems but not financial ones. The share of all AIAN households with any housing problem in AIAN counties was very similar to the U.S. figure, but AIAN households in other metropolitan counties had a slightly higher share of housing problems.

Consistent with their much higher share with cost burdens, renters were also more likely to have one or more housing problem than owners. About half of AIAN renters had at least one housing problem in 2005–09, while only about one-third of AIAN owners did during the same period.

Expectedly, low-income households are more vulnerable than other households. Nearly 8 out of 10 AIAN households earning 30 percent or less of the metropolitan median family income had at least one housing problem in 2005–09, and about 6 out of 10 households with 30 to 50 percent of area median income did. AIAN households nationally have lower or equal rates of housing problems within each income category than all households. This means that the higher rates of housing needs for AIAN households overall are driven by having higher shares of low-income households.

The regional story mirrors the one told above for the individual housing needs indicators (Figure 5.7). AIAN counties in the Alaska region, which exhibited the highest rate of physical deficiencies, exhibited the highest share of AIAN households with any housing problem (54 percent). The next two highest were AIAN counties in California/Nevada and Arizona/New Mexico, with about 44 percent. We can surmise that the nature of the housing problems differs between these two regions, since the former had the highest share with cost burdens and the latter the worst incidence of overcrowding. AIAN counties in the Oklahoma and South Central regions had the lowest shares of AIAN households with any housing problem, 30 and 31 percent, respectively.

**Figure 5.7. Percent of AIAN Households With One or More Housing Problems in AIAN Counties by Study Region, 2005–2009**



Source: U.S. Census Bureau, American Community Survey, Consolidated Planning Special Tabulations 2005–2009

## Implications

Like the population and socioeconomic analysis in earlier sections, AIAN housing conditions and needs in tribal areas are different than in other geographic areas, and the policy solutions will need to be crafted appropriately. One concern in four regions (Plains, North Central, Alaska, and California/Nevada) is the large share of vacant housing in tribal housing markets. Tribal areas in these regions had one-fifth or more of their housing units standing vacant, indicating either low levels of demand or a mismatch between the supply of vacant housing and the needs of the tribal residents. The high vacancy rates may contribute to the lower home values and less household wealth for AIAN owners.

The declining AIAN homeownership rate signals another area of concern, although homeownership as an asset-building strategy should be considered in the light of local housing markets. The other components of this research project—the lender study, household survey, and interviews with local tribal leaders—should shed light on the level of interest in homeownership and the current barriers for AIAN households wishing to purchase a home.

Our analysis of housing problems demonstrated the continuing hardship that many AIAN households face. Sharp reductions in facilities problems in tribal areas since 2000 are an important advance in meeting the housing needs of American Indians and Alaska Natives. But AIAN households still experience these problems at extremely high rates, particularly in larger tribal areas in the Arizona/New Mexico and Alaska regions.

Housing affordability persists as the most prevalent housing problem among AIAN households. More than half of AIAN renters

and about one-third of the AIAN owners are paying unaffordable housing costs. Since rents and home values are lower on average than for non-Indians, AIAN households having lower-than-average income appear to be the root of the cost burden rates. This means that education and workforce development, in addition to traditional housing programs, can contribute to the alleviation of housing problems. In short, the signs of improvement for AIAN households living in and outside of tribal areas should be welcomed, but with 4 out of 10 AIAN households suffering from at least one housing problem, much work remains to be done.

## 6. Conclusions

The Urban Institute's 1996 report reviewed the socioeconomic and housing circumstances of the American Indian and Alaska Native (AIAN) population in a comprehensive manner, comparing conditions across subjects and geographies, mostly as of 1990. The current study was designed to tell the story of what has happened to this population over the two decades, adopting a similarly broad scope and structure.

As noted in Section 1, this particular report, which is based largely on census surveys, can tell only a part of that story. Our field surveys, scheduled for completion in early 2014, will fill in a wealth of details that will be critical to a full understanding of AIAN housing needs. This report does offer important new findings—some that would not have been anticipated in 1996. The picture is not a simple one; there are major variations across geography. It is a story of both continuity and change.

Our conclusions are presented in two parts because U.S. policy toward the AIAN population varies markedly by geography. The first part deals with circumstances in Indian Country, the areas where the Native American Housing Assistance and Self-Determination Act (NAHASDA) is the dominant framework for the delivery of housing assistance. The second part deals with the rest of the Nation, where approaches

to housing assistance are generally the same for Indians as for other Americans.

### Changing Circumstances in Indian Country

In the 2000s the AIAN population in tribal areas grew in eight of our nine study regions and the growth was faster in the counties surrounding those areas. Tribal areas and their surrounding counties accounted for two-thirds of the non-Hispanic AIAN alone population in 2010 and for three-quarters of its growth over the decade.

Gaps in well-being between Indians and non-Indians appear to have narrowed along some dimensions since 2000, but sizable gaps still remain. For example AIAN people living in tribal areas in 2006–10 had poverty and unemployment rates that were more than twice as high as the rates for non-Indians nationally. Compared with the national average, AIAN households in large tribal areas were twice as likely to live in housing that was overcrowded and 12 times more likely to live in housing that did not have adequate plumbing facilities. In these areas 17 percent of AIAN households lived in mobile homes or RVs compared with an average of 6 percent for all households nationally.

These indicators are enough to suggest that, while there have been improvements, the housing problems of the AIAN population in tribal areas overall may still be the most severe of any group in the Nation. The household surveys will provide information

on the other physical housing conditions and the perceptions of the residents, allowing us to draw more definitive conclusions about the problems and needs in Indian Country.

The data also indicate large differences in tribal area socioeconomic and housing conditions by region. In 2006–10, AIAN tribal area poverty rates in the nine study regions varied from 23 percent in Oklahoma and Alaska to 41 percent in the Northern Plains region. The share of households in larger tribal areas with inadequate plumbing facilities ranged from about 1 percent in six regions to 17 percent in Arizona/New Mexico. Differences like these must be kept in mind as policymakers and program managers consider strategies to address housing needs.

Our current study was not designed as an overall assessment of NAHASDA, but we expect our Tribally Designated Housing Entities (TDHE) survey to shed light on both problems and opportunities in housing program implementation in Indian Country. In the later stages of this research, we will attempt to document approaches that seem to be taking advantage of the NAHASDA environment to drive improvements in the housing stock and the delivery of housing services. The data collection will explore how program managers assess the barriers they face in administering Indian Housing Block Grant (IHBG) resources and gather their views of opportunities to stimulate private investment in housing for tribal members. Interviews in our site visits will permit us to explore the potential for private housing investment in Indian Country in more depth and to learn more about differences in market potential in different regions. Further, our survey of private lenders will provide another perspective on this issue and will contribute to our understanding of access to private investment in tribal areas.

## **Circumstances for Indians in the Rest of the Nation**

Although the growth rate of the non-Hispanic AIAN alone population was about the same as that of the Nation as a whole in the 2000s (8.6 and 9.7 percent, respectively), the rates were much faster for two other subgroups who identified their race as Indian: AIAN multirace (41 percent) and AIAN alone Hispanic (64 percent). Two-thirds of the growth of these latter two groups took place outside of Indian Country, mostly in metropolitan areas. By 2010 the AIAN alone Hispanic population reached 468,000, and the AIAN multiracial population rose to 1.52 million.

The marked growth in the multiracial AIAN and AIAN Hispanic population underscores the need to examine conditions for the AIAN population outside of Indian Country. Though there may have been some improvements, the latest data available show that the AIAN populations living outside of Indian Country are still not doing as well as their non-Indian counterparts in a number of ways. The gaps, on average, are not as wide as for Indians living in tribal areas, but they remain serious nonetheless. Sections 3 and 5 have documented, for example, that in metro areas outside of Indian Country, Indians face considerably more serious problems than non-Indians with respect to poverty, employment rate, and housing cost burden.

As noted, Indians living outside of tribal areas are served by the same housing assistance programs that serve other Americans without any preferential treatment. Funding for these programs is being reduced overall. Across metropolitan areas, there are notable differences in AIAN population growth as well as living conditions. This gives special emphasis to our upcoming study of Indians in urban areas to provide greater understanding

of the well-being of different subgroups among the overall AIAN population in these areas. We plan to learn about changes in other service programs as well as housing problems, and we plan assessments that are qualitative as well as quantitative.

## Summary

The last decade has seen progress in some measures of housing problems and related socioeconomic measures for the AIAN population, but the marked disparities with non-Indian people that were noted in the 1996 report persist today. Although it is good that the AIAN community was not disproportionately hit by the Great Recession, the economic situation for AIAN families has worsened considerably in the past few years, exacerbating already high levels of housing problems.

This report confirms the necessity of examining issues by type of area and by region to understand the diverse contexts in which Indians live. Geography, governance, cultural context, and land use vary and affect the housing needs of residents. This report also confirms the importance of considering socioeconomic and economic development trends, as well as tribal context, in assessing housing needs and conditions. Education, workforce development, and traditional housing assistance play a critical role in alleviating housing problems.

The interim report provides an important backdrop for the project's remaining data collection activities. The continuing housing hardship experienced by AIAN households is severe, with 4 out of 10 having at least one housing problem. Combining our observations from the secondary data with the insights from the primary data will offer a fuller picture of AIAN housing needs, but the data analyzed here already call for the policy community's attention.

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## Appendix 1. Description of Data Sources

The analyses presented in this report relied on several different data sources. In this appendix, we describe each source and examine any limitations the source may have when it comes to studying the American Indian and Alaska Native (AIAN) population.

### American Community Survey

The American Community Survey (ACS) is an ongoing statistical survey run by the U.S. Census Bureau, replacing the long-form in the decennial census. The ACS has approximately 250,000 monthly respondents, totaling 3 million respondents per year. ACS publishes annual estimates for geographies with more than 65,000 people. Because of the smaller sample size compared to the decennial census, the Census Bureau averages 5 years of surveys to produce estimates for the smallest geographies, including tribal areas.

We analyzed the tabulations from the 2008 and 2010 annual surveys and the tabulations and microdata from the 2006-10, 5-year survey.

### Limitations

Because the ACS produces estimates based on a smaller sample than the decennial

census long-form survey, which the U.S. Census Bureau stopped conducting after the 2000 decennial census, the estimates are subject to more sampling error than long-form census estimates. The reliability of ACS estimates for areas of smaller population and smaller population groups, like the AIAN population, have been questioned. DeWeaver (2010) finds that the 2006-2008, 3-year ACS estimate of the size of the AIAN alone population is 14.3 percent lower than the size predicted over that period by the U.S. Census Bureau's Population Estimates program.<sup>40</sup> Further, multiyear estimates, by definition, cannot provide a point-in-time picture, which can be critical for certain analyses. For example, overcrowding in households may have been impacted by the housing finance crisis that occurred during the period between 2006 and 2010; these multiyear estimates may not accurately portray true conditions at any point over this period. Although the U.S. Census Bureau also produces 1-year estimates, these are not available for all tribal areas because of the restricted sample size.

### ACS Selected Population Tables

The ACS Selected Population Tables, another U.S. Census Bureau product, provides tabulations of social, economic, and housing characteristics for selected racial and ethnic groups that are unavailable in the general ACS. This product includes estimates for 392 race, Hispanic origin,

<sup>40</sup> See DeWeaver 2010 for more information on the limitations of the ACS in providing complete, timely, and reliable data for Indian Country.

ancestry, and tribal groups with a national population of at least 7,000. Estimates for individual groups are published for geographies in which that group had a population of at least 50 members during the 5-year ACS data collection period, with census tract being the lowest level of geography available.

We analyzed the 2006–10, 5-year estimate tabulations.

**Limitations**

Because of the population thresholds as noted above, the Census Bureau does not produce AIAN alone estimates for many geographic areas. AIAN alone estimates were available across all tables included in the analysis for the United States nationally, all States, 574 of 3,138 counties (not including counties in Hawaii), and 230 of 617 tribal areas. See Table A.1 for a breakdown of coverage for tribal areas and AIAN alone households in tribal areas

**Table A1.1. American Community Survey, Selected Population Tables Coverage Rates, 2006–10**

	Number of Tribal Areas		Coverage Rate (%)	Number of AIAN Alone Occupied Housing Units on Tribal Land		Coverage Rate (%)
	In ACS Selected Population Tables Universe	In ACS Standard Tables Universe		In ACS Selected Population Tables Universe	In ACS Standard Tables Universe	
Total	230	617	37	239,233	256,661	93
North Central	21	36	58	13,035	13,866	94
Eastern	19	68	28	28,236	31,020	91
Oklahoma	27	30	90	72,163	72,322	100
South Central	8	17	47	3,556	3,877	92
Northern Plains	25	31	81	30,328	30,604	99
Arizona/New Mexico	30	42	71	65,470	68,141	96
California/Nevada	17	130	13	4,225	7,593	56
Pacific Northwest	24	42	57	10,599	11,381	93
Alaska	59	221	27	11,621	17,857	65

Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2006–10 and American Community Survey Selected Population Tables, 2006–10

## Community Development Financial Institution Database

The U.S. Department of the Treasury's Community Development Financial Institutions (CDFI) Fund maintains a database of certified CDFIs. The data contains the organization's name, financial institution type, Native CDFI designation, address, contact person and his/her contact information, and the organization's Web site.

We gathered the information that was current as of mid-2012.

## County Business Patterns

The U.S. Census Bureau's Business Patterns series is produced annually and provides subnational economic data by industry. Data for this product comes from administrative sources, the 5-year Economic Census, and the annual Company Organization Survey. The series is useful for studying the economic activity of small areas; analyzing economic changes over time; and benchmarking statistical series, surveys, and databases between economic censuses. The Business Patterns series provides information on the number of establishments and employment at the county and Zip Code level, but the research team relied on the county-level data for this report.

We analyzed data from 2000, 2007, and 2010.

## Decennial Census

Every 10 years, the U.S. Census Bureau conducts a national household survey. The federal government uses decennial census data for apportioning congressional seats, for identifying distressed areas, and for many other activities. Short-form information is collected on every person and includes basic characteristics, such as age, sex, and race. Through 2000, the long-form was sent to one out of every six households

and collected more detailed information, such as income, housing characteristics, and employment. After 2000, the long-form of the census was replaced with the ACS.

We analyzed data from 1990, 2000, and 2010.

### *Limitations*

The decennial census, while nominally a 100-percent count of the population, has historically undercounted hard-to-reach populations. In 2010, coverage of the AIAN population varied by geography. American Indians and Alaska Natives living on reservations were undercounted by 4.9 percent, compared with a 0.9 percent overcount in 2000 (U.S. Census Bureau 2012). For the 2010 decennial census, the Census Bureau reports an overcount of American Indians outside of reservations of 1.95 percent. The net error for American Indians not living on reservations was not statistically different from zero in 2010 or 2000.

Applying the tribal undercount percentage to the official totals would translate as an additional 47,000 people, or 1.7 percent of all AIAN alone population. This analysis uses the published statistics from the decennial census and does not attempt to adjust for the undercount on reservations.

## Home Mortgage Disclosure Act Data

The Home Mortgage Disclosure Act (HMDA) requires most lending institutions to report mortgage loan applications, including the outcome of the application, information about the loan and applicant, location of the property, structure type, lien status, and whether the loan had a high interest rate. The Federal Financial Institutions Examination Council (FFIEC) collects the data in order to determine whether financial institutions are meeting a community's housing credit needs, to target community development funds to attract

private investment, and to identify possible discriminatory lending patterns.

We analyzed data from 2004 to 2006.

### **National Indian Gaming Commission Register of Gaming Institutions**

Through a Freedom of Information Act request, the Urban Institute obtained, from the National Indian Gaming Commission (NIGC), a list of all registered tribal gaming operations in the country. Each operation is labeled with a tribe name, name of gaming operation, address, phone number, fax, and email address.

#### ***Limitations***

A limitation of the data set is that the listed administrative address does not necessarily match the location of the physical gaming operation, which is likely in the instances where administrative addresses are P.O. boxes.

We obtained the data that was current as of March 2011.

## Appendix 2. Geographic Area Definitions and Methodology

### Types of Tribal Areas Defined by the U.S. Census Bureau

The U.S. Census Bureau defines nine different types of tribal areas in the United States that include government-designated reservations, trust lands, and joint use areas as well as several types of statistical entities:

- **American Indian reservations—federal (federal AIRs):** These are areas that the federal government set aside for tribal use. The boundaries of federally recognized reservations are determined through treaties, agreements, executive orders, federal statutes, secretarial orders, and judicial determinations. This type of reservation can be legally referred to as any of the following: colonies, communities, Indian colonies, Indian communities, Indian rancherias, Indian reservations, Indian villages, pueblos, rancherias, ranches, reservations, reserves, settlements, and villages. Federal AIRs may cross State and other area boundaries. American Indian tribes are considered to have the primary governmental authority over federally recognized reservations. The U.S. Census Bureau determines the boundaries of federal AIRs through its annual Boundary and Annexation Survey.
- **Off-reservation trust lands:** These areas are held in trust for an American Indian tribe or individual American Indian by the federal government. Trust lands can be located on or off designated reservation lands, but the U.S. Census Bureau only provides data for off-reservation trust lands—the areas that are not already included in the tabulations of data for reservations. Off-reservation trust lands are always affiliated with a federally recognized tribal area and their boundaries are determined by the U.S. Census Bureau through its annual Boundary and Annexation Survey.
- **Joint-use areas:** These are areas that are administered jointly by more than one American Indian tribe and/or are areas that are claimed by multiple tribes. For the purpose of providing statistical data, the U.S. Census Bureau considers joint-use areas to be geographically comparable to a reservation. Joint-use areas do not cross State boundaries.
- **American Indian reservations—State (State AIRs):** These areas are set aside for tribes that are recognized by a State government. Names and boundaries for these reservations are provided to the U.S. Census Bureau by a liaison appointed by the State’s governor.
- **Statistical entities:** These are areas that do not directly correspond to a federally or State-recognized land base but are home to a concentration of American Indian and



Alaska Native (AIAN) people affiliated with a particular tribe.

- o **Oklahoma tribal statistical areas (OTSAs):** These are the areas of Oklahoma that were formerly reservations. OTSAs are identified in consultation with the federally recognized tribes that previously had a reservation in Oklahoma. OTSA boundaries mirror those of the tribes' former reservations, unless the boundaries have been changed through agreements with neighboring tribes.
- o **Oklahoma tribal statistical area (OTSA) joint-use areas:** These areas are OTSAs that are administered jointly by multiple American Indian tribes with an OTSA and/or are claimed by multiple tribes with an OTSA. For the presentation of statistical data, the U.S. Census Bureau treats these areas as distinct geographic areas.
- o **Tribal-designated statistical areas (TDSAs):** These are areas inhabited by a concentration of people who identify with a federally recognized American Indian tribe but do not have a federally recognized land base. To be considered a TDSA, the area must have organized tribal activity. TDSA boundaries are identified by the inhabitants for the U.S. Census Bureau. TDSAs may cross State lines but cannot include land that is part of another tribal area.
- o **State-designated tribal statistical areas (SDTSAs):** These are areas inhabited by a concentration of members of State-recognized American Indian tribes without a State-recognized land base. A governor-appointed liaison for the State reports these areas and their boundaries to the U.S. Census Bureau. To be considered a SDTSA,

the area must have organized tribal activity. SDTSAs cannot cross State lines and cannot include land that is part of another tribal area. These areas were referred to as State-designated American Indian statistical areas (SDAISAs) in the 2000 decennial census.

- o **Alaska Native Village statistical areas (ANVSAs):** These areas are the portions of Alaska Native Villages (ANVs) that are densely populated. ANVs are associations, bands, clans, communities, groups, tribes, or villages that were recognized through the Alaska Native Claims Settlement Act of 1971. However, the exact boundaries of ANVs are difficult to determine, so the U.S. Census Bureau presents data for the ANVSAs. ANVSAs are areas where Alaska Natives, particularly those belonging to the defining ANV, are a large share of the population in at least one season of the year. ANV officials, if they choose to, review the boundaries of ANVSAs; if ANV officials choose not to participate, boundaries are verified by officials of the ANV's Alaska Native Regional Corporation (ANRC). ANVSA's cannot include land that is part of another tribal area.

Table A2.1 presents some basic characteristics for each type of tribal area or the United States as a whole and the nine study regions.

**Table A2.1. AIAN Tribal Areas and Population, 2010**

	Study Region									
	Total	N. Central	Eastern	Oklahoma	S. Central	N. Plains	AZ/NM	CA/NV	Pacific NW	Alaska
<b>Number of Tribal Areas</b>	<b>617</b>	<b>36</b>	<b>68</b>	<b>30</b>	<b>17</b>	<b>31</b>	<b>42</b>	<b>130</b>	<b>42</b>	<b>221</b>
Federally recognized tribal area	321	36	32	1	11	31	40	128	41	1
With reservation and off-reservation trust land	121	25	6	0	6	15	15	31	23	0
With reservation only	190	10	21	1	5	15	25	95	17	1
With off-reservation trust land only	10	1	5	0	0	1	0	2	1	0
Joint-use area	7	0	0	4	1	0	2	0	0	0
State-recognized reservation	10	0	10	0	0	0	0	0	0	0
TDSA or OTSA	29	0	1	25	0	0	0	2	1	0
State-designated tribal statistical area	30	0	25	0	5	0	0	0	0	0
Alaska Native Village statistical area	220	0	0	0	0	0	0	0	0	220
<b>2010 AIAN Population (000)</b>	<b>967.1</b>	<b>42.2</b>	<b>102.5</b>	<b>280.1</b>	<b>13.4</b>	<b>128.4</b>	<b>265.9</b>	<b>25.4</b>	<b>42.1</b>	<b>67.1</b>
Federally recognized tribal area	542.0	42.2	26.8	6.9	3.4	128.4	265.9	25.3	41.8	1.2
With reservation and off-reservation trust land	346.3	29.7	1.0	NA	1.4	80.7	199.5	5.0	29.0	NA
With reservation only	195.3	12.5	25.6	6.9	2.0	47.7	66.4	20.2	12.7	1.2
With off-reservation trust land only	0.4	0.1	0.2	NA	NA	0.0	NA	0.1	0.1	NA
Joint-use area	8.2	NA	NA	8.2	0.0	NA	0.0	NA	NA	NA
State-recognized reservation	0.8	NA	0.8	NA	NA	NA	NA	NA	NA	NA
TDSA or OTSA	265.5	NA	0.0	265.0	NA	NA	NA	0.1	0.3	NA
State-designated tribal statistical area	84.8	NA	74.8	NA	10.0	NA	NA	NA	NA	NA
Alaska Native Village statistical area	65.9	NA	NA	NA	NA	NA	NA	NA	NA	65.9
<b>Total Population Per Area (000)</b>	<b>25.8</b>	<b>23.2</b>	<b>156.7</b>	<b>49.0</b>	<b>169.0</b>	<b>5.0</b>	<b>7.2</b>	<b>26.3</b>	<b>21.6</b>	<b>11.9</b>
Federally recognized tribal area	9.0	23.2	43.9	21.1	20.9	5.0	7.2	25.2	18.1	11.0
With reservation and off-reservation trust land	7.5	22.8	6.4	NA	43.5	4.3	6.3	91.4	18.3	NA
With reservation only	12.3	24.1	81.9	21.1	18.2	6.5	11.1	15.6	17.6	11.0
With off-reservation trust land only	11.4	110.3	1.9	NA	NA	31.4	NA	20.1	416.2	NA
Joint-use area	118.3	NA	NA	119.2	0.0	NA	0.0	NA	NA	NA
State-recognized reservation	233.8	NA	233.8	NA	NA	NA	NA	NA	NA	NA
TDSA or OTSA	50.4	NA	71.7	49.8	NA	NA	NA	907.2	163.5	NA
State-designated tribal statistical area	189.2	NA	180.6	NA	224.0	NA	NA	NA	NA	NA
Alaska Native Village statistical area	11.9	NA	NA	NA	NA	NA	NA	NA	NA	11.9

NA: Not applicable.  
 Source: U.S. Census Bureau, Decennial Census 2010

## Using Consistent Geographic Boundaries for 2000 to 2010 Analysis

Official U.S. Census Bureau boundaries for tribal areas can change between decennial census years for a number of reasons, though this does not happen frequently. New tribal areas are created, and earlier ones are split or combined. Boundaries are also adjusted as new legal agreements are made or past disputes about land are resolved. This section describes the analytic decisions made to construct the tribal areas for the analysis for this report.

### Redefined Tribal Areas

In this analysis, we aimed to report changes in population and housing between 2000 and 2010 for a consistent land area, not those that occurred due to differences in boundaries between those years. Accordingly, where boundary changes would have significant impact, we used 2000 geographies to construct an area that matched as closely as possible to the area as defined in the 2010 census.

Such adjustments were required for only 31 of the 617 tribal areas. In the remaining cases, either the tribal area boundaries did not change or the change was modest or had negligible impact on population.

### Criteria for Redefinition

We decided that a redefinition of the 2000 boundary would be necessary for tribal areas that had significant changes in land area and population. Specifically, the criteria to identify tribal areas for redefinition were:

1. Change in area: Where there was an increase or decrease in land area that exceeded 2 percent.
2. Change in population: Where there was an increase or decrease in population that exceeded 2,000.

This rule was applied for tribal areas that existed in both years (22 areas) and those that existed only in 2010 (9 areas).

### Redefinition Methods

1. Combinations of 2000 tribal areas: For three 2010 tribal areas, two 2000 tribal areas had been combined in 2010, but there was no change in the boundary of the combined area.<sup>41</sup>
2. Combinations of 2000 census tracts: For 19 tribal areas that existed in 2000 and 2010 and 9 tribal areas that existed only in 2010, we constructed areas equivalent to the 2010 boundaries using 2000 census tracts. Tables A2.2 and A2.3 list the tribal areas for which the 2000 data was based on the refined boundaries.

As a general rule when constructing the equivalent areas, we included 2000 tracts only when more than 50 percent of the census tract population fell into the 2010 tribal area boundary. However, it was necessary in six cases to lower the threshold in order to include at least one tract as tribal land in each AIAN county (5 percent in six cases and 2.5 percent in one case). In addition, two of the tracts selected partially overlapped nonredefined tribal areas. Because we did not have estimates at the subtract level, we could not eliminate this double-counting.<sup>42</sup>

<sup>41</sup> The 2010 Menominee Reservation and Off-Reservation Trust Land tribal boundary was redefined for 2000 by combining the 2000 geographic area of this same name with the Menominee/Stockbridge-Munsee joint use area; the 2010 Mille Lacs Reservation and Off-Reservation Trust Land was redefined for 2000 by combining the area 2000 area of this same name with the Sandy Lake Reservation; and the 2010 Knik ANSVA was redefined for 2000 by combining the 2000 Knik ANVSA with the Kanatak TDSA.

<sup>42</sup> We estimate that including the two tracts and the tribal areas as tribal land shifts the population in tribal areas by 186 AIAN alone people from the totals for their surrounding counties.

**Table A2.2. Tribal Areas with Significant Boundary Changes, Population Counts Before and After Adjustment, 2000**

Tribal Area Name	Total Population		AIAN Alone Population	
	Before Crosswalk	After Crosswalk	Before Crosswalk	After Crosswalk
Adais Caddo SDAISA	39,080	12,836	421	249
Agua Caliente Reservation	21,358	21,358	176	176
Apache Choctaw SDAISA	23,459	5,664	1,828	1,195
Aroostook Band of Micmac, TDSA	9,756	2,946	286	140
Cayuga Nation TDSA	10,707	21,318	23	64
Cherokee Tribe of Northeast Alabama SDAISA	173	7,511	0	44
Cherokees of Southeast Alabama SDAISA	120,294	77,522	366	256
Coharie SDAISA	123,761	51,055	1,429	860
Echota Cherokee SDAISA	65,068	41,200	1,941	1,958
Four Winds Cherokee SDAISA	79,657	32,069	943	419
Kenaitze ANVSA	29,320	31,088	1,672	1,908
Lumbee SDAISA	474,100	443,164	58,238	57,903
MaChis Lower Creek SDAISA	24,198	20,865	329	357
Mississippi Choctaw Reservation and Off-Reservation Trust Land	5,190	24,269	4,902	4,304
Nanticoke Indian Tribe SDAISA	22,683	17,255	394	387
Nanticoke Lenni Lenape SDAISA	12,316	6,283	351	319
Pine Ridge Reservation and Off-Reservation Trust Land	15,521	17,656	14,304	14,855
Pokagon Band of Potawatomi TDSA	35,415	4,251	466	109
United Houma Nation SDAISA	839,880	189,614	11,019	6,860

Source: U.S. Census Bureau, Decennial Census 2010

**Table A2.3. New Tribal Areas in 2010 With Population Greater than 2,000**

Tribal Area Name	Total Population	AIAN Alone Population
Ketchikan ANVSA	12,742	1,692
Nome ANVSA	3,681	1,994
Occaneechi-Saponi SDTSA	8,615	112
Pee Dee SDTSA	2,915	104
Petersburg ANVSA	2,347	175
Sitka ANVSA	4,480	855
<b>United Cherokee Ani-Yun-Wiya Nation SDTSA</b>	5,869	36
Washoe Ranches Trust Land (part)	2,916	69
Wassamasaw SDTSA	2,011	31

Source: U.S. Census Bureau, Decennial Census 2010

### Excluded Tribal Areas

In three cases, we decided to drop the tribal area from the 2000 analysis. These tribal areas are treated similarly to the tribal areas that were new in 2010 but below the population threshold for redefinition; they are included in the 2010 analyses but excluded from the 2000 analyses.

The tribal area for the Jena Band of Choctaw existed in 2000 and 2010. It met the redefinition criteria because it experienced extreme land area and population losses from 2000 to 2010. Its 2010 land area was reduced by 99.9 percent from its 2000 land area, and its 2010 population decreased to zero. Because its 2010 land area was so small, no tract could be assigned to it to create an equivalent area for the 2000 analysis, so it was excluded from the 2000 analysis.

In addition, two of the tracts selected for tract-level crosswalks according to the rules above each contained an entire separate tribal area that had not been selected for redefinition. In this case, we dropped the two tribal areas that the tracts contained (Salamatof ANVSA and Saxman ANVSA) from the 2000 to 2010 tribal area crosswalk to avoid counting the population of that area twice.

### Adjustments in Calculating Data for Tribal Areas and Surrounding Counties

Counties were identified as AIAN counties if some part of the county's land was designated as a tribal area in 2010. The surrounding county area was calculated by subtracting the tribal area estimate from the estimate for the county as a whole.

For the 2000 calculations, we subtracted the figures for redefined tribal boundaries from the county total. As mentioned above, the tract-based definitions did not perfectly replicate 2010 boundaries. Further, some tribal areas experienced small boundary changes for which we did not account. Either of these two factors could alter which counties the tribal areas covered. As a result, the counties classified as AIAN counties using 2010 boundary definitions do not match exactly the counties that would be designated as tribal land using the crosswalk in 2000.

This mismatch meant that adjustments had to be made in order to calculate the surrounding county level for all of the 2010-defined AIAN counties. In the 2000 analyses, 31 AIAN counties (as determined by the 2010 boundaries) contained no tribal land according to the 2000 boundaries used in our analysis.<sup>43</sup> In these cases, we imputed the tribal area values as zero. This adjustment resulted in a small shift of the population from tribal areas to the surrounding counties. In addition, six counties that were not classified as AIAN counties by 2010 standards contained tribal land according to the 2000 boundaries. In these cases, we dropped the parts of the tribal areas that intersected with these six counties from our 2000 analyses.<sup>44</sup>

<sup>43</sup> This total includes two counties that contained the small amount of land for Jena Band of Choctaw in 2010 (noted above). In 2010, the tribal area AIAN alone population of these counties was zero in 18 cases and less than 350 in 13 cases.

<sup>44</sup> All of the parts of the tribal area that intersected with these six counties had AIAN alone populations of zero in 2000, so our actions did not affect the analysis.

U.S. Department of Housing and Urban Development  
Office of Policy Development and Research  
Washington, DC 20410-6000



January 2014