

# NATIVE MIGRATION: IN SEARCH OF THE MISSING COHORTS, AMERICAN INDIAN AND ALASKA NATIVE MIGRATION AND THE LOSS OF CAREGIVERS IN NATIVE COMMUNITIES<sup>1</sup>

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## ABSTRACT

Using 2000 US Census data, the demographic makeup of 345 Native communities was examined to identify those communities with a deficit of potential caregivers. The Caregiver Ratio Index (CRI) was developed as an index of the number of potential caregivers divided by the number of potential frail elders. The variability in the CRI indicated that some Native commu-

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ities have experienced dramatic outward migration, resulting in “missing cohorts” of potential caregivers. The purpose of this study was to examine the 2000 US Census data on migration of Native people out of their communities and to chart where these missing cohorts might have migrated. Unique patterns of migration exist for American Indian and Alaska Natives (AIANs) and Native Hawaiians. From US Census 2000 data, AIANs migrated primarily to the West, which was losing other ethnic populations. In contrast, those Native communities with a low Caregiver Ratio Index (CRI) showed migration to the South, reflecting national trends and probably motivated by the search for employment. We identify and discuss factors that may affect migration among Native people. Those communities that have the lowest CRI — reflecting higher outmigration — also have higher unemployment. This migration pattern of Native areas with high unemployment shedding populations to the South is new for Native communities.

**Keywords:** American Indian, Alaska Native, Native Hawaiians, caregivers, aging, elderly, frail, cohorts, demography, migration, unemployment, tribal lands, tribal communities, native lands, diaspora.

## OBJECTIVE

The objective of this paper is to examine the regional migration patterns of American Indian and Alaska Natives, and Native Hawaiians in the United States between 1995 and 2000. The paper focuses specifically on the migration of younger people from communities with a low Caregiver Ratio Index (CRI) and whether these communities have a different migration pattern than Native communities with a high CRI.

## INTRODUCTION

According to the 2000 US Census, 120 million US citizens changed residence between 1995–2000 (Schachter, 2003). Although migration slowed down between 1991–2001, the group remained most mobile is the younger population aged 20–29 years (US Census Bureau, 2009a). In 2008, of those residents who moved, more moved within county (intercounty, 65%) than to another county (intracounty, 31%) (US Census Bureau, 2008). Intercounty migration is primarily work related (30%), while intracounty migration is housing related (52.8%) (US Census Bureau, 2009b). Overall, more than 22 million people were domestic migrants — individuals who moved out of state from 1995–2000 (Franklin, 2003).

## AMERICAN INDIAN AND ALASKA NATIVE MIGRATION

For 2.2 million American Indian and Alaska Natives (AIANs) who were five years and older (single race), 49.5% moved residence between 1995–2000 (Schachter, 2003: unless otherwise stated, all data is from multiple race identification). Although this percentage is higher than for Whites (43.8%) or Blacks (48.7%), it is lower than for Hispanics (55.5%), Native Hawaiians and Other Pacific Islanders (55.1%), or Asians (54.1%) (Schachter, 2003). For AIANs and Native Hawaiians living on Native lands, only 35% changed residence in the same period (n=281,536; special tabulations from the US 2000 Census). Of these, the largest proportion stayed within the same county (64%). Native people on Native lands tend to migrate less than when they live in other areas. Of the total 1.1 million AIANs who changed residence, more than 62.9% — the highest percentage among ethnic groups — remained in the same county, while 15.1% moved to another state (Schachter, 2003). Unfortunately census data does not allow an examination of whether they moved to another Native community. Although the AIAN rate of domestic migration (from one state to another) was the lowest among the primary five ethnic groups, it represents a significant loss for Native communities.

## HISTORICAL CONTEXT OF MIGRATION

Unlike other ethnic groups in the United States, AIANs' residence has been the focus of US Congress since its inception. Historically, migration was not voluntary for Native communities.

From the very beginning, the Office of Indian Affairs was an instrument by which the United States enforced its ambition against the Indian nations and Indian people who stood in its path. And so, the first mission of this institution was to execute the removal of the southeastern tribal nations. By threat, deceit, and force, these great tribal nations were made to march a thousand miles to the west, leaving thousands of their old, their young and their infirm in hasty graves along the Trail of Tears. (Gover, 2007)

To understand migration among AIANs, one must understand the conflicting federal policies that created the diaspora of Native communities across the United States. Since the establishment of the United States, Congress has enacted ambivalent policies toward AIANs, which historians have categorized under five major periods (US Department of Agriculture, 2006; see Appendix 1 for more detail). A summary of these historical periods includes:

- Removal and the establishment of the Reservation system (1830–1880)
- Assimilation (1880–1934)
- Indian New Deal (1934–1953)
- Termination and Relocation (1953–1970)
- Self-determination (1975–present).

This historical context, especially the Termination and Relocation period of 1953–1970, resulted in a large cohort of AIANs moving from reservations to major industrial metropolitan areas. These policies partly explain why 64% of AIANs live in metro areas (Ogunwole, 2006); large populations of AIANs exist in metro areas such as New York, NY with 87,241; Los Angeles, CA with 53,092; and Phoenix, AZ with 35,093 (Ogunwole, 2006, Table 3), contributing to these areas being true “melting pots” (Zangwill, 1919) in the United States (Frey, 2006). This early migration or relocation practice resulted in established AIAN communities in cities which attract, because of the familial connection, new AIAN migrants from reservations.

Little attention has been paid to the effects of this migration in present-day Native communities — especially the outmigration of young cohorts. Previous research by the authors examined the availability of potential caregivers among 345 AIAN communities in order to identify those communities that show a deficit of caregivers (Garrett et al., 2008; Garrett and McGuire, 2008). The Caregiver Ratio Index (CRI) was developed as an index of the number of potential caregivers divided by the number of potential frail elders. The higher the CRI the higher the number of potential caregivers that exist for each frail elder. The CRI is useful in identifying communities which exhibit a diminished demographic capacity to meet the need for caregivers to older adults. A critical question becomes where has this segment of the population — this “missing cohort” — moved?

## METHODS

This study did not require new Institutional Review Board (IRB) review because only public domain data was applied in the analyses. The University of North Dakota (UND) Center for Rural Health provided correlation of the CRI with its own needs assessment data under their 12/03/2009 IRB-200712-139 approval.

This study was designed to initiate a discussion of how demographic changes affect Native communities where, in most cases, local data does not exist. As a result, the authors made proxy arguments to define these demo-

graphic gaps. The objective was to identify the existence of demographic gaps among local Native communities that might affect their capacity to provide care for their older adults.

This study utilized three databases: the US Census 2000, unemployment state-based data from the US Department of Labor, and an elder needs assessment from the UND Center for Rural Health.

## 1. US CENSUS 2000

The Caregiver Ratio Index was computed using the US Census 2000. The US Census collects information on any Native area as defined by the federal government (Federal Register Notices, 2000). These include both federally recognized tribes and state- (but not federally) recognized tribes. Although 561 tribes have federal recognition (Federal Register Notices, 2007), the US Census gathers data from 650 AIAN and Native Hawaiian communities. Most of these communities have small populations. More than 190 have Native populations of fewer than 50, while more than half (367) have populations of fewer than 250. Only ten communities have populations greater than 10,000 and within these, only one has an AIAN population of more than 100,000. The analysis, using 2000 Census data, extracted demographic variables for each of the 650 individual AIAN and Native Hawaiian communities enumerated by the US Census. Of these, 345 communities had sufficient demographic data to enable the completion of this analysis.

In order to define the level of need, two computations were performed. One was to create an estimate of the number of frail elders — a factor determining the level of care needed. The second variable — the number of potential caregivers — partially defines the level of resources available to meet caregiving needs (Garrett et al., 2008).

### NUMBER OF FRAIL ELDERS

Older adults are more likely to have problems with Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) with increasing age (Royall et al., 2005). Among AIAN communities, a national initiative, funded by the US Administration on Aging, conducted older adult needs assessments in select AIAN communities that have Title VI (Older Americans Act) programs (Moulton et al., 2005). The study found that for AIANs between the ages of 65–74, about 6% had problems with two or more ADLs (the definition of frail elder). This percentage increased to 8.5% by age 75–84, and continued to increase to 12% of AIANs aged 85 years and older

(McDonald and Ludtke, 2002). These proportions were applied to the 65+ native populations from the 2000 US Census to obtain the number of potential frail elders.

## NUMBER OF POTENTIAL CAREGIVERS

We do not know how many caregivers exist in Native communities. We also do not know the proportion of the population that is providing care to older adults. One way to identify potential caregivers is to enumerate everyone between the ages of 18–100 as potential caregivers, or to enumerate just the adult women. However this is not a true picture of who caregivers are in Native communities. A national study of caregivers among 83 AIAN communities with a total of 8,560 respondents (for a complete description of the methodology see Muus et al., 2008; Baker-Demaray and LeMire, 2009; National Resource Center on Native American Aging [NRCCAA], 2002) revealed that although the majority of caregivers are women (86%), men do perform caregiving duties (NRCNAA, 2003). Men are usually not the primary caregivers, but some do perform this function. These proportions tell us only the composition of the caregiver cohorts, not the proportion or age of the population who provide care, but they are reasonable estimates to use, in lieu of other information. The key term here is “potential” caregivers. Whatever algorithm is used, the result provides a ranked indicator of the balance between older adults and younger populations. The percentage of the population identified as potential caregivers in this study was categorized by age group and gender, with the following breakdown: <35 years of age (18.7%), 35–44 (16.4%), 45–54 (15.9%), 55–64 (24.3%), 65–74 (18.7%), 75–84 (5.6%), 85+ (5%), with 13.5% male and 85.8% female. These proportions were applied to the US Census data to define the number of potential caregivers. The project then identified the ratio between older frail elders and potential caregivers among all Native communities.

Migration was investigated using tabulations from the US Census 2000 Long Form, aggregating data for all Native lands by region and selecting Native American alone (single race) population and categorical variable PCT064C “Residence in 1995 for Population 5+” (See Appendix 2 for detailed breakdown of the variables).

## 2. UNEMPLOYMENT DATA

We would have preferred to use community unemployment figures to investigate whether unemployment created a “push” factor on local outmi-

gration, but this information was not available. As a proxy, unemployment data collected from the Department of Labor is provided by state. We averaged unemployment rates from January, November, and December 1994, and January 1995 (US Department of Labor, 2009) which corresponded to the migration data from the US Census. Since some Native communities straddled more than one state, the average unemployment rate for those states was taken (adding the two percentages and dividing by two). State CRI data was obtained by aggregating all of the Native communities within that state and dividing by the number of Native communities (mean). Where Native communities straddled more than one state the average CRI was computed for those states and a corresponding unemployment rate was similarly averaged. (The table in Appendix 3 illustrates the average CRI by state).

### 3. ELDER NEEDS ASSESSMENT

Ideally, the CRI would correlate with the level of need that each community experiences. Although Native communities do not have assessments of their collective needs — a community needs assessment — numerous efforts have been made to assess the needs of individual older adults living in Native communities. Individual needs differ from community needs. However, it is worth learning if community needs, to which the CRI alludes, bear a relationship to individual needs. Through funding by the US Administration on Aging and the Administration for Native Americans, the UND Center for Rural Health implements an elderly needs assessment tool for Native communities (Muus et al., 2008; Baker-Demaray and LeMire, 2009; NRCCA, 2002).

The individual needs assessment tool utilizes a ten-item scale on social support (Duke Social Support Index — DSSI), which measures multiple dimensions of social support. It has been used extensively in cross-sectional and longitudinal studies of aging. By aggregating the score for each person in each of the 61 communities that had complete data and then dividing this aggregate by all survey participants, we were able to identify the average level of social support with each community. Missing cases ranged from 0% to 27% across the sites.

## RESULTS

The search for missing cohorts entails examining “push and pull” factors influencing migration. Data published by the US Census indicates

that the primary factor for intercounty migration is work, whereas intra-county migration was better housing (US Census Bureau, 2007a; 2007b). These push and pull indicators suggest that the “push” for outmigration is unemployment, whereas employment acts as a “pull” factor that attracts migrants (US Census Bureau, 2008). By aggregating state unemployment data (US Department of Labor, 2009), and correlating this rate with the CRI for the community by state we get a slight but significant correlation ( $r=0.176$ ;  $P<.001$ ). This suggests that the lower the CRI (fewer caregivers) for a community, the higher the unemployment rates are for that state. Unemployment seems to push younger American Indians, Alaska Natives, and Native Hawaiians out of state. Although it is true that the community might have had a low CRI prior to the time period of this study, it does not alter the fact that unemployment is one of the consistent “push” factors for outmigration. Having determined that there is a push for outmigration, can we determine if there is an employment pull for immigration?

Migration exists in a state of flux. Because migration represents an individual and family decision, rather than a group decision, there is simultaneous in- and outmigration by particular ethnic groups within a specific region. However, the overall trend (gains and losses) in the population is indicative of the underlying dynamics. Between 1995–2000 Schater (2003), in his analysis of regional migration, exposed a recent tendency to migrate to the South. For example, Blacks moved to the South, leaving the West, Northeast, and Midwest. Hispanics moved to the South and Midwest, leaving the West and Northeast. Asians moved to the South, from the Northeast and Midwest (Schachter, 2003). Using the US Census Long Form Summary File 3, the authors examined the migration patterns of all AIANs from 1995–2000. Contrary to national trends, more than half of the interstate migration (52%) was to the West ( $n=17,457$ ). Based on population increases for the “Other” racial category between 2000–2004, these increases were greatest in Sacramento-Arden-Roseville, CA; Stockton, CA; Las Vegas-Paradise, NV; and Phoenix-Mesa-Scottsdale, AZ (Frey, 2006). This was followed by AIAN migration to the South (26%) and to the Midwest (20%).

This pattern of migration holds true for all Native communities and those that have a high CRI. It is interesting that for those Native communities with the lowest CRI (from 0–2), the primary path of migration mirrors national trends, primarily to the South. Like all other populations, economic factors play a strong role, and those communities with the lowest CRI also exhibit higher unemployment.



The CRI has emerged as a valid demographic tool, but does it reflect actual needs of the community? In lieu of the existence of community data, the researchers correlated the CRI with an aggregate of needs identified by older adults by aggregating elderly needs assessment scores from 61 tribal communities. Using this method, the Spearman correlation coefficient was +0.053 (and statistically nonsignificant), which indicates that while the CRI correlates with macro community needs (such as state unemployment) it does not correlate with aggregated individual needs.

## DISCUSSION

Unique patterns of migration exist for AIANs and Native Hawaiians. For immigration, the West seems to have acquired more Native people while, at the same time, shedding other population groups. This is not surprising since 90% of AIANs and Native Hawaiians live west of the Mississippi River. It is likely that these migrations to the West, on the whole, reflect familial attractions. Diasporas of off-reservation Native communities — created by past relocation practices — attract new Native migrants. In contrast, those Native communities with a low CRI showed migration to the South, reflecting national trends and likely primarily motivated by employment factors. Care must be exercised in generalizing from these conclusions, since studies tend to use “multiple race” for AIANs and Native Hawaiians, which might be very different from “single race” data applied in this study. Overall, US migration from 1995–2000 gravitates toward the South, which has lower unemployment rates and presumably better job opportunities.

The analyses applied in this project primarily utilize studies undertaken with AIANs since we do not have the same level of data for Native Hawaiians. There are some limitations to generalizing the results. It is our hope that these limitations will compel local groups to initiate discussions on caregiving for frail older adults and generate more accurate community data.

The CRI is a valuable tool that allows identification of needs at a community level. Some Native communities are experiencing a critical loss of caregivers. These “missing cohorts” are likely to have migrated out of the area for employment, primarily to the South. Native communities are not impervious to the caprices of national economies and trends, and the economic status of the nation reverberates across all.

## APPENDIX 1<sup>2</sup>

### REMOVAL AND THE ESTABLISHMENT OF THE RESERVATION SYSTEM (1830–1880)

The Indian Removal Act of 1830, provided that lands held by tribes in the East could be exchanged for lands west of the Mississippi River making it legal to uproot and relocate tribes to “Indian territory” – the area acquired under the Louisiana Purchase of 1803.

### ASSIMILATION AND THE RESERVATION PERIOD (1880–1934)

Policies were put in place to diminish tribal control of the community by creating Indian Police and the Court of Indian Offenses and establishing day and boarding schools to incorporate tribal people into mainstream society. Under the General Allotment (Dawes) Act of 1887, tribal lands were divided into individual allotments and distributed to tribal members. By 1934 tribes had lost control of 90 million acres, two-thirds of the 1887 level.

### THE INDIAN NEW DEAL (1934–1953)

The passage of the Indian Reorganization Act (IRA) in 1934 signalled a major reversal in federal Indian policy. Under the IRA, tribes were encouraged to organize tribal governments through the adoption of a constitution and bylaws, and to establish tribal courts. The IRA also repealed the Dawes Act, thereby ending the policy of allotment. Funds were made available to purchase lands, provide educational loans, and establish a revolving credit fund.

### TERMINATION AND RELOCATION (1953–1970)

In 1953 the House of Representatives passed Resolution 108, which terminated many Indian communities’ legal and political status. More than 100 tribes were targeted for termination. At the same time, Congress sought to encourage “Native Americans” to move off the reservations. In 1952, the BIA established Indian relocation centers in 12 major cities to provide job assistance and training to those who would leave the reservations.

### SELF-DETERMINATION (1975–PRESENT)

Since the mid-1970s, federal legislation has attempted to affirm tribal rights by strengthening tribal autonomy. Acts allowed tribes to take over many of the services previously provided by the BIA and the Indian Health Service, to

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2. Abbreviated from: *Lending on Native American Lands: A Guide for Rural Development Staff*

providing funds for tribal colleges, and reinforcing the right to practice traditional religions. In 1988, the “Self-Governance Demonstration Project” was initiated, allowing tribes to design and implement their own programs (referred to as “638” tribes) without being subject to government regulations.

## APPENDIX 2

### PCT064C “Residence in 1995 for Population 5+”

A detailed breakdown of this category included the following variables:

PCT064C001	Total
PCT064C002	Same house in 1995
PCT064C003	Different house in 1995
PCT064C004	Different house in 1995: In United States in 1995
PCT064C005	Different house in 1995: In United States in 1995: Same county
PCT064C006	Different house in 1995: In United States in 1995: Different county
PCT064C007	Different house in 1995: In United States in 1995: Different county: Same state
PCT064C008	Different house in 1995: In United States in 1995: Different county: Different state
PCT064C009	Different house in 1995: In United States in 1995: Different county: Different state: Northeast
PCT064C010	Different house in 1995: In United States in 1995: Different county: Different state: Midwest
PCT064C011	Different house in 1995: In United States in 1995: Different county: Different state: South
PCT064C012	Different house in 1995: In United States in 1995: Different county: Different state: West
PCT064C013	Different house in 1995: In Puerto Rico in 1995
PCT064C014	Different house in 1995: In Puerto Rico in 1995: Same municipio
PCT064C015	Different house in 1995: In Puerto Rico in 1995: Different municipio
PCT064C016	Different house in 1995: Elsewhere in 1995
PCT064C017	Different house in 1995: Elsewhere in 1995: U.S. Island Areas
PCT064C018	Different house in 1995: Elsewhere in 1995: Foreign country or at sea

## APPENDIX 3

**State Where Native Community is Located, the Average Caregiver Ratio Index (Ranked by CRI), and the Unemployment Rate Averaged for January, November, December 1994 and January 1995.**


<i>State of Native Community</i>	<i>Mean Caregiver Ratio Index*</i>	<i>Mean Unemployment Rate 1994</i>
HI	1	5.8
DE	2	4.7
VA	2	4.8
NJ	4	6.7
NV-UT	4	4.9
IN-MI	6	5.1
NV-OR	6	5.7
NY	7	6.4
FL	8	6.6
ID-NV	8	5.8
WI-MN	8	4.2
CA	9	8.5
OR	9	5.3
SC	9	5.9
CT	10	5.5
ID	10	5.8
NV	10	6.1
AK	11	5.3
AZ-NM-UT	11	5.3
KS	11	5.1
LA	12	7.7
AZ-CA	13	7.3
ME	13	6.8
MN	13	3.9
NM	13	6.2
WY	14	4.9
AZ-CA-NV	15	6.9
IA-NE	15	3.1
OK	15	5.6
TX	15	5.9
AZ	16	6.0
NE	16	2.7
WA	16	6.1
WI	16	4.5
CO	17	4.0
GA	17	4.9
MS	17	6.5
MT	17	5.0
ND-SD	17	3.45
SD	17	3.2
IA	18	3.6
MO	18	5.0
MI	19	5.6
ND	19	3.7
UT	19	3.7
NC	36	3.9
AL	41	5.8

(\* Source: Garrett et al., 2008)

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