

*CABAZON, THE INDIAN GAMING REGULATORY
ACT, AND THE SOCIOECONOMIC CONSEQUENCES
OF AMERICAN INDIAN GOVERNMENTAL GAMING
A TEN-YEAR REVIEW*

AMERICAN INDIANS ON RESERVATIONS:
A DATABOOK OF SOCIOECONOMIC
CHANGE BETWEEN
THE 1990 AND 2000 CENSUSES

JONATHAN B. TAYLOR
JOSEPH P. KALT

JANUARY 2005



THE HARVARD PROJECT ON
AMERICAN INDIAN ECONOMIC DEVELOPMENT

MALCOLM WIENER CENTER FOR SOCIAL POLICY
JOHN F. KENNEDY SCHOOL OF GOVERNMENT - HARVARD UNIVERSITY

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The Harvard Project on American Indian Economic Development
Malcolm Wiener Center for Social Policy
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ABSTRACT

This study compiles 1990 and 2000 U.S. Census data on Native Americans residing on reservations and in designated Indian statistical areas in the lower 48 U.S. States. Gaming and non-gaming areas are compared to each other and to the U.S. as a whole. Data on fifteen measures ranging from income and poverty to employment and housing conditions indicate that, although substantial gaps remain between America's Native population and the rest of the U.S., rapid economic development is taking place among gaming and non-gaming tribes alike.

- Having started the 1990s with incomes lagging far behind those for the general U.S. population, American Indians in Indian Country experienced substantial growth in income per capita. Even with this Indian population rising by more than 20% between 1990 and 2000, real (inflation-adjusted) per capita Indian income rose by about one-third. For both gaming and non-gaming tribes, the overall rate of income growth substantially outstripped the 11% increase in real per capita income for the U.S. as a whole.
- From 1990 to 2000, family poverty rates dropped by seven percentage points or more in non-gaming areas, and by about ten percentage points in gaming areas. U.S. family poverty dropped eight-tenths of a percentage point.
- Unemployment rates dropped by about two-and-a-half percentage points in non-gaming areas and by more than five percentage points in gaming areas. U.S. unemployment dropped by half a percentage point.
- Housing overcrowding decreased during the decade, particularly in Indian areas without gaming. The percentage of American Indians living in homes with plumbing increased markedly in both gaming and non-gaming areas.

The data compiled for this databook are available for download and analysis on the website of The Harvard Project on American Indian Economic Development, <<http://www.ksg.harvard.edu/hpaid>>.

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A Policy Primer on AMERICAN INDIAN GOVERNMENTS AND THEIR GAMING OPERATIONS

The gaming enterprises of American Indian tribes are operations of American Indian tribal *governments*. With powers akin to one of the states, these governments are recognized by the U.S. Government pursuant to the U.S. Constitution, centuries-old treaties, numerous Supreme Court decisions, Presidential orders, and acts of Congress. Today, in the lower 48 states, “Indian Country” is comprised of 350 Indian areas that are associated with federally-recognized tribes and tracked by the U.S. Census. These consist of 310 reservations and 40 Indian statistical areas, 29 of which are in Oklahoma.¹ The reservations range in size from a few acres to hundreds of thousands of acres: the Navajo Nation’s reservation is approximately the size of West Virginia.

Just as states in the United States have certain powers of jurisdiction within their boundaries, so tribes have governmental powers within their boundaries. While tribes (and states) cannot exercise powers such as raising an army or issuing currency, they possess powers to: determine their respective forms of government (e.g., craft constitutions), define citizenship, pass and enforce laws through their own police forces and courts, collect taxes, regulate the domestic affairs of their citizens, and regulate property use (e.g., through zoning, permitting, environmental regulation, and the like). And like states, American Indian governments have the power to determine whether they will engage in gaming operations.

American Indian governments’ rights to gaming have their roots in the U.S. Constitution. The Commerce Clause of the Constitution provides that: “The Congress shall have Power... To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.” Accordingly, when the State of California tried to block the government of the Cabazon Band of Mission Indians from operating a gaming enterprise in the mid-1980s, the U.S. Supreme Court upheld Cabazon’s rights to determine for itself if and how it would

operate gaming enterprises. The Court recognized California and Cabazon as separate sovereigns – just as California and, say, Nevada (which, like Cabazon, shares its border with California) are recognized as separate sovereigns when it comes to Nevada’s right to allow gaming.

With tribes’ rights of gaming thus affirmed, Congress passed the Indian Gaming Regulatory Act of 1988 (IGRA). This Act circumscribes the rights recognized by the Supreme Court in *Cabazon*. Under IGRA, all gambling activities on the reservations are subject to each tribe’s own gaming laws, ordinances, and commissions. Class II gambling (e.g., bingo and related games) and Class III gambling (including, e.g., slot machines and casino games) are both subject to the oversight of the federal National Indian Gaming Commission. And Class III gambling may be subject to state regulation and oversight depending on how these are specified and negotiated in intergovernmental tribal-state compacts.

Paralleling the decisions of many states to operate state lottery businesses in order to help fund state governmental activities, approximately 200 tribal governments are currently engaged in Class II (e.g., bingo) or Class III (e.g., full-scale casinos) gaming. As required by IGRA, revenues from tribal governmental gaming must be directed towards: funding tribal government operations and programs; providing for the general welfare of tribal citizens; promoting economic development; supporting charitable organizations; and funding operations for local, non-tribal government agencies.

Mirroring the decisions of state governments to create and join various associations of state lotteries, 147 tribal governments currently constitute the voting membership of the National Indian Gaming Association (NIGA). Both the Indian and state gaming associations are created pursuant to the respective governments’ obligations to serve their citizens’ interests, and both types of associations fund research into the impacts of their governmental gaming programs.

INTRODUCTION*

The 1990s opened with unprecedented promise for Indian Country. Contemporary tribes had been asserting rights of self-governance since at least the late 1960s. They sought control over everything from law enforcement and anti-poverty programs on the reservations to management of reservation natural resources. As the 1990s dawned, the U.S. courts had recognized, and Congress and successive presidents had generally supported, many of these assertions of sovereignty. A federal policy codified in the 1970s and known as “Indian Self-Determination” was the law of the land. Formal systems of government-to-government relations between American Indian tribal governments and federal authorities had become the nation’s stated policy.

In response to reaffirmed rights in the era of self-determination, by the start of the 1990s, most tribes had invested heavily in their capacities for self-government. They built everything from court systems, police departments, and taxation codes to state-of-the-art health clinics and water treatment plants.² Importantly, evidence was accumulating that self-determination was addressing reservation poverty successfully, prompting hope that long cycles of economic and social distress might be broken.³

The powers of Indian self-government that have received the most public attention have been tribes’ powers to set their own gambling regulations. Beginning in the 1980s with bingo halls and following later in many locations with full-service casino resorts, many tribal governments developed high visibility gambling ventures, just as states had done with lotteries decades earlier.

* We are particularly indebted to Suzanne Cooper, Karl Eschbach, Miriam Jorgensen, Andrew Lee, and Julie Wilson for comments. Charles Varner, Erich Burchfield, Kyle Scherer, Tammy Y. Sieber, and Eliza Bemis provided outstanding research assistance.

The tribes' push into gaming did not arise out of some special federal antipoverty program for Native Americans. Rather, it represented tribes' exercise of sovereign rights to establish their own gambling policies. In 1987, the U.S. Supreme Court affirmed these rights in *California v. Cabazon*.⁴ In 1988, Congress passed the Indian Gaming Regulatory Act (IGRA), recognizing tribes' rights over gaming and establishing a federal regulatory framework for tribal governments' gaming operations.⁵

Notwithstanding the substantial opportunities that self-determination presented in the 1990s, American Indians—particularly those on reservations—had decades' worth of accumulated socioeconomic deficits to address. In 1990, per capita income for Indians on reservations was less than one-third the U.S. average (see discussion below of REAL PER CAPITA INCOME: 1970-2000). College attainment was less than half the U.S. level (see COLLEGE GRADUATES). Unemployment stood at three times the U.S. level (UNEMPLOYMENT). The proportion of Indian homes on reservations lacking hot and cold running water, a flush toilet, or a shower was many times greater than the national average (HOMES LACKING COMPLETE PLUMBING).

This databook employs the 1990 and 2000 decennial United States Censuses to assess whether and to what extent progress was made against these deficits over the 1990s. By happenstance, these Censuses form bookends for the first decade of widespread tribal government gaming. Indian gaming—particularly casino-style—was not widespread at the time of the 1990 Census.⁶ The *Cabazon* decision and IGRA were still in their infancy. At the other end of the decade, the falling rate of new tribal-state gaming agreements (“compacts”) indicated that new tribal casino development had plateaued.⁷ Thus, comparing the 1990 and 2000 Censuses offers an opportunity to understand how Indian areas have changed with and without gaming and, more broadly, how they have fared under tribal and federal policies of self-determination.⁸

This databook presents fifteen indicators of socioeconomic status for all American Indians residing on reservations and in designated Indian “statistical areas” in the lower forty-eight states.⁹ It compares the status of American Indians in these areas

with that of the United States population of all races at both the 1990 and 2000 Censuses. Thus, it allows a before-and-after picture of the 1990s and an assessment of whether, and the extent to which, Indians have caught up (or not) to overall U.S. measures of well-being.¹⁰

The resulting picture is like the proverbial half-full/half-empty glass. On the positive side, the Indian population on reservations grew by a quarter over the decade (see AMERICAN INDIAN POPULATION) and, at the same time, inflation-adjusted income per reservation resident Indian grew by about a third. This growth in reservation residents' per capita income was approximately three times the growth experienced by the average U.S. citizen (see REAL PER CAPITA INCOME, Outside Oklahoma Statistical Areas). This is striking because it occurred despite disproportionately low levels of per capita federal spending directed toward Indian citizens and despite the stagnation of federal spending on Indian populations over the last two decades.¹¹ Indian income gains in the 1990s also come after the 1980s, a decade in which real per capita income for Indians on reservations had *declined* by eight percent (see REAL PER CAPITA INCOME: 1970-2000).

The picture of positive change is confirmed across a number of other Census indicators. REAL MEDIAN HOUSEHOLD INCOME growth in all Indian areas (i.e., reservations and Indian statistical areas – see below) was more than six times the U.S. growth rate. While Indian LABOR FORCE PARTICIPATION was little changed, Indian UNEMPLOYMENT was down about five percentage points on reservations with gaming, and down about two-and-a-half percentage points on reservations without gaming. Indian FAMILY POVERTY was down by at least percentage seven points. Indian HOMES LACKING COMPLETE PLUMBING were down by a quarter or more; and the percent of COLLEGE GRADUATES rose by two or three percentage points for all Indian areas.

What about the changes due to the introduction of gaming? The ideal answer hinges on knowing what would have happened in gaming areas *but for the introduction of gaming*. However, to know for certain would require a rerun of the 1990s as if gaming had not taken place. In lieu of that daunting experiment, a comparison of Indian areas that did and did not experience the

introduction of a tribal casino is a good starting point for analysis.¹²

Two features of Indian census geography confound the seemingly straightforward task of comparing gaming and non-gaming tribes. First, most Oklahoma Indians do not live on reservations *per se*, but live instead within what the Census Bureau calls Oklahoma Tribal Statistical Areas (OTSA). Because these areas correspond to the historic, but now defunct, reservations of the Oklahoma Indian Territory, OTSAs encompass the vast majority of the State—including downtown Tulsa. Thus, Oklahoma tribes' governmental powers and the socioeconomic conditions in the "Indian areas" of Oklahoma often bear a closer resemblance to, say, downtown Duluth (in the case of Indians living in Tulsa) or rural Missouri (a state with no reservations) than they do to the prototypical Crow, Gila River, or Pine Ridge reservations. These features of OTSAs thereby imply that observations of "Indian" socioeconomic change within them reflect the changing socioeconomic conditions of the state itself to a larger degree than on most Indian reservations.¹³

Second, the size of the Navajo Nation, which did not have gaming in the 1990s, tends to pull all averages with it. The on-reservation population of the Nation (175,000 in 2000) is twelve times that of the next largest reservation and nearly three times the combined Indian populations of the other reservations that did not have gaming by decade's end. As a result, comparisons of gaming reservations with *all* non-gaming reservations tend to be dominated by conditions in the Navajo Nation.

In recognition of the differences between OTSAs and reservations, and between the Navajo Nation and other reservations, this databook presents data summaries that both include and exclude the OTSAs and the Navajo Nation. The dedicated reader can explore the full complement of comparisons.¹⁴ The table below summarizes the comparisons for *reservations* (i.e., not OTSAs) other than Navajo that did and did not experience gaming in the 1990s.

CHANGES ON RESERVATIONS OTHER THAN NAVAJO
(Changes 1990–2000 presented in points unless indicated as %; OTSAs excluded)

	Non- Gaming	Gaming	U.S.
Real per capita income	+21%	+36%	+11%
Median household income	+14%	+35%	+4%
Family poverty	-6.9	-11.8	-0.8
Child poverty	-8.1	-11.6	-1.7
Deep poverty	-1.4	-3.4	-0.4
Public assistance	+0.7	-1.6	+0.3
Unemployment	-1.8	-4.8	-0.5
Labor force participation	-1.6	+1.6	-1.3
Overcrowded homes	-1.3	-0.1	+1.1
Homes lacking complete plumbing	-4.6	-3.3	-0.1
Homes lacking complete kitchen	+1.3	-0.6	+0.2
College graduates	+1.7	+2.6	+4.2
High school or equivalency only	-0.3	+1.8	-1.4
Less than 9th grade education	-5.5	-6.3	-2.8

The results are remarkable. In all but two categories, Census-measured socioeconomic improvement is greater for gaming reservations than for non-gaming reservations.¹⁵ At the same time, the measures also indicate substantial improvement for the latter, especially when compared against the changes experienced by the U.S. population overall. Indeed, the progress evident among *non-gaming* tribes in the 1990s suggests that it is not so much gaming that is driving the socioeconomic changes evident across Indian America as it is a broader policy of Indian self-government. Jurisdiction over the gaming choice is part, but hardly the entirety, of that policy.

Prior research repeatedly indicates that devolution of powers of self-rule to tribes can bring, and has brought, improvements in program efficiency, enterprise competency, and socioeconomic conditions.¹⁶ The reasons are to be found in the fact that self-rule brings decision making home, and local decision makers are held more accountable to local needs, conditions, and cultures than outsiders. On the other hand, prior to the present era of Indian self-determination, decades of distant decision making by federal and state authorities accountable to non-Indian constituents and masters had shown little discernable ability to break repeated patterns of poverty and social disarray.¹⁷

Notwithstanding evident socioeconomic improvement in Indian Country between 1990 and 2000, the glass is also half-empty. The Census data make it clear that, on average, Indians on both gaming and non-gaming reservations have a long way to go to with respect to addressing the accumulation of long-enduring socioeconomic deficits in Indian Country. Across many indicators—even those displaying remarkable improvement—the gap remained large in the 2000 Census: REAL PER CAPITA INCOME of Indians living in Indian Country was less than half the U.S. level; REAL MEDIAN HOUSEHOLD INCOME of Indian families was little more than half the U.S. level; Indian UNEMPLOYMENT was more than twice the U.S. rate; Indian FAMILY POVERTY was three times the U.S. rate; the share of Indian HOMES LACKING COMPLETE PLUMBING was substantially higher than the U.S. overall level; and the proportion of Indian adults who were COLLEGE GRADUATES was half the proportion for the U.S. as a whole.

In sum, the gains made by the tribes in the 1990s did not eliminate the socioeconomic disparities between Indian Americans and other Americans. Much remains to be done to close the gap: If U.S. and on-reservation Indian per capita incomes were to continue to grow at their 1990s' rates, it would take half a century for tribes to catch up.

More critically, the reality of falling real incomes and worsening socioeconomic conditions on reservations during the 1980s are testament to the vulnerability of the gains made in the 1990s. Solidification and extension of the gains of the 1990s will require steady hands on the policies of self-determination in the decades to come. Without that—or worse, under policies that actually erode tribal powers essential to self-government—the gains in Indian Country could easily be reversed. Such a reversal would dash prospects for socioeconomic progress in Indian Country and would increase demands that federal and state governments address the problems of reservation poverty. That would be a losing proposition for all.

Jonathan B. Taylor
Joseph P. Kalt
Cambridge, Massachusetts
January 2005

NOTES TO THE FIGURES

Unless otherwise noted, the data in this databook refer to American Indian and Alaska Native (AIAN) people that designate AIAN alone and not in combination with another race (hereinafter “Indians”) while residing on federally recognized reservations and trust lands (“reservations”) or within tribal designated statistical areas (taken together with “reservations” as “Indian areas”).

DEEP POVERTY, PUBLIC ASSISTANCE, GOVERNMENT AND NON-PROFIT SECTOR, OVERCROWDED HOUSING, and HOMES LACKING COMPLETE KITCHEN cover *all races* due to data limitations.

Populations are classified by whether or not the Indian area in question belonged to a tribe operating a gaming facility on or before January 1, 2000.¹⁸

Unless otherwise noted, Native people living in Alaska and Hawaii are excluded.

The graphs present the aggregate averages for all the Indians in the named categories in the identified areas. The populations are aggregated together to report population-weighted average values for individuals residing in Indian areas. In focusing on averages of individuals, this approach treats Indian areas containing large Indian populations with more weight than areas with small populations, and extreme values for small numbers of Indians cannot unduly sway the averages.

Dollars are in 1999 inflation-adjusted dollars.¹⁹

Unless otherwise noted, all material is derived from the U.S. Census Summary File 3 (for 2000) and Summary Tape File 3 (for 1990) as reported in Geolytics (2000a, 2000b).

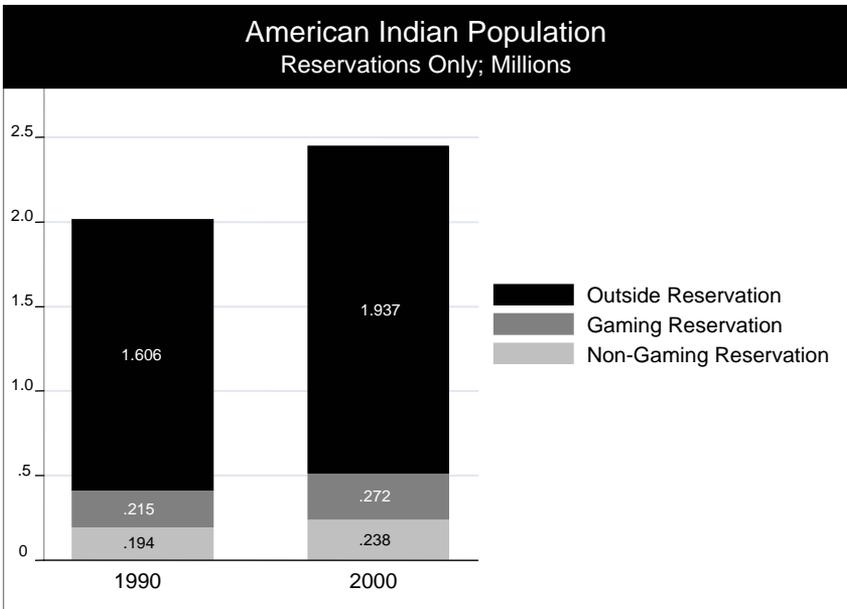
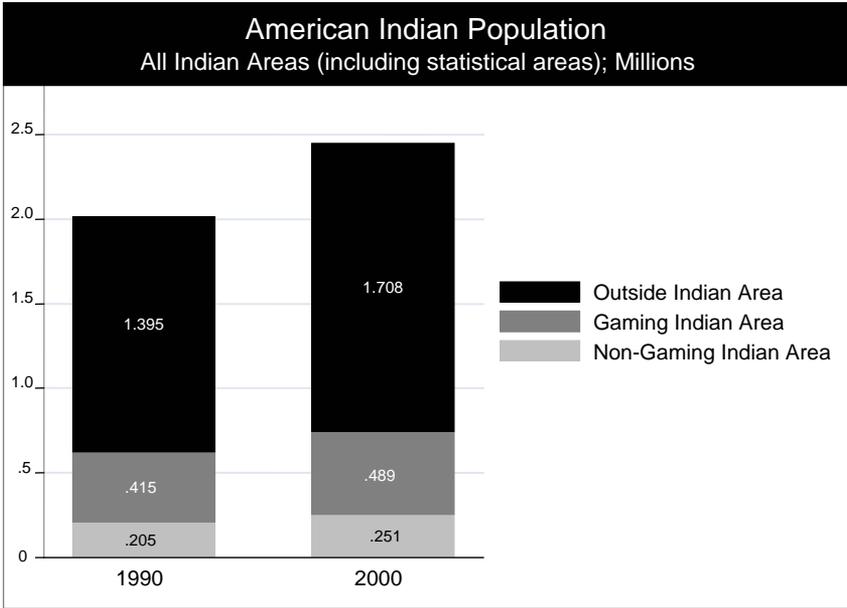
POPULATION

AMERICAN INDIAN POPULATION

◆ **Results:** In 2000, 511,000 people living on reservations in the lower forty-eight states identified themselves as single-race American Indians or Alaska Natives, up 25% from a decade earlier.²⁰ An additional 97,000 single-race Indians lived in Alaska, 3,000 in Hawaii, and 229,000 in designated Indian statistical areas.²¹ The remaining 1.6 million lived outside Indian areas in the lower forty-eight states, for an off-reservation total of 1.9 million and a U.S. total of 2.4 million.²²

◆ **Significance:** The Indian population did not shrink nor was it absorbed into the larger population: it grew over the decade on and off the reservations by 25% and 21%, respectively. Thus, the relative socioeconomic status of Indians grew in policy salience rather than diminishing.

◆ **Data Notes:** Generally, the multiple race categories introduced in the 2000 Census complicate comparisons of 1990 and 2000 data. However, the comparison is relatively straightforward in most Indian areas. For example, adding people reporting AIAN in combination with other races to reservation totals changes the count by only 2%. The data for these figures are for all fifty states.



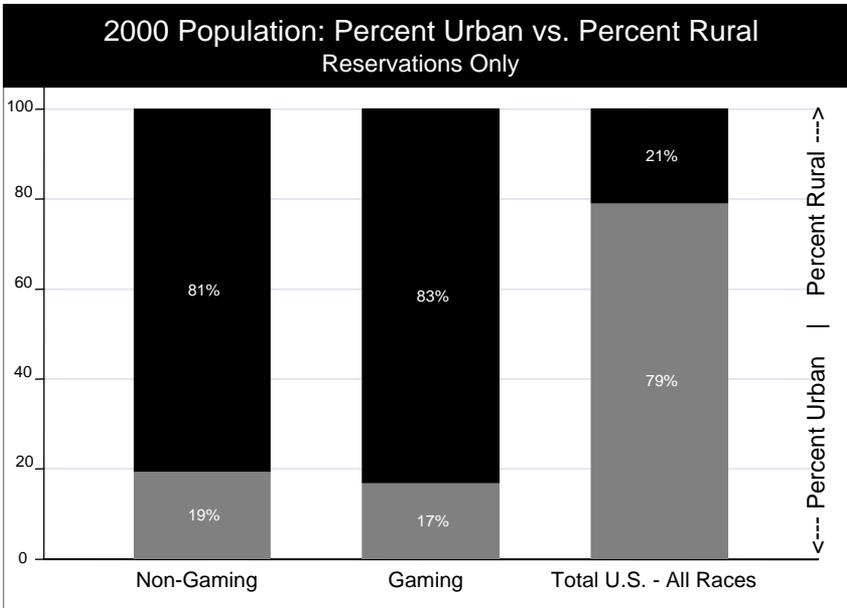
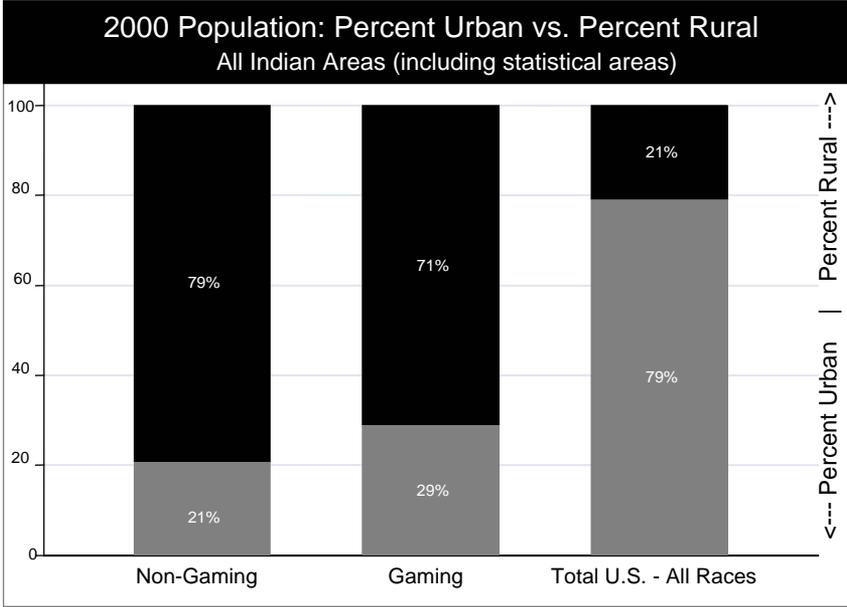
POPULATION

PERCENT URBAN AND RURAL

◆ **Results:** Indians on reservations and in designated Indian statistical areas (OTSAs and TDSAs) were more likely to live in rural areas than Americans generally. The relative proportions that lived in urban and rural settings were roughly inverted from the U.S. average.

◆ **Significance:** Urban regions correlate with diversity of economic opportunity and access to consumer markets. Indians in rural areas are subject to the risk of being dependent upon fewer economic sectors, and rural reservation businesses face the disadvantage of smaller consumer markets. Moreover, access to urban markets plays a critical role in determining the financial and employment success of Indian ventures, especially for gaming.²³

◆ **Data Notes:** Under Census methodology, blocks and block groups that have a density of 1,000 people per sq. mi. or more, and adjacent blocks and block groups with densities greater than 500 are considered urban.²⁴ Data in these figures are from Census Summary File 4.



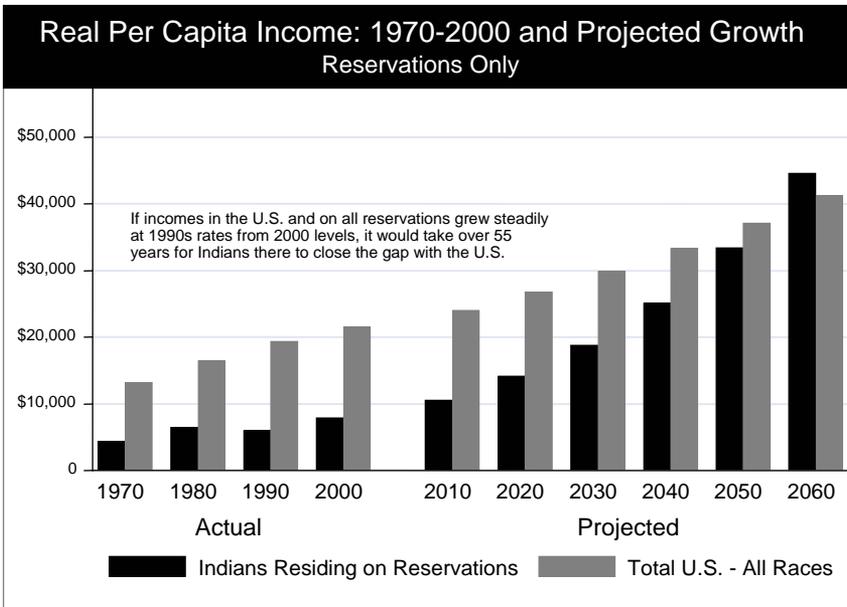
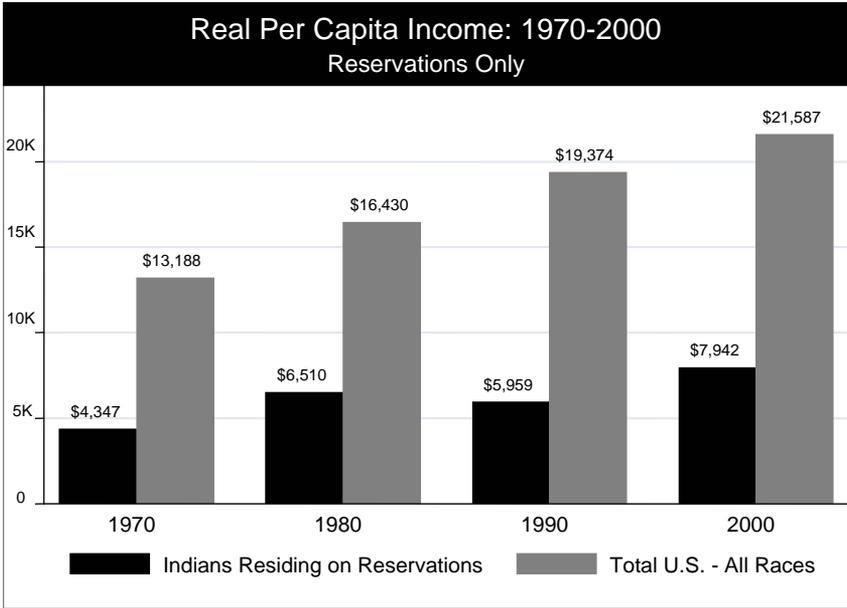
INCOME

REAL PER CAPITA INCOME: 1970-2000

◆ **Results:** Over thirty years, the inflation-adjusted per capita income of Indians living on reservations grew by 83% (compared to 64% for the U.S. population as a whole). The gain in real per capita income over the 1990s (33%) compares favorably with a *decline* in the prior decade (-8%), yet it is lower than the growth in the 1970s (49%). Despite recent gains, reservation-based Indians' per capita incomes remained little more than one third of the U.S. average. Even if incomes were to grow steadily at their 1990s pace henceforward, the gap would not close for 55 years.

◆ **Significance:** The growth in reservation Indians' real per capita incomes in the 1970s was associated with increases in federal spending, and the relative stagnation in the 1980s was associated with precipitous declines in the same.²⁵ Federal spending on a number of major Indian programs has been in stagnation since.²⁶ Thus, the growth of Indian incomes in the 1990s is reasonably attributed to the economic successes arising out of greater self-determination.²⁷

◆ **Data Notes:** The trend displayed here does not arise from the addition of new reservations.²⁸



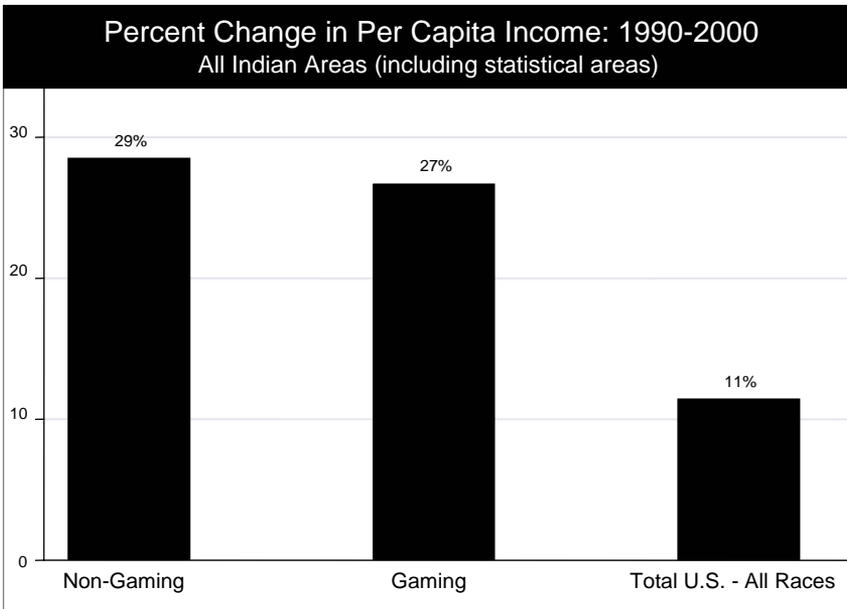
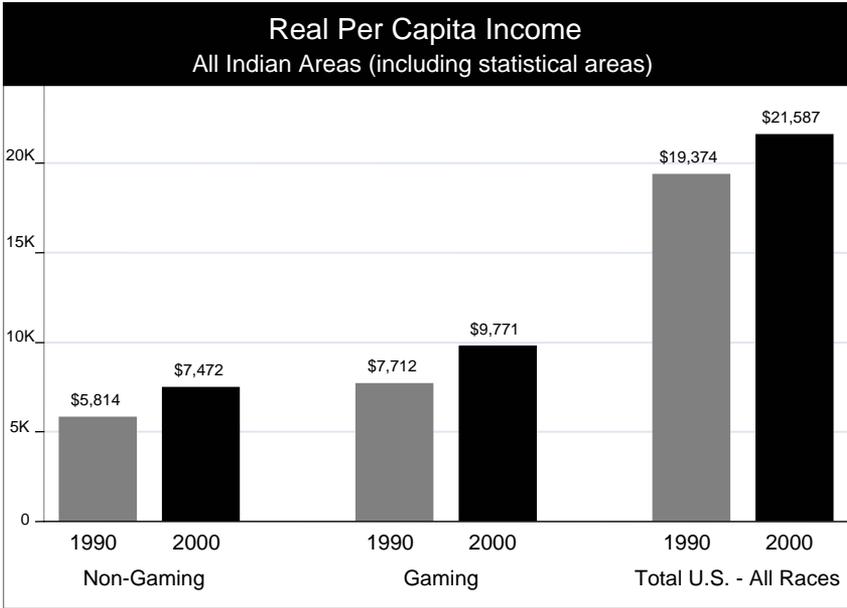
INCOME

REAL PER CAPITA INCOME

◆ **Results:** Over the decade, inflation-adjusted per capita income grew two-and-a-half times faster for Indians in Indian areas than for the U.S. population at large.²⁹ Nonetheless, substantial gaps remained: Indians in Indian areas without gaming had per capita incomes that were 35% of the U.S. average, and Indians in Indian areas with gaming had per capita incomes that were 45% of the U.S. average.

◆ **Significance:** Per capita income is a measure of average individual economic well-being. Since it is also a major component of gross regional product (U.S. GDP is 85% per capita income),³⁰ its changes stand as a reasonable proxy for broader economic growth in Indian areas.

◆ **Data Notes:** Per capita income is aggregate inflation-adjusted income (from wages, salary, self-employment, farming, investments, public assistance, and other regularly received income such as Veteran's payments and alimony) divided by the aggregate Indian population of all ages.



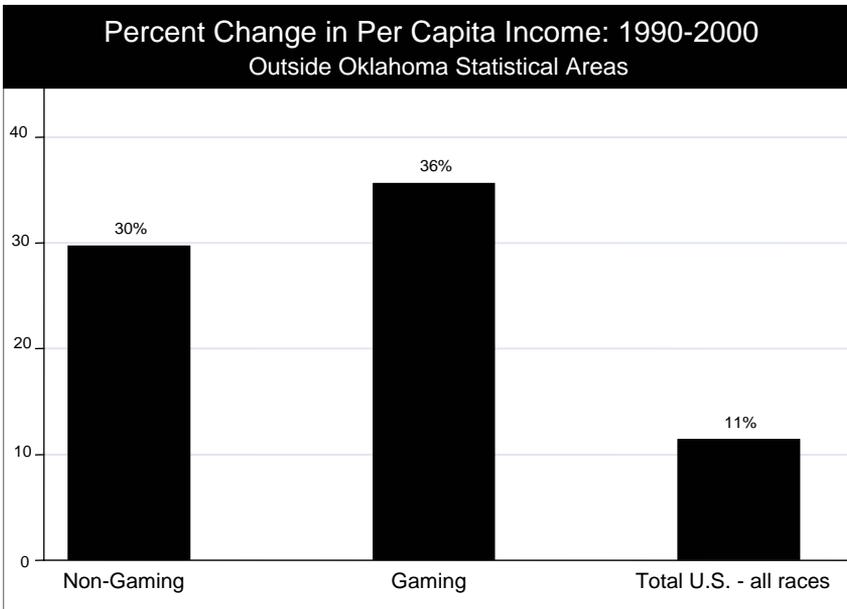
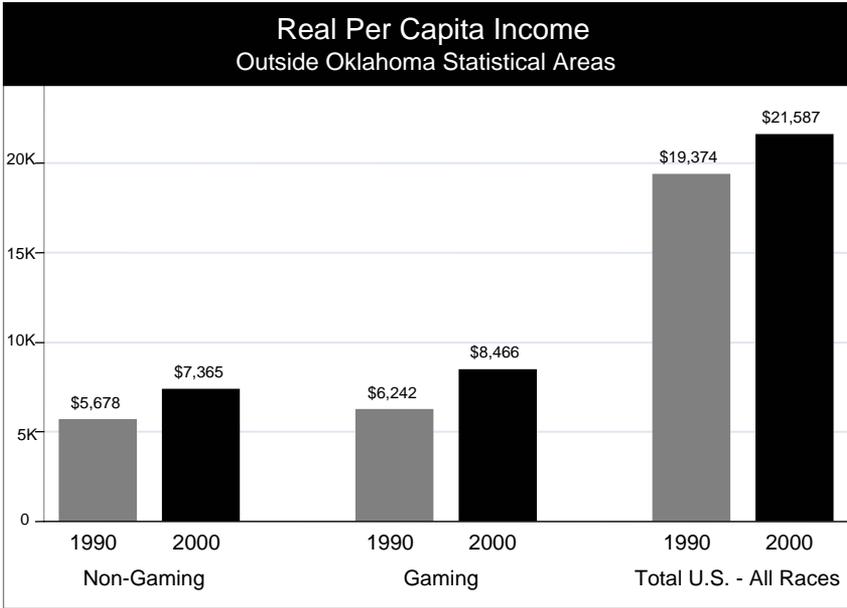
INCOME

REAL PER CAPITA INCOME OUTSIDE OKLAHOMA TRIBAL STATISTICAL AREAS

◆ **Results:** The graphs on the facing page decompose the graphs of the previous page by excluding OTSAs, which correspond to historic rather than actual reservations. In this view of the data, Indians' per capita income levels are somewhat decreased, yet the growth rate of gaming areas is notably higher. Apart from differential growth rates, the relative results remain roughly the same: Indians living on reservations with gaming displayed higher incomes than on reservations without, and both lagged well behind the U.S. average.³¹

◆ **Significance:** Because OTSAs include nearly the entire state of Oklahoma (and some urban areas), statistics for the OTSAs reflect the conditions in the broader state economy to a degree not typically experienced on reservations. Thus, excluding OTSAs focuses attention on reservation conditions per se. [As noted in the INTRODUCTION, the Navajo Nation heavily influences this picture and the next pages address that issue.]

◆ **Data Notes:** All Indian areas except OTSAs are included. Accordingly the sole Oklahoma reservation—Osage—is included.



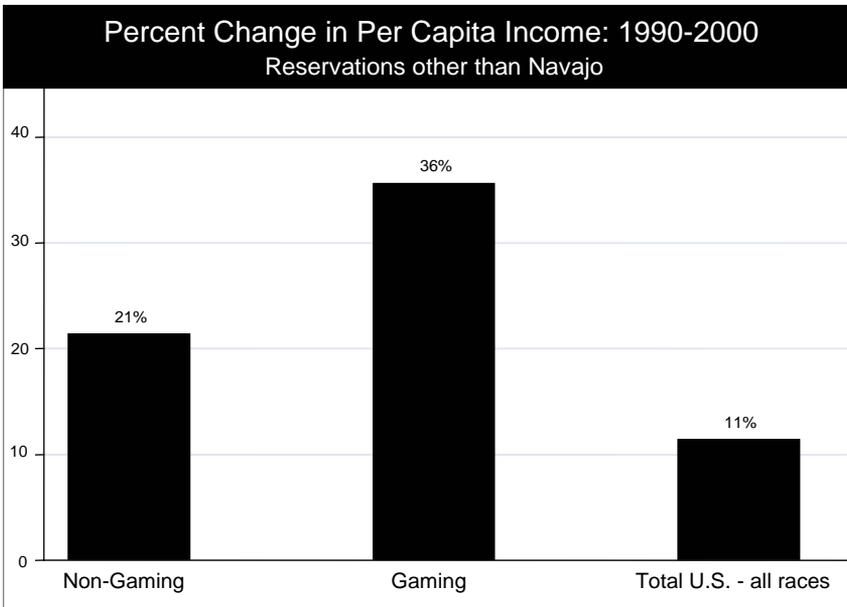
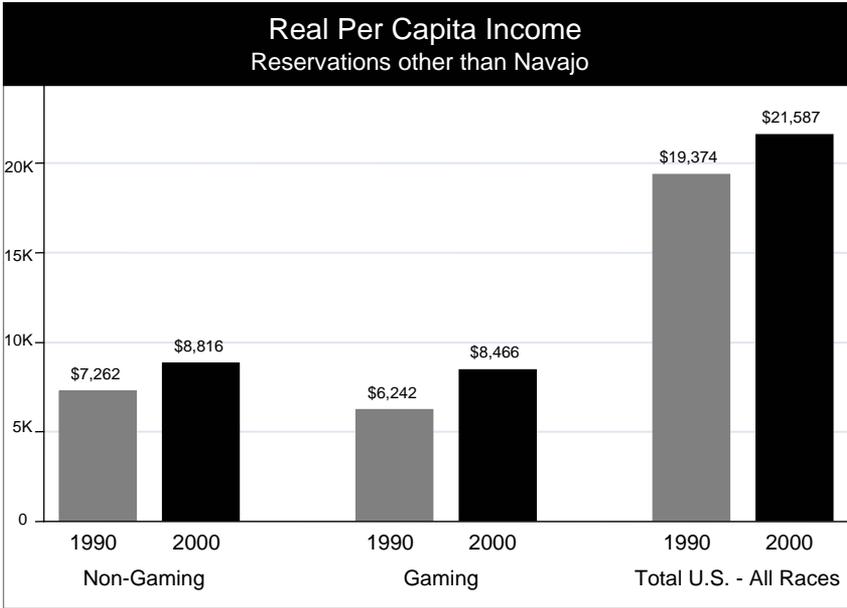
INCOME

REAL PER CAPITA INCOME ON RESERVATIONS OTHER THAN NAVAJO

◆ **Results:** The graphs on the facing page are for reservations only, excluding the Navajo Reservation.³² On average, across all reservations where tribes had had gaming, Indian incomes grew by 36%—three times the national average. Income growth of 21% for Indians that lived neither on the Navajo Reservation nor on reservations where gaming was introduced averaged nearly twice the national rate.³³

◆ **Significance:** While the growth rates here and in the preceding two income charts are large relative to the U.S. growth rate, Indians cannot hope to close the income gap in a meaningfully short time frame. Starting at 2000 levels and at sustained 1990s growth rates, it would take about half a century to do so (see REAL PER CAPITA INCOME: 1970-2000).

◆ **Data notes:** In 2000, 175,000 Indians lived on the Navajo Reservation, nearly three times the number living on all other reservations without gaming. The figures here leave Navajo out and thereby keep its large population from dominating the non-gaming averages.



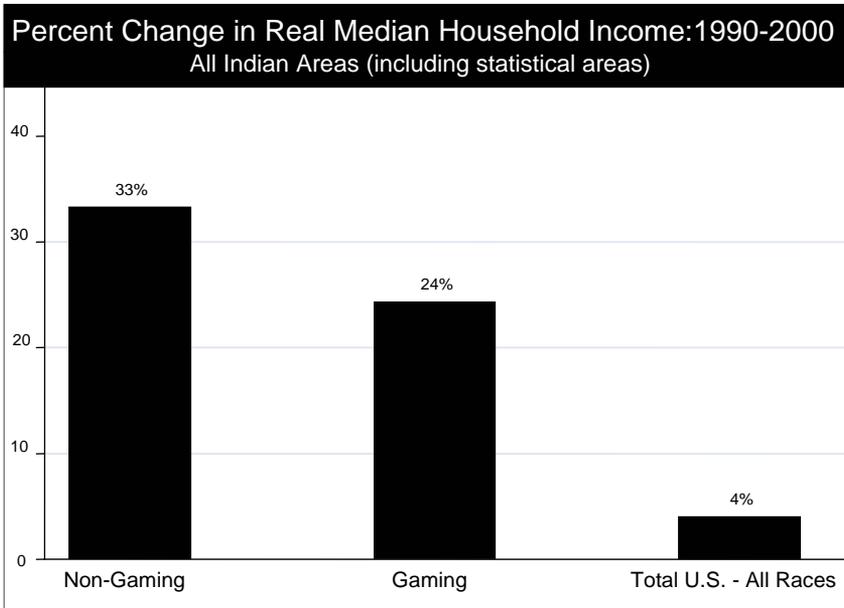
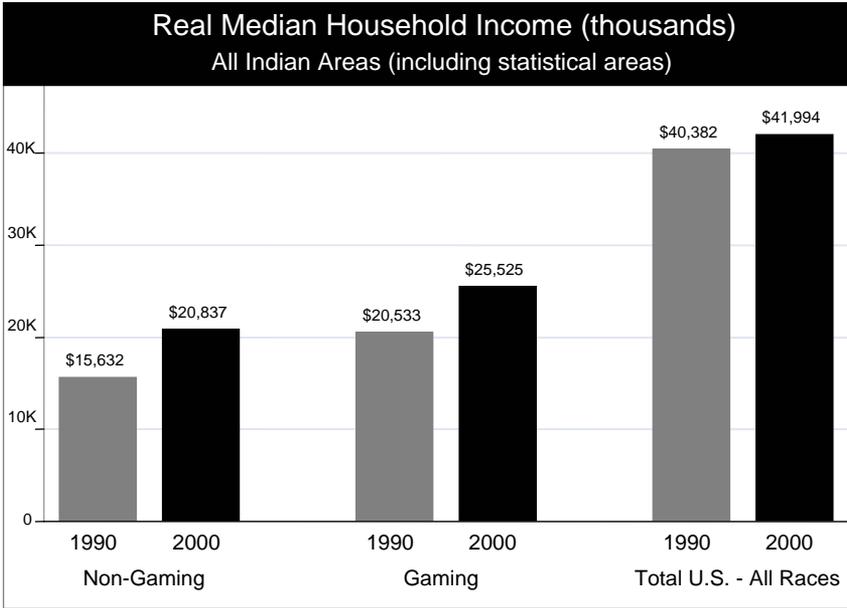
INCOME

REAL MEDIAN HOUSEHOLD INCOME

◆ **Results:** Indian households in Indian areas closed some of the gap with the U.S. median over the decade, experiencing more than six times the growth in inflation-adjusted median household income that the U.S. did. Nonetheless, the real median household income of Indians living in Indian areas remained little more than half of the U.S. level.

◆ **Significance:** As with REAL PER CAPITA INCOME above, median household income reflects a measure of economic well-being. However, here the data are expressed for households rather than for individuals. Given that the poverty line for a family of two adults and two children was \$16,895 in 2000, these medians are strikingly low (see FAMILY POVERTY).

◆ **Data Notes:** Median household income is that level of income at which half of the households in the measurement area have incomes above the level and half below it. Because incomes can reach very high levels in some populations and thereby skew average or per capita figures, social science often relies on medians to indicate the position of a “typical” member of a group.³⁴



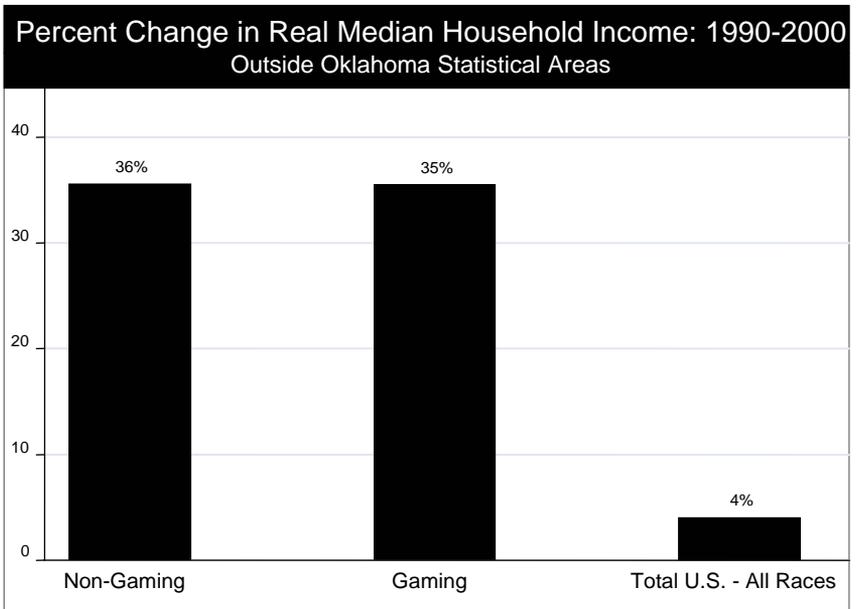
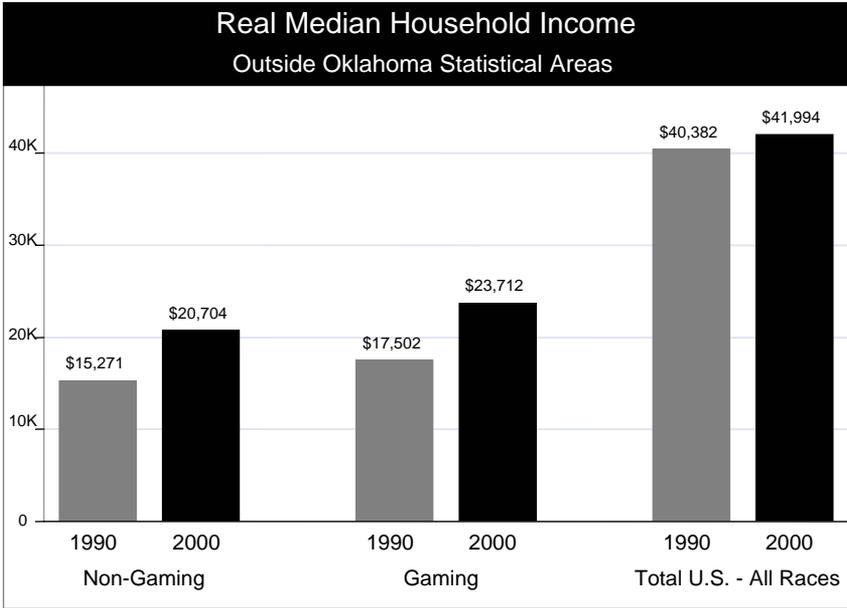
INCOME

REAL MEDIAN HOUSEHOLD INCOME OUTSIDE OKLAHOMA TRIBAL STATISTICAL AREAS

◆ **Results:** The graphs on the facing page decompose the median graphs from the previous page by excluding Oklahoma tribal statistical areas. They show that the median household incomes of Indians living on reservations (i.e., excluding OTSAs) are lower than for all Indian areas generally (p. 15) and that the growth of household median incomes in gaming areas is about the same as in non-gaming areas.

◆ **Significance:** Again, because OTSAs include nearly the entire state of Oklahoma (and some urban areas), statistics for the OTSAs reflect the opportunities in the broader state economy to an atypical degree. The figures on the facing page focus attention on reservations alone, albeit leaving the non-gaming reservation picture heavily influenced by the Navajo Reservation (as noted above).

◆ **Data Notes:** As before, data are for all Indian areas except OTSAs, and the sole Oklahoma reservation—Osage—is included.



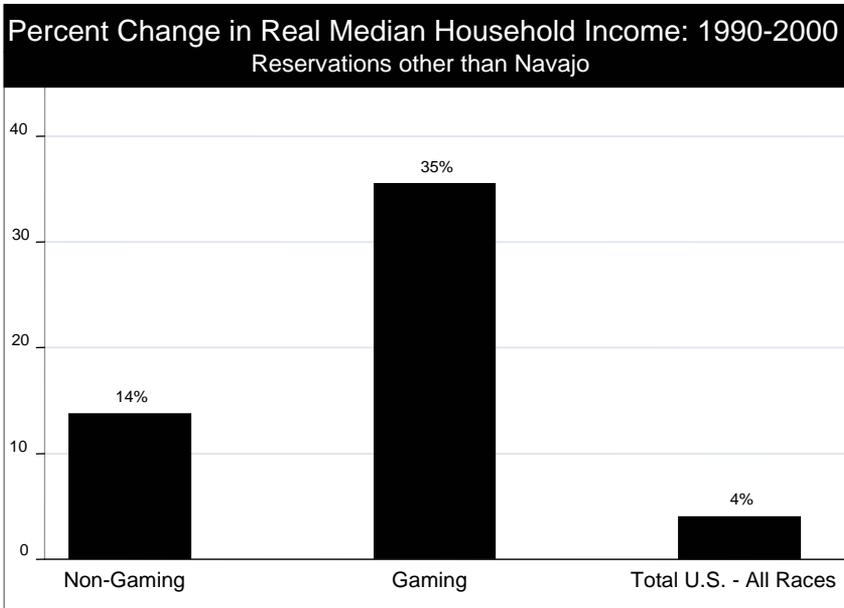
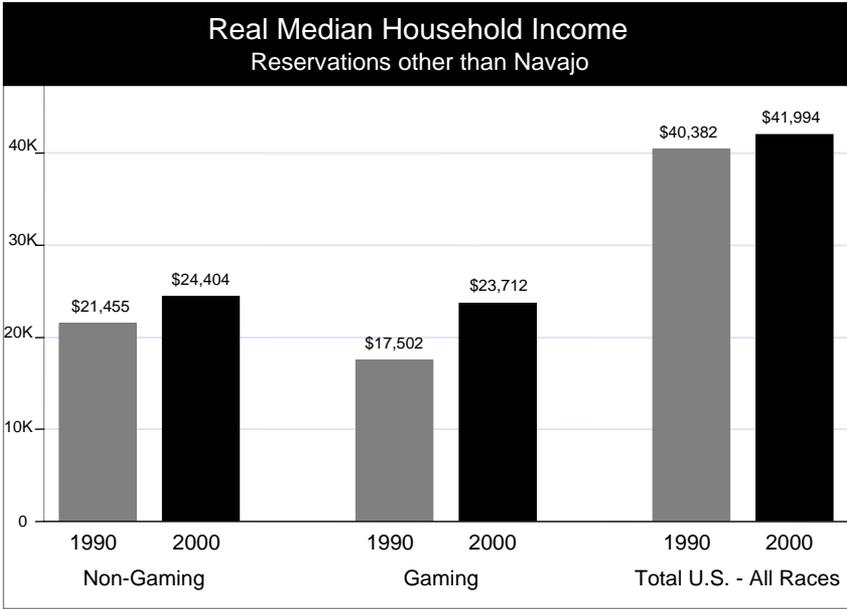
INCOME

REAL MEDIAN HOUSEHOLD INCOME ON RESERVATIONS OTHER THAN NAVAJO

◆ **Results:** On average, across all reservations where tribes had developed gaming by year-end 1999, the real median household Indian income grew by 35%, more than eight-times the national pace. For the 64,000 Indians that lived neither on the Navajo Reservation nor on reservations where gaming was introduced, the growth rate was more than twice the national average, but a much more modest 14%.

◆ **Significance:** The substantially higher growth rates experienced by Indians in the 1990s indicate that median household income in Indian Country was closing the gap with U.S. median household income. The gap at the start of the decade, however, was so large that fully eliminating the Indian-U.S. difference would take a very long time at 1990-2000 growth rates.

◆ **Data Notes:** As with REAL PER CAPITA INCOME ON RESERVATIONS OTHER THAN THE NAVAJO RESERVATION, the figures on the right leave Navajo out to prevent the large Navajo population from dominating the non-gaming averages.



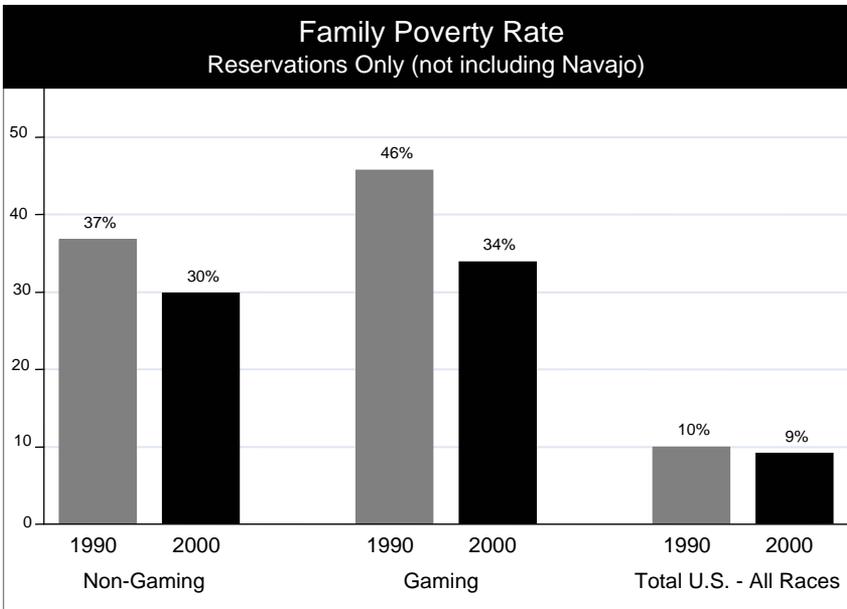
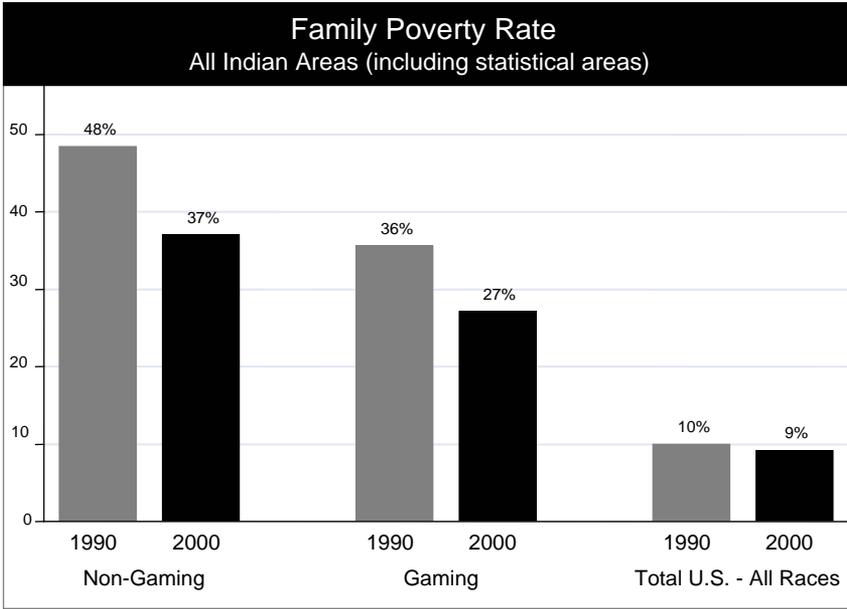
INCOME

FAMILY POVERTY

◆ **Results:** From the 1990 to the 2000 Census, the family poverty rate for Indians fell substantially. Nonetheless, the family poverty rate for Indians remains at three times the U.S. average.

◆ **Significance:** The poverty thresholds are not intended as a “description of what...families need to live.”³⁵ Some believe that the poverty line should be higher than it is.³⁶ If so, these rates understate Indian economic hardship, particularly given the low medians observed above.

◆ **Data Notes:** This rate is the proportion of families falling below the income threshold for their particular family type (e.g., \$16,895 in 2000 for a family of two adults and two children). Note here and below that the juxtaposition of graphs for *All Indian Areas* and *Reservations other than Navajo* allows some comparison of the effect of removing OTSAs from the picture (mostly moves the red bars per endnote 31) and of removing the Navajo Nation (moves the blue bars per endnote 32).



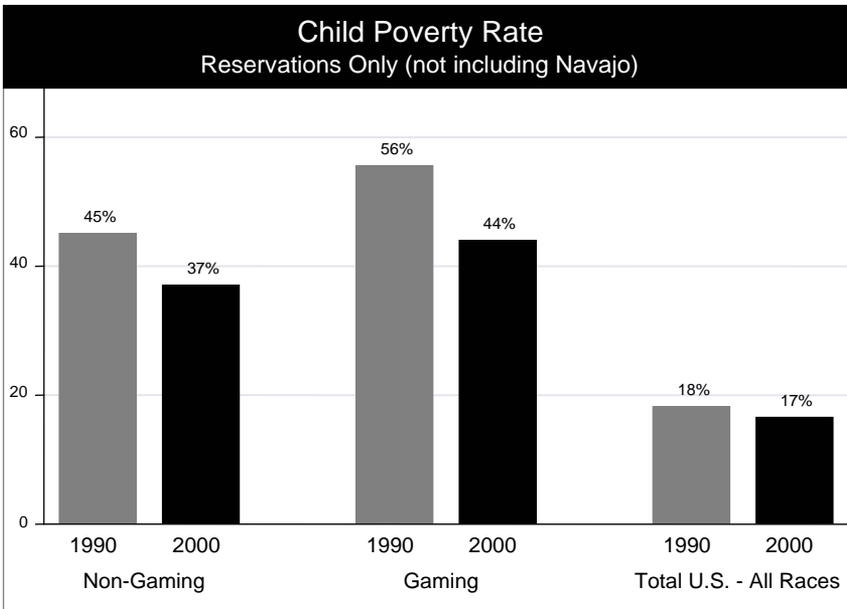
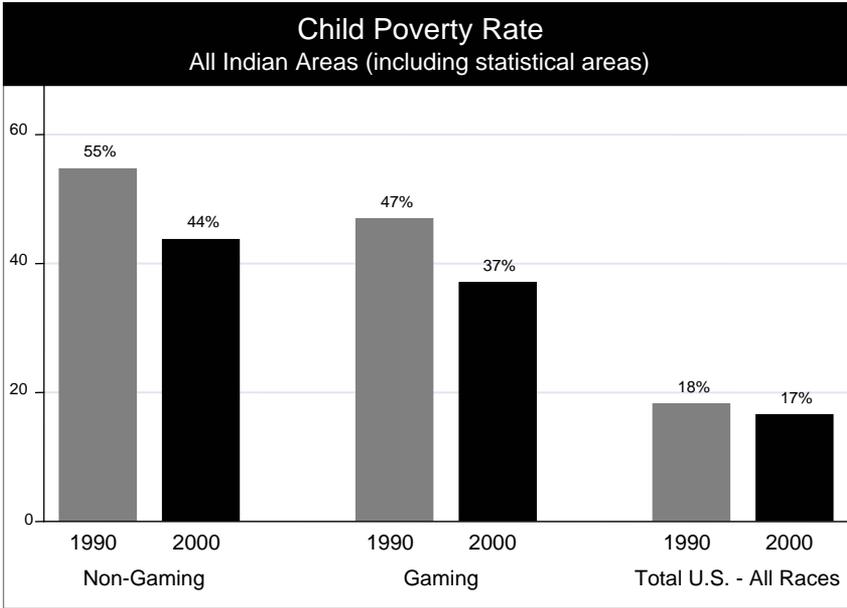
INCOME

CHILD POVERTY

◆ **Results:** The child poverty trends on the facing page mimic those on the previous page for family poverty, yet at higher levels. From the 1990 to the 2000 Census, the child poverty rate for Indians fell substantially. Nonetheless, the child poverty rate for Indians remained more than two times the U.S. average in 2000.

◆ **Significance:** Reductions in family poverty resulting from Indian gaming have been directly associated with declines in child mental disorders.³⁷ And given that poverty thresholds may well understate economic hardship (per the discussion in FAMILY POVERTY), the figures here are cause for concern.

◆ **Data Notes:** The child poverty rate is the number of persons under age 18 living in families with income below the relevant poverty level divided by the number of persons under 18 for whom poverty status is determined.



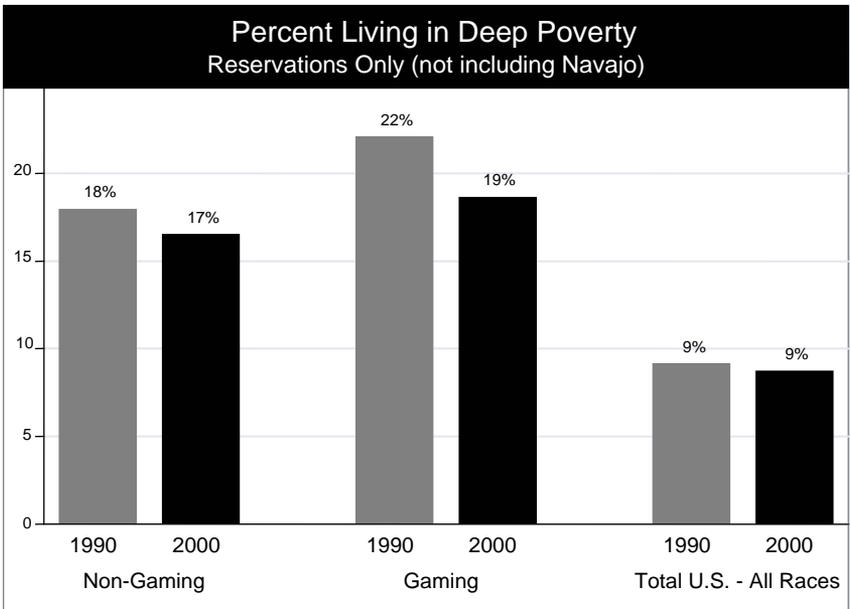
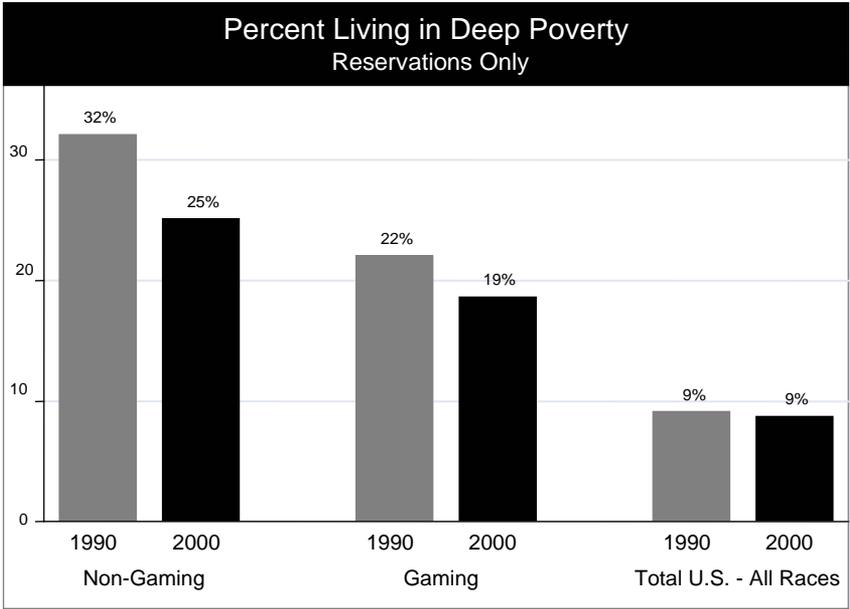
INCOME

DEEP POVERTY

◆ **Results:** The proportion of people of all races living in “deep poverty”—at less than 75% of the poverty level—is declining on reservations. Yet reservation residents of all races experienced deep poverty at about twice the U.S. rate or more.

◆ **Significance:** Given that this is the all races rate and that Indians on reservations experience lower incomes than non-Indians living on reservations,³⁸ the actual picture of deep poverty for Indians is likely worse than shown. Further, since the poverty line may not adequately capture the level of income required to live modestly (see page 20), these statistics highlight the continuing need for reservation economic growth.

◆ **Data Notes:** The proportion living in deep poverty is the all races population living at less than 75% of the poverty level divided by the population whose poverty status is determined. For this and all other all races pages, the top figure is *Reservations Only*, not *All Indian Areas*.³⁹ The inclusion of the very substantial non-Indian populations in OTSAs would make an *All Indian Areas* figure reporting all races data misleading with respect to the conditions faced by Native people.



INCOME

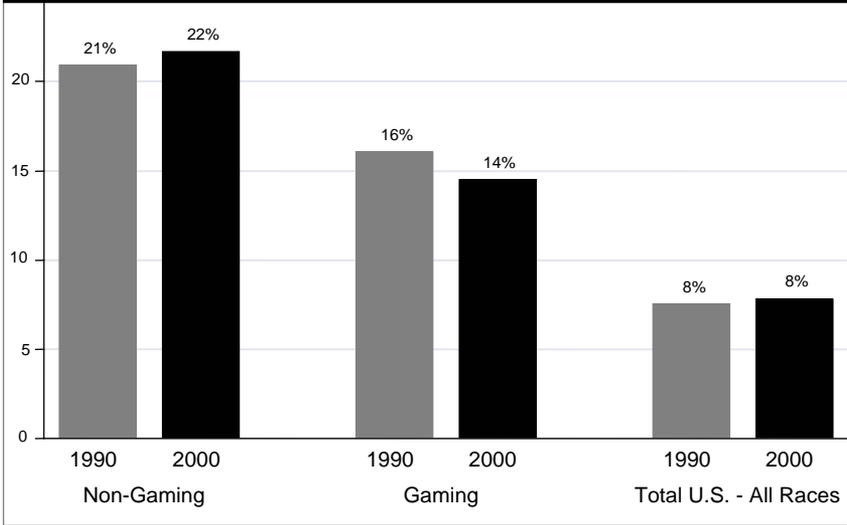
PUBLIC ASSISTANCE

◆ **Results:** More households of all races received public assistance than did a decade earlier, except in areas that had gaming. Reservation households rely on welfare more than Americans generally.

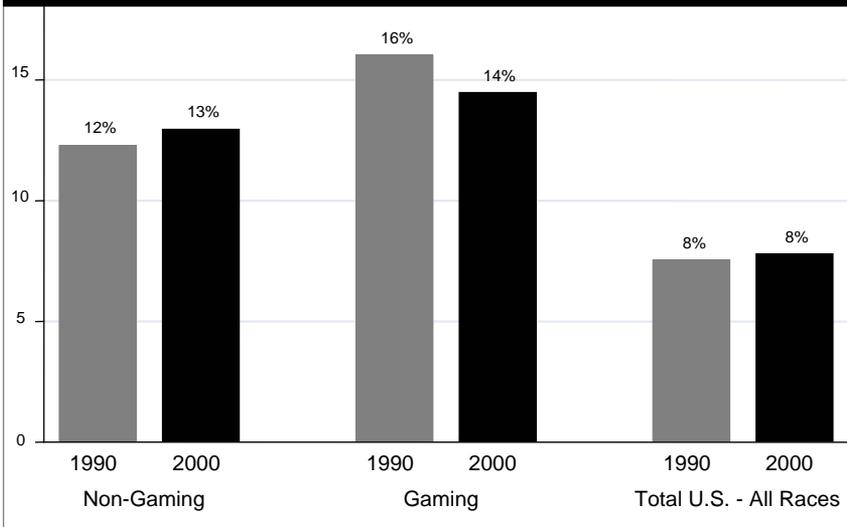
◆ **Significance:** Since this data portray people of all races, actual Indian dependence on welfare is likely worse than shown.⁴⁰ Nonetheless, the data indicate that gaming associates with declining welfare rates in Indian areas, and whether this decline is due to immigration of workers or to net decreases in welfare dependents, it indicates growing economic vitality.

◆ **Data Notes:** Census 2000 households of all races receiving either supplemental security income (SSI) or public assistance income are aggregated for comparison with the 1990 Census category “public assistance,” which included both SSI and other forms of public assistance. For this and all other all races pages, the top figure is *Reservations Only*, not *All Indian Areas*.⁴¹ The inclusion of the very substantial non-Indian populations in OTSAs would make an *All Indian Areas* figure reporting all races data misleading with respect to the conditions faced by Native people.

Percent of Households Receiving Public Assistance Income Reservations Only



Percent of Households Receiving Public Assistance Income Reservations Only (not including Navajo)



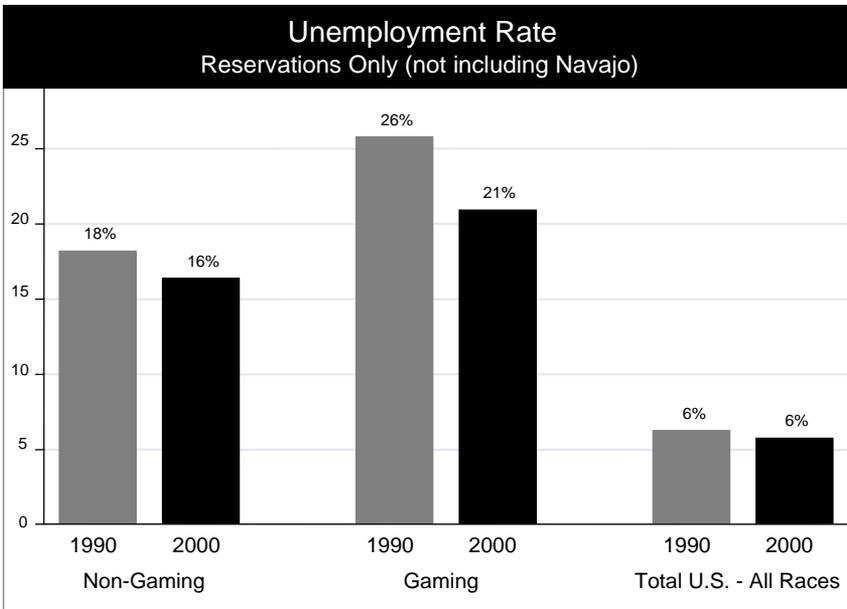
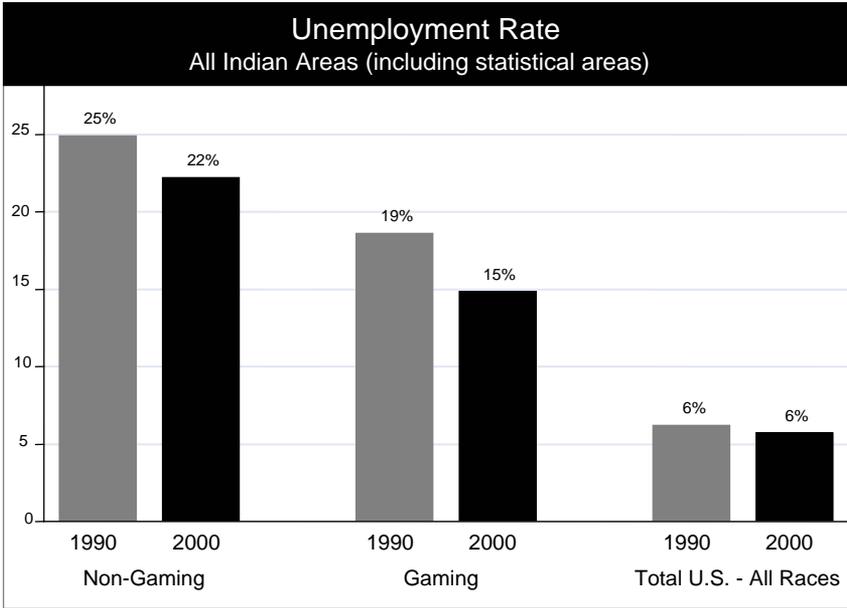
EMPLOYMENT

UNEMPLOYMENT

◆ **Results:** Unemployment declined for both gaming and non-gaming areas. Indian unemployment in Indian areas with gaming declined from 19% to 15%, but remained more than twice as high as the U.S. rate of 6%.⁴² Reservation unemployment (excluding Navajo) declined, but still substantially exceeded U.S. national levels in 2000. It was higher on reservations with gaming.

◆ **Significance:** Despite improving over the 1990s, these unemployment rates further substantiate the ongoing economic problems in Indian areas. Unemployment rates reflect those looking for work but unable to find it, and when unemployment is high, looking for work can be fruitless. Thus, actual non-employment, including those discouraged from looking for work, tends to be higher than reflected in the rates reported in the graphs (see LABOR FORCE PARTICIPATION).

◆ **Data Notes:** Civilians older than 15 are classified as *unemployed* if they are: (i) neither 'at work' nor 'with a job but not at work', and (ii) actively looking for work during the last four weeks, and (iii) available to accept a job.⁴³ The rate is people unemployed divided by the labor force.



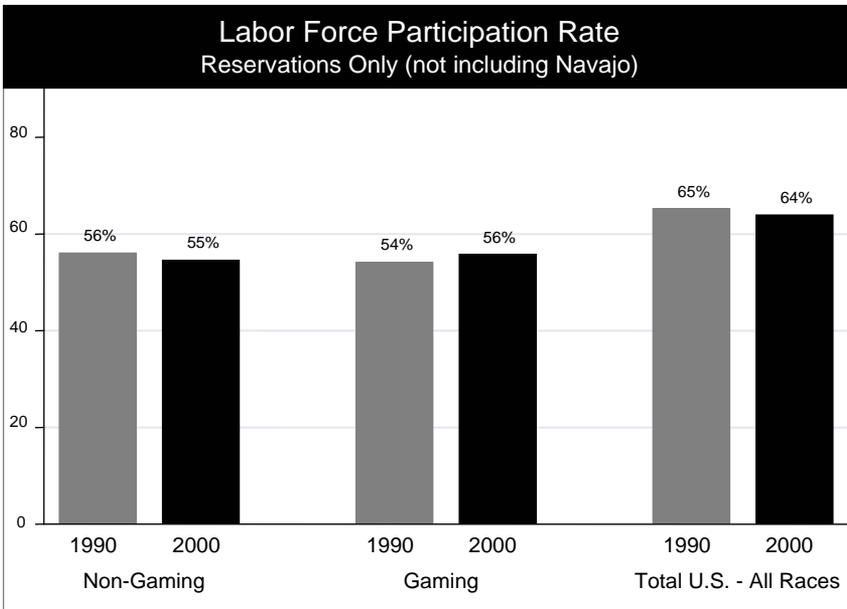
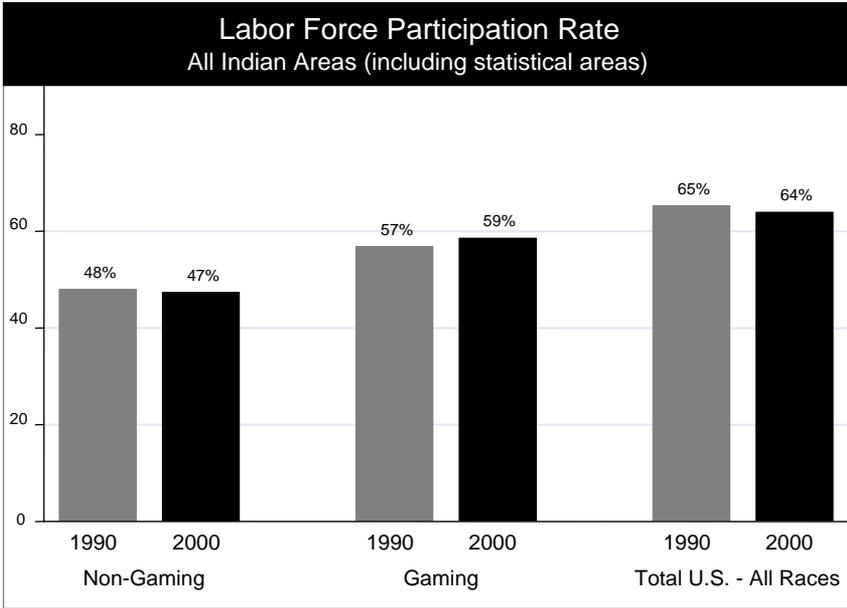
EMPLOYMENT

LABOR FORCE PARTICIPATION

◆ **Results:** The Indian labor force participation rate (LFP) has remained steady—much as it has for the U.S. Yet, the Indian LFP is still substantially below the U.S. rate.

◆ **Significance:** The LFP offers a window on those in the population who have ceased trying to find a job. The inverse of the LFP rate ($1 - \text{LFP}\%$) is the proportion of people over age 16 who are i) disabled workers, ii) discouraged workers (unemployed and *not* seeking work), or iii) other non-workers such as retirees and students. Given the economic conditions of reservations documented above, the proportion of non-working Indians who are discouraged workers is likely to be substantially higher than in the U.S. generally.

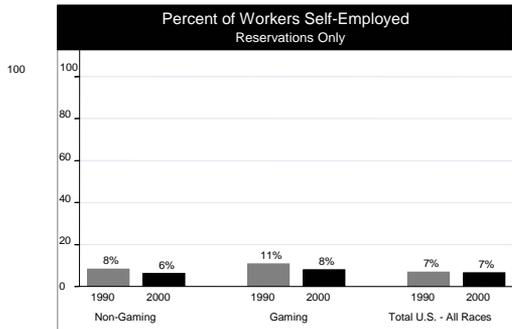
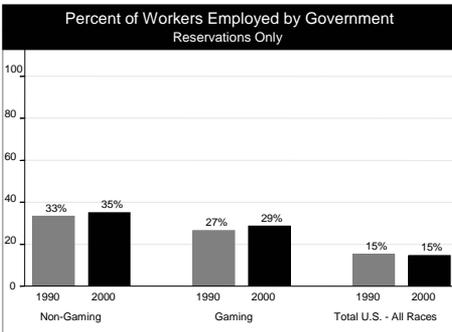
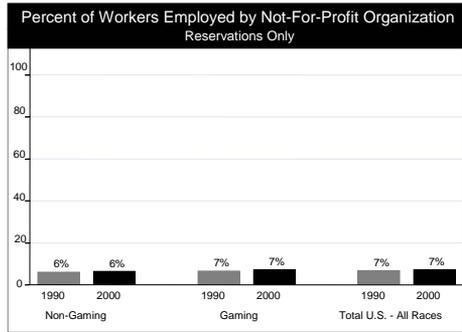
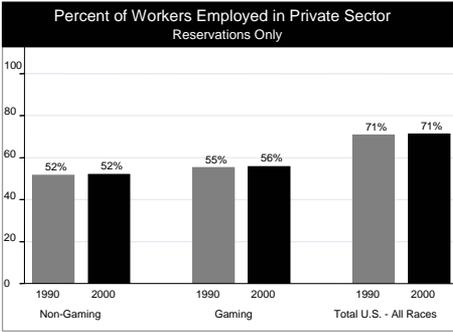
◆ **Data Notes:** The labor force includes all people classified in the civilian labor force (i.e., employed and unemployed people), plus members of the U.S. Armed Forces on active duty. The labor force participation rate is the labor force as a percent of the total population age 16 and over.



EMPLOYMENT

GOVERNMENT AND NON-PROFIT SECTOR

- ◆ **Results:** Workers of all races on reservations are less likely to be employed in the private sector than workers in the U.S. generally. Over the decade, the share of Indian workers who were self-employed fell to become more comparable to the U.S. share of self-employed workers.
- ◆ **Significance:** In the past, government work has been the predominant employment opportunity for Indians on reservations.⁴⁴ Private sector employment as a share of all jobs has been relatively constant.
- ◆ **Data Notes:** For this and all other all races pages, the figures display data for *Reservations Only*, not *All Indian Areas*.⁴⁵ The inclusion of the very substantial non-Indian populations in OTSAs would make an *All Indian Areas* figure reporting all races data misleading with respect to the conditions faced by Native people.



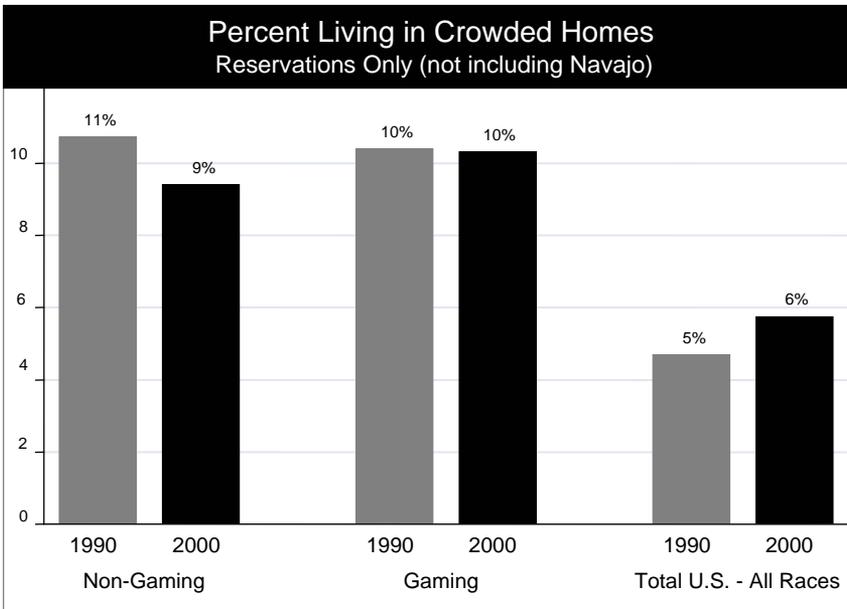
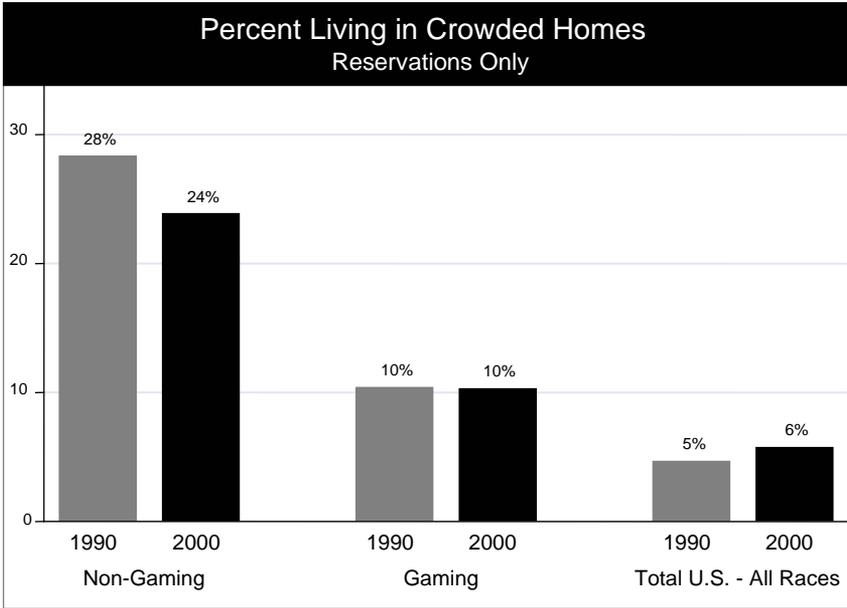
HOUSING

OVERCROWDED HOUSING

◆ **Results:** The proportion of overcrowded houses—houses with more than one occupant of *any race* per room—declined on non-gaming reservations over the decade and held steady for gaming reservations. In 2000, overcrowding rates on Indian reservations were almost double the U.S. average.

◆ **Significance:** Since the data present the all races picture and Indians have lower standards of living than non-Indians on reservations,⁴⁶ levels of overcrowding are likely more pronounced for Indians than indicated here. Overcrowding reflects inadequate housing stock and is associated with other socioeconomic distress such as substandard housing quality, infectious disease, and risk of fire fatality.⁴⁷

◆ **Data Notes:** The Census Bureau defines *overcrowded* as more than one person per room.⁴⁸ For this and all other all races pages, the top figure is *Reservations Only*, not *All Indian Areas*.⁴⁹ The inclusion of the very substantial non-Indian populations in OTSAs would make an *All Indian Areas* figure reporting all races data misleading with respect to the conditions faced by Native people.



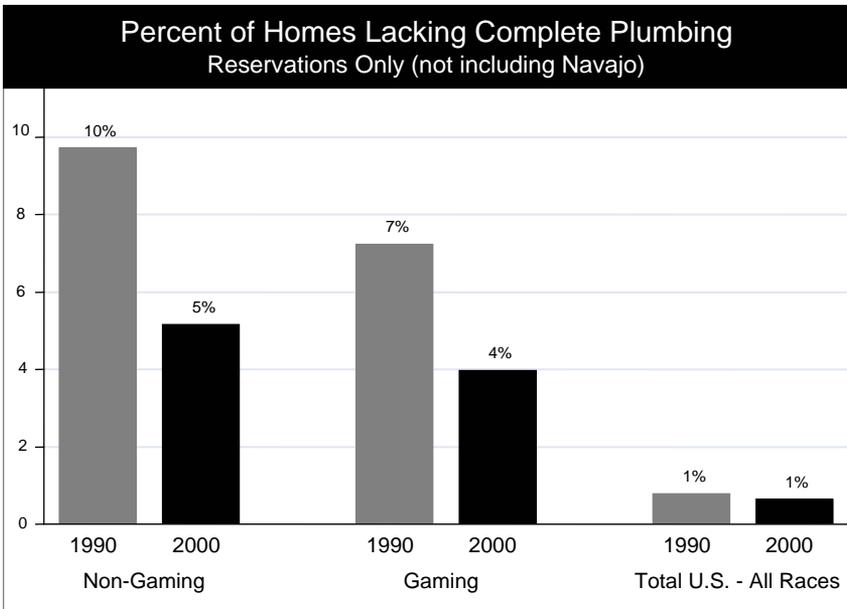
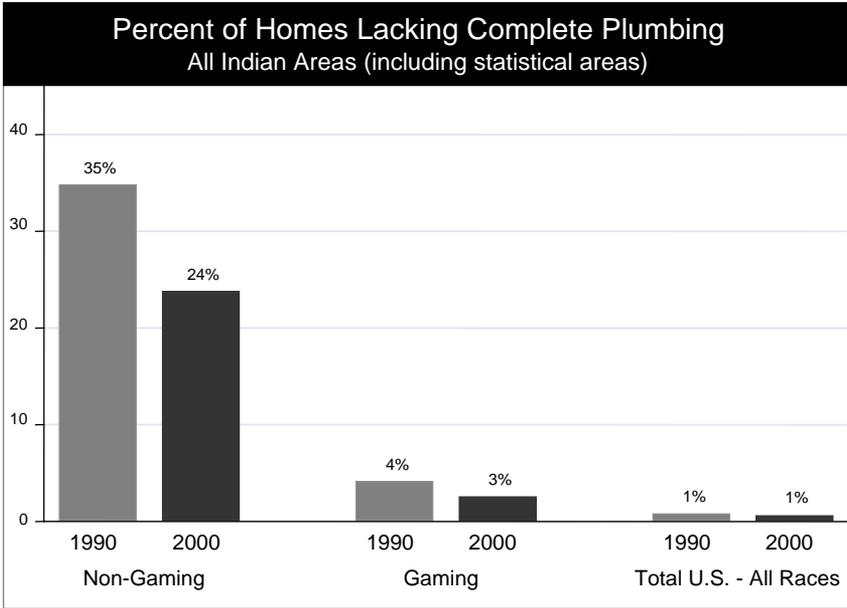
HOUSING

HOMES LACKING COMPLETE PLUMBING

◆ **Results:** The absence of basic plumbing necessities in Indian homes remains a problem. Regardless of the geography, the rates are substantially higher than the U.S. level. Yet the 1990s saw substantial progress, particularly for reservations other than Navajo.

◆ **Significance:** Lack of complete plumbing reflects a combination of low-quality housing stock, costly access to water distribution infrastructure (e.g., at Hopi and Navajo), and low incomes. The declines noted here indicate a substantial diminishment of the problem: it was about cut in half on reservations other than Navajo.

◆ **Data Notes:** Homes that lack “complete” plumbing do not have: i) hot and cold piped water; ii) a flush toilet; or iii) a bathtub or shower.



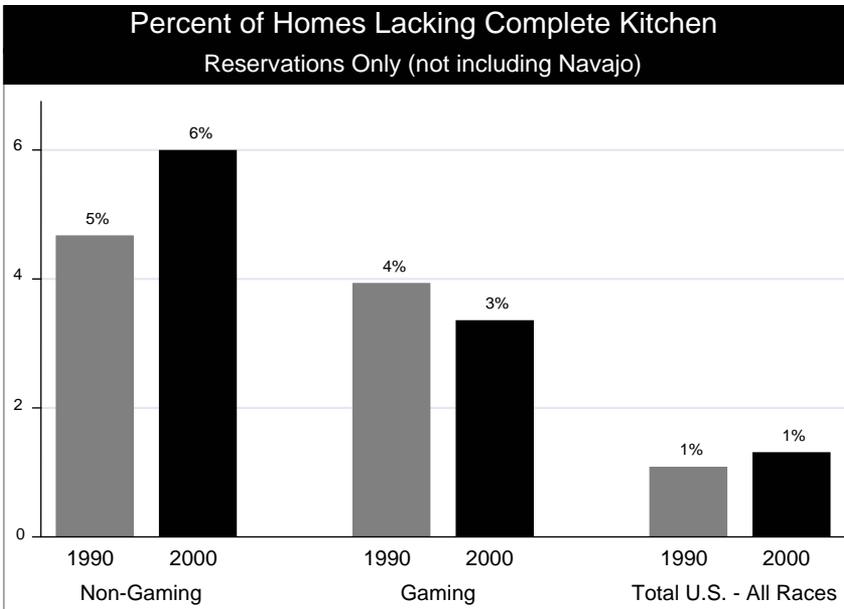
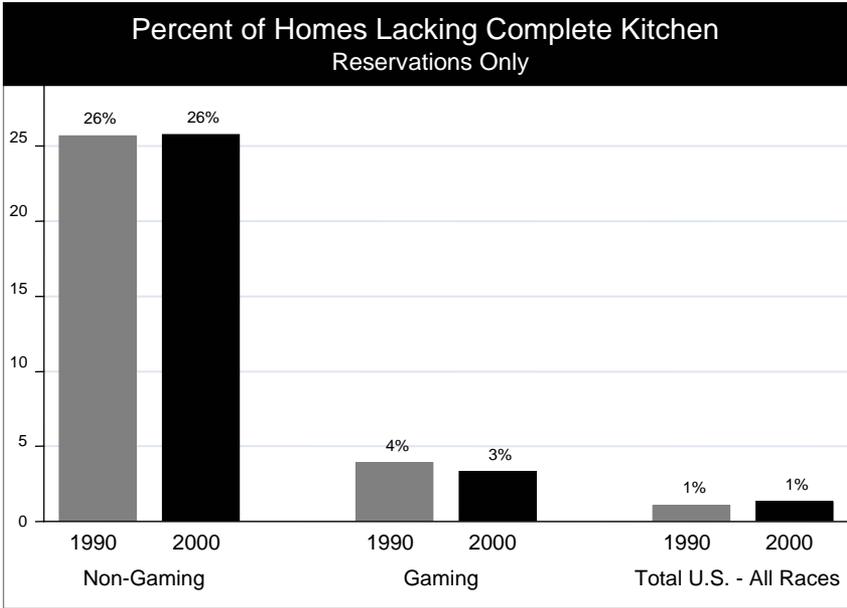
HOUSING

HOMES LACKING COMPLETE KITCHEN

◆ **Results:** The proportion of all races homes lacking basic kitchen facilities on reservations is substantially larger than the U.S. average, and has increased and decreased slightly in different Indian areas.

◆ **Significance:** Again, since Indians on reservations have lower average incomes than the general reservation population,⁵⁰ the all races picture here probably understates the proportion of Indians lacking complete kitchen facilities. Lack of complete kitchen facilities is an indicator of low-quality housing stock, and it correlates with HOMES LACKING COMPLETE PLUMBING, since both variables are associated with a lack of piped water.

◆ **Data Notes:** A home without a “complete” kitchen lacks: i) a sink with piped water, ii) a range or stove, or iii) a refrigerator in the kitchen. For this and all other all races pages, the top figure is *Reservations Only*, not *All Indian Areas*.⁵¹ The inclusion of the very substantial non-Indian populations in OTSAs would make an *All Indian Areas* figure reporting all races data misleading with respect to the conditions faced by Native people.



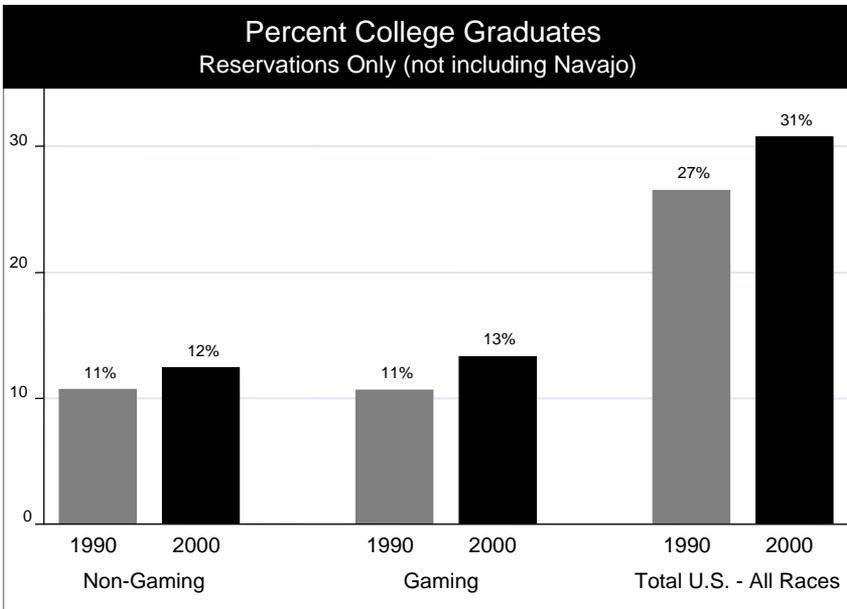
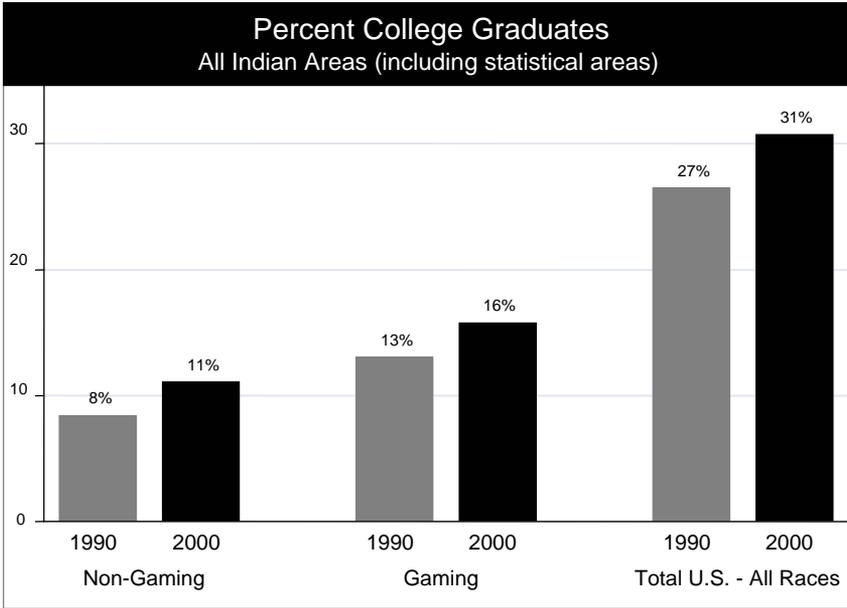
EDUCATION

COLLEGE GRADUATES

◆ **Results:** The proportion of Indian adults with college degrees is rising, but not quickly enough to close the gap with the rising proportion of U.S. adults with college degrees.

◆ **Significance:** This proportion cannot change rapidly over time because: i) there is a lag between enrollments and graduations, and ii) the number of potential enrollees (e.g., recent high-school graduates) is always a relatively small share of the total number of adults. Moreover, migration of college graduates to urban areas may put downward pressure on the number of college graduates residing in Indian areas—especially areas where economic opportunities are limited. As a result, it may take decades of sustained investment in college attendance to appreciably alter the Indian proportion on reservations relative to the U.S. average.

◆ **Data Notes:** The figures display the percent of the total population over age 25 which has an associate's degree or higher.



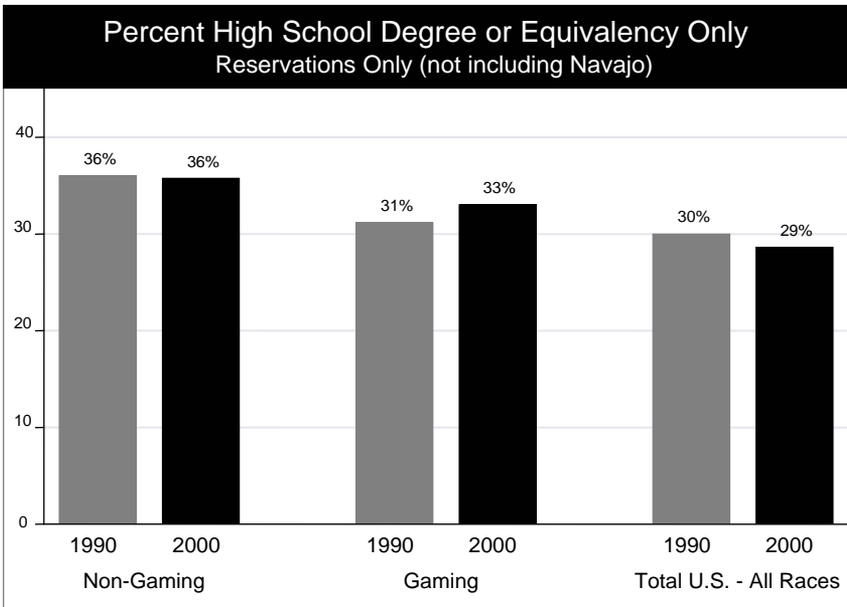
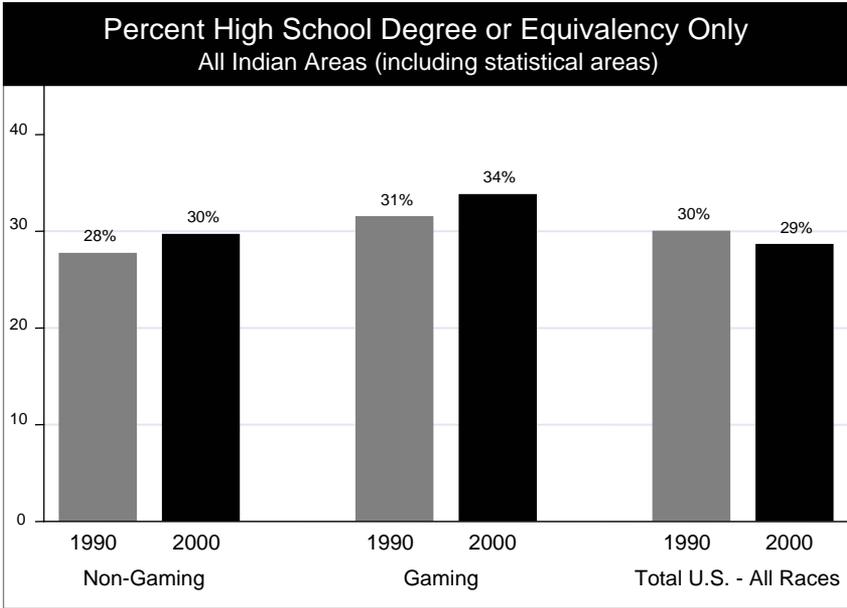
EDUCATION

HIGH SCHOOL OR EQUIVALENCY ONLY

◆ **Results:** The proportion of Indian adults with only a high school education (or equivalent) is roughly on par with the U.S. and rising slightly.

◆ **Significance:** In light of the rise in the number of Indian adults with college degrees (COLLEGE GRADUATES), the modest increase in the proportion of Indian adults with *only* a high school education indicates a broad improvement in educational outcomes. If college completions increase (per the previous indicator) but no additional students complete high school, then the proportion of adults with *only* a high school education would have to decrease. In actuality, the proportion of adults with only a high school education rose; so additional students must have completed high school. These additional Indians completing high school more than replaced the new cohort of Indians that went on to get college degrees.

◆ **Data Notes:** The figures present the percentage of the Indian population over age 25 who have a high school diploma (or equivalency) and no further degree.



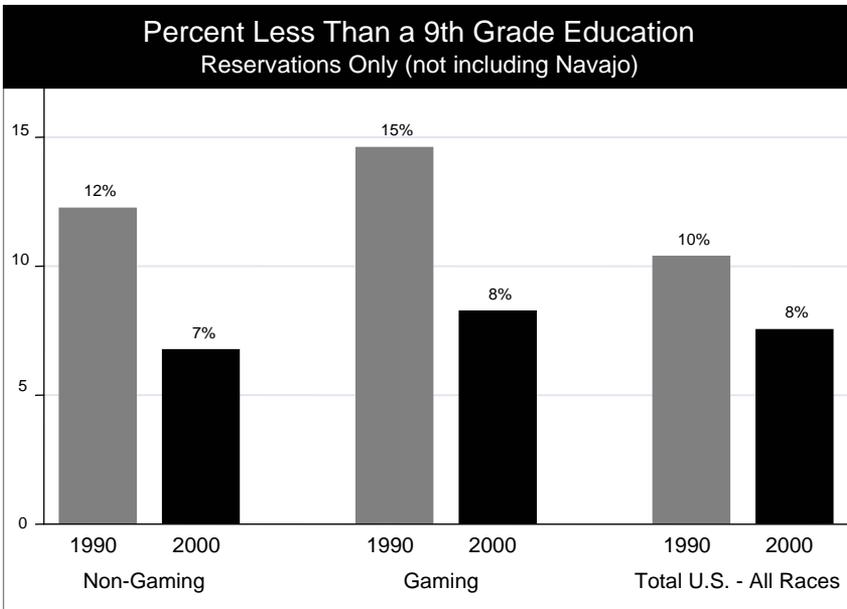
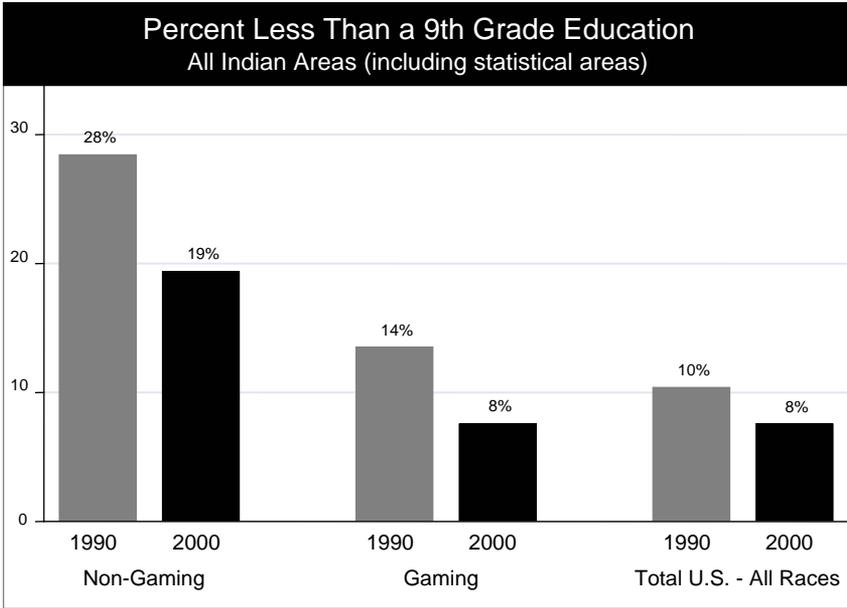
EDUCATION

LESS THAN 9TH GRADE EDUCATION

◆ **Results:** The proportion of adult Indians with an 8th grade level of education or less is declining markedly.

◆ **Significance:** Consistent with the picture presented in COLLEGE GRADUATES and HIGH SCHOOL OR EQUIVALENCY ONLY, these declines in low educational attainment attest to broadly improving educational outcomes among Indians. Indeed, for some Indian areas (areas other than the Navajo Reservation), the gains have brought Indians to a position comparable to the U.S. as a whole.

◆ **Data Notes:** The figures present the proportion of Indian adults over age 25 who have completed less than the 9th grade.



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ENDNOTES

¹ In addition, there are more than 200 federally-recognized Alaska Native Villages. This databook does not address the data for these communities.

² Sixty-four examples of effective assertions of Indian self-determination—some of which have been emulated by non-Indian U.S. governments—can be found at the website for Honoring Contributions in the Governance of American Indian Nations, an awards program for excellence in tribal government: www.ksg.harvard.edu/hpaied/hn_main.htm. See also, *Honoring Nations* (1999, 2000, 2002, and 2004).

³ Cornell and Kalt (1992).

⁴ *California v. Cabazon Band of Mission Indians*, 480 U.S. 202 (1987).

⁵ See *A Primer on American Indian Governments and Their Gaming Operations* herein.

⁶ Trosper (1996, at 189-90) observes that Indian gaming was “not important” in 1989 (the year for which the 1990 Census polled income data), and cites *Indian Gaming and Wagering Business* to report 1989 Indian Gaming revenues of \$400 million. By contrast, in 2002, Indian gaming revenues were more than \$14 billion (National Indian Gaming Commission, 2003).

⁷ This is not to say that the industry is in stasis—tribes with facilities are constantly adjusting (upward and downward) their operations to account for market conditions. The point here is that the number of new tribes that *initiated* gaming ventures dwindled by the end of the 1990s (Cornell, *et al.*, 1998, at 11-13). It should also be noted that more of the prerequisite compacts between states and tribes have been signed since the taking of the 2000 Census (c.f. California), yet in many instances these seemingly “new” compacts attach to facilities whose capacity had been generating revenues for their owner governments to deploy toward socioeconomic recovery for some considerable time during protracted compact negotiations with the states.

⁸ Of course, the U.S. Census is not the be-all and end-all data source to examine socioeconomic change. (For a guide to the broader literature on the socioeconomic impacts of Indian and non-Indian gaming, see Gardner, *et al.*, 2005.) The Census does not measure a host of relevant indicators such as health status or wealth. It does not

adequately reflect subtleties of Indian life. For example, it may be inattentive to the classification of tribal employment in government-owned casinos as “governmental” or “private-sector.” And it does not count everything everywhere perfectly.

Notwithstanding its limitations, the Census is arguably the most expensive (\$6.8 billion), extensive, and heavily reviewed data picture that exists of the United States, in general, and of Indian Country, in particular (U.S. General Accounting Office, 2001, at 2). Moreover, the long-form sample upon which this databook relies provides a breadth of useful socioeconomic data, ranging from employment status to whether kitchens have sinks, ranges, and refrigerators.

⁹ Indian statistical areas exist for federally-recognized tribes with no reservation land base. State-recognized tribes that do not have federal recognition are not studied here. See NOTES TO THE FIGURES for additional descriptions of the data and the geographic terminology used here.

Indicators were selected from the Census for their ability to characterize the salient challenges facing Indian communities. Indicators were excluded from analysis if they were:

Tangential to the analysis of overall socioeconomic conditions (e.g., *place of birth*);

Relevant to Indian socioeconomic status, but part of a particularly complex chain of causes and effects (e.g., *number of persons with disability*);

Relevant to Indian socioeconomic status, but not of primary salience (e.g., *median home age*); or

Incomparable between the 1990 and 2000 Censuses (e.g., *year last worked*).

¹⁰ Because this databook averages across all Indian *individuals* residing in Indian Country, the experiences of large Indian communities count for proportionately more in the reported averages. In other words, every individual Indian living in an Indian area contributes the same weight to the population average, but those individuals shared often vastly different experiences in the 1990s due to the different experiences of the communities in which they resided.

¹¹ The central conclusion of the U.S. Commission on Civil Rights (2003, at ix) is that federal funding for Native programs is inadequate:

Federal funding directed to Native Americans through programs at these agencies [Interior, Health and Human Services, Housing and Urban Development, Justice, Education, and Agriculture] has not been sufficient to address the basic and very urgent needs of indigenous peoples (iii). Over the last 10 years, federal funding for Native American programs has increased significantly. However, this has not been nearly enough to compensate for a decline in spending power.

Walke (2000, at 200) demonstrates that inflation-adjusted per capita federal funding for a number of “major programs affecting the nation’s Indian population, particularly those programs targeting Indians in federally recognized tribes” was relatively flat through the 1990s and lost ground relative to federal domestic non-defense spending per capita for all Americans (Figure 23B).

¹² Such a comparison may overlook systematic differences between gaming and non-gaming tribes—differences that are unrelated to the introduction of gaming and its consequences. A deeper investigation of this and related issues is in progress.

¹³ The same might be said of the Census’ Tribal Designated Statistical Areas (TDSAs), however their small populations do not have the power to sway the averages that the OTSAs do. Moreover, their geographic extent tends to be much smaller.

¹⁴ A careful reading of the comparisons begs the question: What explains the substantial improvement in many socioeconomic indicators on the Navajo Reservation? The research necessary to answer the question is beyond the scope of this databook.

¹⁵ We recognize that the Census data do not encompass all dimensions of well-being or all possible impacts of gaming. For a guide to the extant literature on such impacts, see Gardner, *et al.* (2004).

¹⁶ See, e.g., Kalt (2004) for a summary.

¹⁷ Kalt (1996, at 4) finds that self-determination is a “necessary prerequisite” to development on reservations, and observes that:

If we look back on the history of federal Indian policy in the Twentieth Century, it is not a coincidence that it has only been in the era of self-determination that a significant number of reservations have begun to break the cycle of poverty and dependence...The only thing that is working is self-determination—i.e., *de facto* sovereignty.

¹⁸ Certain joint use areas recognized by the Census are associated with two or more tribes. If a joint use area belonged to a tribe operating a gaming facility by January 1, 2000, the Indians within it were considered to be in a “gaming” area for the purposes of this databook. An alternative specification that assigned joint use areas according to whether or not the area *itself* had a gaming facility altered the outcomes for the variables presented here by very little (<3%) and only for data reporting OTSAs, so this alternative approach is not presented here. Sources of gaming status on or before January 1, 2000 are National Indian Gaming Commission (n.d.); U.S. General Accounting Office (1997); and personal communications with casino personnel.

¹⁹ Using U.S. Bureau of Labor Statistics (2004).

²⁰ Note that some variation occurs between numbers in the text and numbers in the figures due to rounding.

²¹ In regions where federally-recognized land bases did not exist, the Census Bureau used Tribal Designated Statistical Areas (TDSAs) or Oklahoma Tribal Statistical Areas (OTSAs). The Census Bureau’s State Designated American Indian Statistical Areas and state-recognized reservations are excluded from this analysis.

²² In a broader discussion of the American Indian and Alaska Native (AIAN) totals, Ogunwole (2002) reports that a total of 4.1 million people self-identify as AIAN alone or in combination with another race across the fifty U.S. states.

²³ Cordeiro (1992), Jorgensen (2000), and Krepps, *et al.* (1998) note the critical relationship between Indian gaming success and access to consumer markets.

²⁴ Some less densely settled blocks are designated “urban” by the Census Bureau to connect noncontiguous regions with densities qualifying under the standards noted in the text. Thus “rural” is defined on a case-by-case basis to be blocks outside these contiguous “urban” regions.

²⁵ Trosper (1996) observes that reservation poverty levels improved in the 1970s (moving in tandem with other indicators of Indian well-being), only to worsen again in the 1980s:

Casual observation suggests that these trends parallel trends in real federal expenditures on Indian reservations (173)...The public sector plays an important role on most reservations. Employment in federal agencies and in programs funded by federal agencies and administered by tribes are [*sic*] significant

sources of money for reservation economies. Thus reductions in the public-sector role should have large effects on economic activity as measured by census income data (188)...It is plausible that reductions in real federal budget expenditures on Indian programs and components of the social safety net contributed to the sharp increase in Indian poverty in the 1980s. Other trends may have contributed, particularly the general increase in inequality in the United States (194).

²⁶ See endnote 11.

²⁷ It is reasonable to make this attribution because a substantial amount of anecdotal *and* systematic evidence demonstrates that tribal self-determination brings to the reservations greater commercial success, program efficacy, and social improvement (Moore, *et al.*, 1990; Cornell and Kalt, 1992; Krepps and Caves, 1994; Dixon, *et al.*, 1998; Jorgensen, 2000; Wakeling, *et al.*, 2001; Costello, *et al.*, 2003; Honoring Nations, 1999, 2000, 2002, and 2004).

²⁸ Such a spurious trend might arise if new reservations tended to have higher incomes than average existing reservations. However, the fact that new reservations are generally small in population mitigates how much their addition can sway the overall averages. In actual fact, trends for reservations specifically named in all four censuses (i.e., reservations that are neither in an “other” category nor newly recognized at some point over the three decades) display a pattern very similar to that shown in the figure: robust growth in the 1970s, decline in the 1980s, and strong growth in the 1990s. Sources for the figure are U.S. Census Bureau (1973, Tables 14 and 17; 1989a, Table 15; 1989b, Table 1; 2004) and U.S. Bureau of Labor Statistics (2004).

²⁹ On these facing pages and for the next five sets of facing pages (that is, for all treatments of REAL PER CAPITA INCOME and REAL MEDIAN INCOME), the data is presented in the following geographic sequence: first all Indian *areas* are presented, then Indian areas *excluding OTSAs*, and then *reservations other than the Navajo Reservation*. Beginning with FAMILY POVERTY and continuing to the end, only one set of facing pages is provided for each socioeconomic indicator. The discussion in NOTES TO THE FIGURES explains how the different combinations of geographies can be read from these latter pairs of figures. Note also that where the Census reports no Indian-specific data and *all races* data must be used, the databook eschews any examination of OTSAs per the discussion in NOTES TO THE FIGURES on every all races page.

³⁰ U.S. Census Bureau (2003c).

³¹ Removing OTSAs affects the gaming column disproportionately because the overwhelming majority of Oklahoma Indians live in Indian areas associated with tribes that had some form of gaming in the 1990s (see Spilde, *et al.*, 2002, Appendix A).

³² Though policy is changing at the Navajo Nation, the Nation did not open any gaming facilities before 1/1/00, so the data for individual Indians residing on the Navajo Reservation come out of the non-gaming numbers in the prior figures to yield the figures here.

³³ Improved economic outcomes on reservations without gambling establishments arise, in significant measure, from diverse and growing development activities, including: prefabricated home manufacture, mall development, cotton production, remote IT support, coal mining, defense contracting, hazardous waste clean up, supermarkets, water bottling, and scores of other businesses not related to gambling. These non-gaming activities benefit concretely from Indian self-determination policies as well. Krepps and Caves (1994) demonstrate, for example, that when tribes control forest production, they systematically reap concrete bottom-line improvements in prices received and volumes sold.

³⁴ All medians were calculated using Pareto interpolation per U.S. Census Bureau (2002), at B-19 and Stults (n.d.).

³⁵ U.S. Census Bureau (2003b).

³⁶ The poverty line is updated only for inflation, yet the consumption patterns upon which it is based are from the middle of the last century. Studies assessing the poverty line indicate an update would increase it by about 40% to 70%. (Ruggles, 1990; Citro and Michael, 1995).

³⁷ Costello, *et al.*, (2003).

³⁸ In the 2000 Census, per capita reservation income for all races was \$12,451, whereas the average income of Indians on reservations was two-thirds that amount (\$7,943).

³⁹ As discussed in NOTES TO THE FIGURES above, data for all races in Indian areas and on reservations is presented here rather than Indian-specific data, due to limitations in Census tabulations. The same limitations require that PUBLIC ASSISTANCE, GOVERNMENT AND NON-PROFIT SECTOR, OVERCROWDED HOUSING, and HOMES LACKING COMPLETE KITCHEN also report data for all races.

⁴⁰ See endnote 38.

⁴¹ See endnote 39.

⁴² Variations in the bars for the United States—both of which are labeled “6”—are reflections of the actual un-rounded numbers for 1990 (6.22%) and 2000 (5.72%). In all graphs, the bar height reflects the un-rounded values.

⁴³ U.S. Census Bureau. (2003a).

⁴⁴ See endnote 25.

⁴⁵ See endnote 39.

⁴⁶ See endnote 38.

⁴⁷ See, e.g., National American Indian Housing Council and Tiger Research (2001) and Simmons (2002).

⁴⁸ See, e.g., Bennefield and Bonnette (2003), at 5.

⁴⁹ See endnote 39.

⁵⁰ See endnote 38.

⁵¹ See endnote 39.