Social and Economic Changes on American Indian Reservations in California: an Examination of Twenty Years of Tribal Government Gaming¹

Randall K.Q. Akee Katherine A. Spilde Jonathan B. Taylor

Introduction

When the Indian Gaming Regulatory Act (IGRA) was being debated in Congress one of the most controversial points was the role, if any, for state regulation of tribal government gaming. Tribal governments were so opposed to Congressional imposition of state regulation that some tribal leaders preferred an "outright ban...to any direct grant of jurisdiction to States" (Senate Committee on Indian Affairs, 1988). IGRA was ultimately passed in 1988 with a provision that did require tribal and state governments to negotiate a compact for American Indian tribes to offer Las Vegas-style slot machines and house-banked card games in tribal gaming facilities (Indian Gaming Regulatory Act, 1988). Ultimately, this federal requirement created a patchwork of state-tribal agreements that resulted in uneven policy outcomes across Indian Country. Therefore, any analysis of IGRA's impacts requires a thorough analysis of both state and tribal policies.

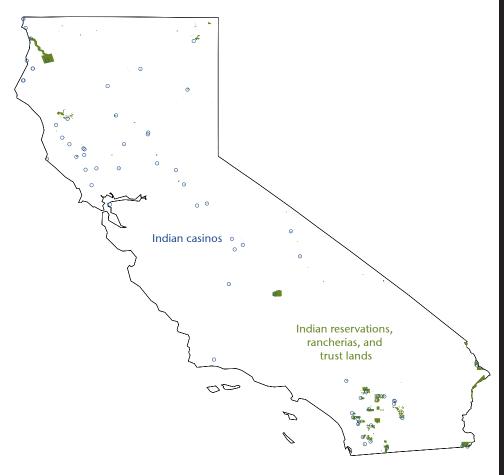
California's constitutional ban on "Las Vegas style" gaming was one of the main reasons the tribal-state compact negotiation process was stalled for 12 years. After more than a decade of negotiations and millions of dollars invested in two statewide initiatives, the voters of California overwhelmingly approved a tribal-state compact between Governor Gray Davis and numerous California tribal governments in 2000 ("the Davis compact"). The Davis compact contained provisions that addressed the particular needs of the tribal communities in the state and evolved from more than a decade of tribal gaming experience. While there has been phenomenal growth and recovery for many American Indian reservations, there are still large discrepancies in comparison to the rest of the US. Therefore, there is much room for additional innovation in policies and institutions that promote self-determined economic growth in Indian Country.

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Figure 1 Indian Casinos in California 2013



(Casino City, 2013; US Census, 2013c)

Our analysis on the impacts of IGRA and the compacting process is based primarily on data collected by the US Census. This US Census data roughly captures the milestones in the California tribal gaming story. For example, the decade from 1990-2000 reflects the non-compacted gaming years in the state after IGRA. By 2010, tribal communities in California had experienced a full decade of casino operations under the first California State-Tribal Compact Agreements. These compacts, signed in 1999, formalized revenue sharing programs between tribal governments with gaming and tribes with small or non-existent casino operations. Additionally, the compacts created a Special Distribution Fund that supported local and county (non-tribal) governments affected by casino operations. As a result, gaming revenues spread across reservations with casinos, adjacent non-Indian communities, and non-gaming reservations.

California Reservations in Context

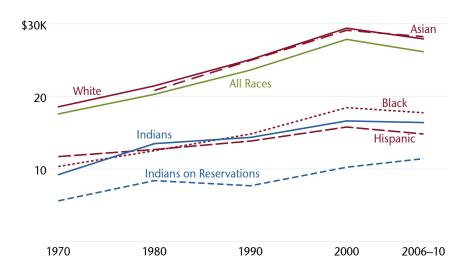
As of early 2014, there were 109 federally recognized American Indian tribal nations in California (Bureau of Indian Affairs, 2014). These federally recognized tribes were located on 106 American Indian reservations and Rancherias (Osier, 2012). Several reservations share lands with other tribal nations and five reservations straddle the Arizona and/or Nevada borders. These reservations stretch from the Smith River Rancheria in far northwestern California to the Campo Indian Reservation on the border with Mexico in the south and to the Colorado River in the east (Figure 1).

The American Indian reservations and tribal governments in California are distinct from those in other states. California and its Native peoples fell under either Spanish or Mexican rule until 1848. Starting as early as 1769, Spanish Missions were established, and Native peoples in California were forced to reside in and around the mission lands, often serving as unpaid laborers. Disease, depopulation, and removal policies that began in the 1700's put sustained pressure on California native population and land.

California tribes differ in many regards as compared to American Indian tribes in the other 47 states. For instance, in the 2010 decennial census, there were only 170 people on average residing on California reservations while the on-reservation average in the rest of the US was 2,368. (US Census, 2011). Likewise, California reservation land bases are very small. The average size of reservations within California was 8.7 sq. mi. in 2013, whereas the average reservation elsewhere in the lower forty-eight was 509 sq. mi. (US Census, 2013c). These two features of California Indian life have meant reduced economic activity and options for California Indians historically. The relatively small land base and population sizes made large-scale economic activities used elsewhere—such as mining, forestry, or fishing—difficult if not impossible to conduct. The advent of tribal government gaming, however, changed conditions for many California American Indian tribes.

Nationally, the economic fortunes of American Indians on reservations continue to lag those of other racial and ethnic groups tracked by the census (Figure 2). The per capita income of American Indians on reservations falls far below that of Hispanics, African Americans, Asian Americans and American Indians living elsewhere. In California, the picture is somewhat less bleak, but nonetheless the conditions on American Indian reservations continue to fall below mainstream US averages.

Figure 2
Per Capita Income by Census Racial or Ethnic Category
2009 dollars



Note: the roster of reservations tracked by the Census Bureau changes over time. (Akee & Taylor, 2014)

Even after the advent and widespread adoption of self-determination policies by tribes and the federal government, low-income levels persist on reservations. Indeed, in light of the Indian Gaming Regulatory Act (IGRA)—one of many recent federal laws recognizing and bolstering Native self-reliance—it is perhaps surprising that American

Indians living on reservations fare as poorly as they do. The actual per capita income level contradicts the widespread public perception of burgeoning American Indian individual wealth from casino operations.

American Indian real per capita income on reservations grew by 50% during the 1970s but fell by 8% in the following decade, just as self-determination and gaming gained traction. That drop accompanied dramatic Reagan-era cuts in funding for programs targeting American Indians. American Indian incomes on reservations grew steadily again, even though federal funding per individual American Indian lost ground relative to non-defense discretionary spending per American (Walke, 2000). More important, income growth on reservations outpaced that of all these census groups in the 1990s and 2000s.

Since 1970, Indian per capita income on reservations has doubled, increasing by 104%, whereas the growth rate for all races in the US was 49% over the same period. Growth in per capita income occurred over the period of 1990 to 2010 despite low and declining federal funding for tribal governments; these results may be indicative of increased Native sovereignty, self-sufficiency, and economic development.

We investigate 13 indicators of demography, income, employment, education, and housing for reservations in California. We update earlier research for reservations in the US and California over the period of 1990 to 2000 (Marks & Contreras, 2007; Martin *et al.*, 2006; Taylor & Kalt, 2005), extending prior research documenting the challenges of reservation life (Snipp, 1989; Trosper, 1996).

The next section describes recent California Native political economy, painting in broad strokes a picture of political and economic resurgence. The following section summarizes a selection of the data findings, providing a snapshot of recent change on California Indian reservations. Graphs and discussions of the data follow immediately thereafter. After a concluding section, a section describes our methods and another provides references.

Recent California Native Political Economy

Three general trends characterize the last quarter-century of American Indian life. First, Native nations are more assertive in exercising their sovereignty and engaging in the process of nation re-building. Tribes are reforming their constitutions, deepening their administrative capacities, and crafting self-determined policies. Second, tribes are increasing their economic activities in a variety of sectors. They have developed their natural resources, built sustainable businesses, and—most importantly—recruited and deployed their citizens' growing human capital. Third, tribal governments are investing in the social and cultural integrity of their communities. In spheres as diverse as indigenous language revitalization, wildlife management, college preparation, and foster care, tribes are addressing deficits that accumulated over decades. The nationwide counterpart to the findings presented in this paper and other sources document these trends (Akee & Taylor, 2014; HPAIED *et al.*, 2008).

These broad developments have been accompanied in California by intense tribe-state conflict over gaming policy. Several California tribes, most notably the Cabazon and Morongo Bands, held a vanguard position in the state-tribal gaming battles. The US Supreme Court ultimately decided in favor of these tribes, thereby initiating the modern tribal gaming era in the US. Notwithstanding the tribes' Supreme Court victories, the California government remained a staunch opponent to tribal government gaming through the 1990s. Governor Pete Wilson's reluctance to negotiate compacts as required under the Indian Gaming Regulatory Act (IGRA) held back tribal gaming facilities' development for the better part of a decade. The compacts that were eventually negotiated by his successor contained a cap on the number of gaming machines per gaming facility; these actions imposed a burden on tribal gaming operations, forcing them to operate below their potential.

The delays and constraints on Indian gaming diminished the economic benefits for tribal governments in California and their non-Indian neighbors. California's tribal-state

gaming compact structure, through a mechanism called the Revenue Sharing Trust Fund (RSTF), distributes a portion of the net revenues from gaming to tribes with small casinos or none at all. Furthermore, the requirement that Indian gaming take place on Indian land has resulted in tribal governments building casinos in some remote, poor areas of the state. Thus revenues from Indian gaming help to distribute the growth across different parts of California.

There have been many conflicts in Indian gaming in California over the past four decades. Beginning in the late 1970s and early 1980s with the federal government's encouragement, tribal governments pushed a variety of economic development ventures, one of which was high-stakes bingo. Controversy immediately followed. The ensuing litigation between tribal, state, and local governments established the contours of tribal government powers of gambling regulation that remain today. California tribes were parties to many of the landmark cases.

In 1982, the US Supreme Court let stand a lower court ruling that the Seminole Tribe of Florida should be free from state interference on matters of bingo regulation (*Seminole Tribe of Florida v. Butterworth*, 1982). A year later, the US Supreme Court likewise declined to revisit a lower court ruling that the Barona Group of the Capitan Band of Mission Indians, not San Diego County, had the power to regulate Indian bingo (*Barona v. Duffy*, 1982). Finally, in 1987 the Supreme Court ruled directly on the question of Indian gaming in a case between California and the Cabazon and Morongo Bands of Mission Indians (*California v. Cabazon Band of Mission Indians*, 1987).

The *Cabazon* decision was pivotal for the American Indian gaming industry. It reaffirmed that tribes would only be precluded from establishing gaming operations where the state had adopted a criminal, prohibitory approach to the industry. If, by contrast, state gaming policy was civil and regulatory, tribes were allowed to conduct gaming operations and to adopt their own bet limits and regulatory standards. *Cabazon* made possible tribal government gaming operations as we know them today. Almost immediately, the attorneys general from several states and others approached Congress to finish developing legislation governing the regulation of tribal government gaming. In particular, representatives of the various states pushed Congress to strengthen states' rights with regard to tribal gaming policy and regulation. Congress had been considering several bills in the mid- to late-1980s, and the ruling in the *Cabazon* case pushed the work to a quick conclusion. In 1988 Congress passed the Indian Gaming Regulatory Act and President Reagan signed the bill into law.

IGRA divides Indian gaming into three classes. Class I comprises culturally traditional games of chance played for social purposes. IGRA recognized tribal regulatory exclusivity over Class I. Class II games include bingo, pull-tabs, related games of chance, mechanical aids to their play, and card games explicitly authorized by the state. IGRA created a National Indian Gaming Commission (NIGC) and apportioned responsibility for Class II regulation to tribal governments and the NIGC as federal-tribal co-regulators. IGRA defines Class III games as all games not in Class I or II, encompassing Las Vegasstyle slot machines, high-stakes table games, and other games. The Act gives tribes and states the shared responsibility to regulate Class III gaming through the mechanism of a tribal-state gaming compact.

Under IGRA, Class III gambling must take place on Indian lands, however, no operations may begin until a tribal-state compact governing the regulation and scope of gaming had been successfully negotiated. IGRA requires that states must negotiate compacts in good faith with tribes.

IGRA explicitly prohibited states from taxing tribes or otherwise insisting on revenue sharing as a condition for state approval of a compact (25 USC §2710(d)(4)). Congress also intended to prevent compact negotiations from extending unrelated state jurisdiction into Indian Country (Senate Committee on Indian Affairs, 1988). Notwithstanding the letter and the spirit of the law, California demonstrated the very substantial blocking power IGRA conferred to states—a power strengthened by the 1996 Supreme Court decision

protecting states from tribal suit for failure to negotiate in good faith (*Seminole Tribe of Florida v. Florida*, 1996). Despite two California tribes winning Supreme Court recognition of their gaming regulatory authority in 1987, it was not until a dozen years later that legal uncertainty in the California Indian gaming industry was finally eliminated.

In December 1991, several California tribes and representatives of Governor Pete Wilson's office began compact negotiations, but talks soon became deadlocked. Governor Wilson insisted that he would not negotiate until tribes ceased using electronic gaming devices (EGDs) that he considered banned under the California constitution. The tribes objected to what they felt was a double standard: a narrow interpretation of the definition of EGD for machines in tribal gaming facilities but a loose one for the state's own video lottery terminals (Gordon, 2000; Koenig, 2002; Mason, 2000).

In the mid-1990s it seemed a path out of the deadlock would emerge when a single, non-gaming tribe—the Pala Band of Luiseño Mission Indians—negotiated a model compact with the governor. The other California tribes were dismayed to discover that Pala's closed negotiation produced a compact with onerous environmental, employment, and size restrictions in contravention of tribal sovereignty and the legislative history of IGRA. The deadlock deepened when Governor Wilson insisted that all California tribes agree to the Pala terms in 60 days or face shutdown by the US Attorneys.

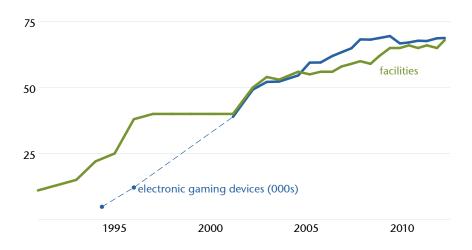
The tribes responded by sponsoring an initiative in 1998—Proposition 5—to specify minimum terms under which Indian gaming could proceed. The initiative became one of the most expensive public campaigns in California history when wealthy commercial casino interests invested heavily in anti-Indian messaging, prompting a massive "California Indian Self Reliance" response by tribal governments. In the fall of 1998, Prop 5 passed with 63% of the vote, and at the same time California voters elected a new governor, Gray Davis (Gordon, 2000). Governor Davis was more amenable to negotiating compacts. The governor successfully negotiated a compact with dozens of governments in California in late 1999 and early 2000; these compacts were known thereafter as the "1999" compacts or the "Davis" compacts. Also in late 1999, the California Legislature approved a second initiative—Proposition 1A—to amend the constitution to ratify the compacts and, thus, allow Indian gaming. That proposition passed in March 2000 with 64.5% support, and thereby cleared the last major legal hurdle to Indian gaming in California (Johnson, Filla, & McLaughlin, 2005).

While American Indian gaming had expanded throughout the rest of the United States in the 1990s, these political challenges held back growth in California at a time when other sectors of the state economy were booming. California tribes found it difficult to assure lenders and investors that the state government would not ultimately end tribal gaming there. Many potential investors were reluctant to jeopardize their existing gaming licenses in other jurisdictions by participating in California Indian gaming without a secure gaming compact. The result was slow capital growth until the early 2000s.

In Figure 3, the green line indicates the number of American Indian gaming facilities in California. The construction of facilities in California in the past two decades hit a plateau (40 facilities) in the late 1990s. A period of growth occurred after the 1999 compacts were approved starting in May 2000. The growth of the electronic gaming device capacity in California is less well documented in the 1990s. Certainly at the beginning of that decade, Indian bingo dominated. However, over time more machines were added.

The 1999 compacts improved investor confidence in tribal government gaming and established the types of allowable gaming machines in California gaming facilities. The compacts also implemented a one-year deadline for deploying the compacted electronic gaming devices. These three features helped spur capital investment in Indian gaming facilities. Consequently, Indian gaming revenues grew rapidly.

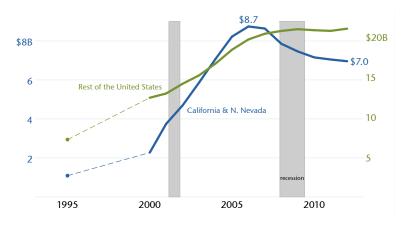
Figure 3
California Indian Casino Capacity
1991 – 2012



(Casino City, 2013; Dunstan, 1997; Martin et al., 2006)

Figure 4 provides the trend in Indian gaming revenues for California and Northeastern Nevada (blue line, left axis); the Indian gaming revenues for the rest of the United States are depicted by the green line (green line, right axis). California and Northeastern Nevada experienced faster growth over the 2000s than tribes residing in the rest of the US. This accelerated growth occurred after the Davis compacts and the passage of Prop 1A, which indicates the binding constraints on California Indian gaming in the 1990s. The national recession in 2008-2010 impeded the growth of the gaming industry in California and elsewhere; industry revenues declined by almost \$2 billion dollars in California.

Figure 4
California Indian Gaming Grew Quickly from 2000 to 2005
Indian gaming revenue in billions of 2012 dollars



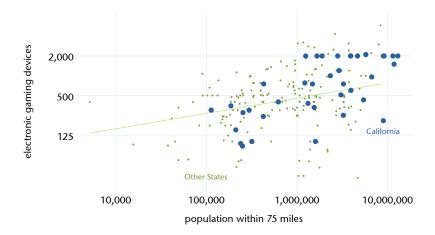
(Bureau of Labor Statistics, 2012; National Bureau of Economic Research, 2010; National Indian Gaming Commission, 2013)

There are two components of the Davis compacts aimed at improving the quality of life for American Indians on reservations in California. First, the Revenue Sharing Tribal Fund (RSTF) distributes a portion of statewide gaming revenues to non-gaming tribes and to tribes that operate fewer than 350 machines (California State Auditor, 2011). Over the past 14 years, a total of \$916 million dollars flowed from the RSTF to 88 California tribes. These funds were used by the recipient tribes for basic tribal operations, government programs and services for tribal citizens (California Gambling Control Commission, 2013). In addition, the RSTF distributes gaming proceeds to tribal communities in remote California locales that cannot sustain a tribal gaming facility of appreciable size. This money would not flow to those counties without Indian gaming.

Second, the Special Distribution Fund (SDF) helps meet shortfalls in the RSTF and to address certain effects of from tribal government gaming operations that might affect neighboring communities. In particular, the state legislature can appropriate SDF funds to underwrite programs to treat gambling addiction, to pay for gaming regulation, and to fund local law enforcement, fire and emergency services, roads, and public health in communities that are affected by tribal gaming operations. The contributions provided to the SDF range from 7% to 13% of the gaming device net win, with the percentage rising with the total number of devices the tribe has in operation (California State Auditor, 2011).

IGRA requires tribal gaming facilities to be built on Indian lands. These lands are primarily located outside of major metropolitan areas. Thus the economic development activities fostered by Indian gaming have a beneficial effect on rural development in California.

Figure 5
Indian Casino Capacity and Market Opportunity
late 2001

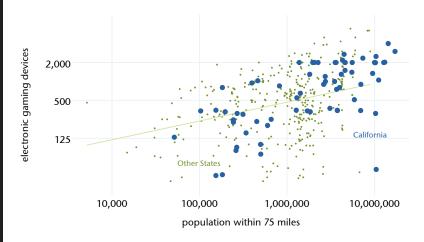


(Casino City, 2013; US Census, 2000a)

A few California reservations are located near to large population centers, providing extraordinary economic opportunities for casinos and non-gaming business. Those tribes' economic development was not only restricted by the state's intransigence in 1990s compact negotiations, but also by the Davis compacts. Figure 5 shows the relationship between Indian casino capacity and market opportunity (represented by the population within 75 miles) in late 2001. California Indian casinos are indicated by the blue dots, while Indian casinos operating in other states are indicated by the green dots. Indian casinos nationwide are generally permitted to respond to market forces—the greater the opportunity, the greater the number of gaming devices. However, California's

Indian casinos were constrained—none could exceed the Davis compact's 2,000-device limit. By contrast, Figure 6 indicates that once the Davis compact's device cap was amended in 2012, tribes expanded their operations accordingly.

Figure 6
Indian Casino Capacity and Market Opportunity
late 2012



(Casino City, 2013; US Census, 2011)

Unfortunately for both American Indians and non-Indians alike, the benefits of Indian gaming in California were held back for almost a decade. These benefits include the retention of California leisure dollars that otherwise would go to Nevada. Nevada interest groups and their allies spent over \$25 million opposing Prop 5 (Morain, 1999), and subsequent research indicates Indian casino growth precipitated drops in Nevada casino revenue in Reno-Sparks and Lake Tahoe (Eadington, Wells, & Gossi, 2010). Separate from the interstate trade effects, American Indian economic development brought income growth to American Indians on California reservations and to non-Indians nearby, as data below will show. Many of those beneficiaries could have received those benefits a decade or more earlier.

Recent Change on California Indian Reservations

Broadly speaking, the statistics in the US Census and American Community Surveys indicate continuing improvement on Indian reservations, but with some slowing of the pace of change in the 2000s. As noted above, the change since 1970 has been remarkable, with truly astonishing gains coming in the 1990s. In that decade, reservation economies nationwide grew at almost three times the national average (Taylor & Kalt, 2005). Our analysis in this section focuses on comparisons between California American Indians and the US average as a whole. These comparisons between the California trends for American Indians and the US as a whole serves as an initial benchmark. In later sections, we compare economic outcomes within the state of California by US Census tracts. While we do not conclude that tribal government gaming operations alone are responsible for all of the observed changes, these economic activities certainly play a large role. Per capita federal funding for programs serving Indians lost ground against other federal spending (Walke, 2000), and no other large-scale economic activities exist to explain the observed changes.

Table 1 indicates that there were large gains on several dimensions for California reservations since the 1990s. The table provides information on changes by decade for several reservation-level characteristics (see important notes on method after the conclusion,

below). For instance, in the first column we see that per capita income increased by 43.4 % over the 1990s while it increased by 11.4% for the US as a whole over the same time period. Large gains in per capita income persisted (23.3%) into the 2000s for California reservation populations even while per capita income fell for the US as a whole (-3.3%).

Median household income increased for both California Reservation populations and the US as a whole over the decade of the 1990s. The 2000s saw a reduction in real median household income and California saw a larger percentage reduction than the US as a whole (-7.4% vs. -5.5%). Over the two decades, however, the California reservation population median household income saw gains of approximately 10.4% while the US saw a decline of -1.8%.

There was an increase in both per capita income and median household income over time for California reservations. The simultaneous improvement in both measures indicates that more households on American Indian reservations are earning higher income and this has resulted in a reduction in income inequality. There are fewer people below the previous levels of median income on the reservation.

Table 1
Change by Decade on California Reservations in percentage points unless indicated as %

	Indian	s on Rese	rvations	United Sta		tes
	i	n Californ	iia		All Races	
	1990s	2000s	Both Decades	1990s	2000s	Both Decades
real per capita income	43.4%	23.3%	76.7%	11.4%	-3.3%	7.8%
real median household income	19.2%	-7.4%	10.4%	4.0%	-5.5%	-1.8%
child poverty	-7.6	0.0	-7.6	-1.7	2.6	0.9
family poverty	-7.5	-1.0	-8.6	-0.8	0.9	0.1
unemployment	-3.0	-2.0	-5.1	-0.5	2.1	1.6
labor force participation	-1.4	-3.6	-4.9	-1.3	1.1	-0.3
male labor force participation	-6.9	-7.0	-14.0	-3.7	0.2	-3.5
female labor force participation	3.5	-0.5	2.9	0.8	1.9	2.6
overcrowded homes*	0.8	-3.1	-2.3	1.1	-2.6	-1.6
homes w/o complete plumbing	-0.4	-2.2	-2.6	-0.1	-0.1	-0.3
homes w/o complete kitchens*	0.5	0.6	1.1	0.2	1.4	1.6
high school degree only	0.3	2.3	2.6	-1.4	0.4	-1.0
college graduate or more	1.5	2.2	3.7	4.1	3.5	7.6

^{*}Due to data limitations, the Indian-area figures for overcrowded homes and homes w/o complete kitchens are the all-races, rather than Indian, statistics. Sources are given in endnote 2 below.

The rates of poverty on California reservations have declined over the 1990s and remained relatively stable over the 2000s. For the US as a whole the change in poverty rates has been less than a percentage point over both decades. California reservation populations started out with larger absolute levels of poverty and made the largest gains in the 1990s, with reductions of 7.6 percentage points or more.

Unemployment rates for California reservations decreased consistently across both the 1990s and 2000s, while for the US as a whole there was a noted increase in unemployment by 2 percentage points in the 2000s. The recent recession was responsible for this change, but for California reservation populations the recession did not result in an increase in unemployment levels.

One striking result is that total labor force participation rates declined on California reservations. The participation rate decreased by 4.9 percentage points over the two decades while it decreased by less than half a percentage point for the US over the same time period. This result may be driven by the 14-point reduction in male labor force par-

ticipation on California reservations. Female labor force participation actually increased by 2.9 percentage points over the two decades. The large reduction in male labor force participation rates, which has no easy explanation and interpretation, may be confounded by migration patterns.

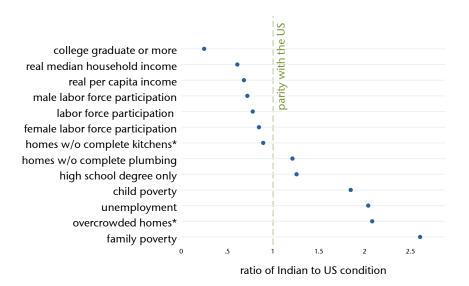
The condition and quantity of the housing stock speaks to the quality of reservation infrastructure generally. The proportion of overcrowded housing and homes without complete plumbing fell over time. There was an increase in the number of homes without complete kitchens.

Finally, we observe that there have been gains in educational attainment on California reservations. The percentage of adults with only a high school degree increased by about 2.6 percentage points in California. In addition, the proportion of adults with a college degree or higher increased by 3.7 percentage points. For the US as whole, however, the proportion of adults with only a high school degree decreased by 1 percentage point over this same time period and the percent with a college degree or higher increased by 7.6 percentage points. This indicates that while there have been steady gains in education on California reservations there are still large differences between reservation and the rest of the US.

The Outlook For California's Indian Country

In Figure 7, we compare outcomes for California reservations relative to the US as a whole. The figure provides the ratio of the absolute values of selected characteristics of California reservation populations to that of the US as a whole. The figure indicates that California reservations are below the national level on seven characteristics. These characteristics could be categorized as desirable (except for homes without a complete kitchen) and California reservation populations fall below the national figures in absolute terms.

Figure 7
Relative Standing of Indians, 2006 – 2010
California reservations



^{*}Due to data limitations, the Indian-area figures for overcrowded homes and homes w/o complete kitchens are the all-races, rather than Indian, statistics. Sources are given in endnote 2 below.

On the other hand, California reservation populations tend to have a higher overall proportion of traits that would be considered undesirable. For instance, the level of child and family poverty, unemployment, overcrowded homes, homes without complete plumbing and high school degrees only are larger on California reservations than they are for the US as a whole in 2006–2010.

Given that reservation economic fortunes have slowed down in the recent past, and that there are persistent gaps in important socioeconomic indicators, it is imperative that federal, tribal, and state policymakers remain attentive to self-determination and effective Native self-governance. The observed improvements in the past two decades were predicated on strong, effective systems of self-government. Future outcomes will depend heavily on the continued exercise of tribal sovereign rights and on sound decision-making in reservation contexts.

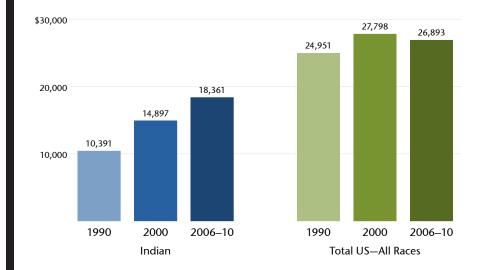
Real Per Capita Income

In spite of their limited ability to fully mobilize their federal gaming rights, California American Indians witnessed an increase in per capita income of \$4,506 (or 43%) over the 1990s (Figure 8). This growth rate is extraordinary and far outpaces that of the US as whole in the same time period (11%). However, American Indians in California had incomes that were about half the US average in this same time period. During the 2000s the growth of per capita income was still positive for California American Indians at 23%, while it was negative in real terms for the US (-3%).

It is quite notable that American Indians on reservations in California started out the 1990s with less than half the per capita income of the US average in real terms (42%) and ended the 2000s at 68% of the US average. These changes represent large movements in a relatively short amount of time. It is also remarkable that American Indians in California experienced income growth over the 2000s while the rest of the nation on average experienced a decline in real per capita income. The direct causes of this phenomenal per capita income growth remain an open question of causation; however, this growth is correlated with the expansion of gaming operations and other business ventures by tribes in California made possible by tribes' ability to access capital.

Nationally, personal income is about 85% of GDP, and it amounts to 80%–90% of GDP in the majority of states (Bureau of Economic Analysis, 2013). Thus real personal income per capita is a proxy for GDP per capita—a statistic of interest for Indian Country but one not easily measured. Per capita income provides a single measure of the economic well being for American Indians and tribal populations. Although it sometimes receives undue consideration at the expense of other quality-of-life indicators, income correlates with mortality, fertility, migration, education level, occupation, and a host of other measures (Shryock, Siegel, & Stockwell, 1976). For example, rising income made possible by gaming profits has recently been linked to declines in American Indian child psychopathology among children whose families crossed the poverty threshold (Costello, Compton, Keeler, & Angold, 2003). Similarly, higher baseline incomes correlate with healthier dietary responses to American Indian income growth (Akee, Simeonova, Copeland, Angold, & Costello, 2013). Income tracks only the cash economy, not domestic production, barter, subsistence, or other economically meaningful but uncompensated work. Nonetheless, it remains a valuable first-order comparator on the conditions of life in societies. Given its importance, it is significant that, despite significant strides, American Indians in California still lag the rest of the United States in real per capita income.

Figure 8
Real Per Capita Income, 2009 Dollars
California reservations

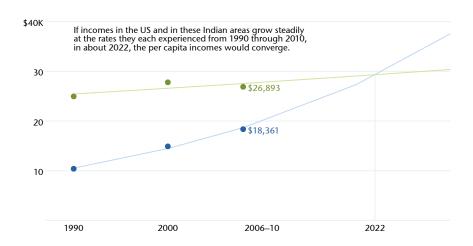


Projected Real Per Capita Income

Given the phenomenal growth across Indian Country, it is fair to wonder when tribal communities may finally "close the gap" with mainstream Americans. According to these projections, if the prior rates of economic growth continue for American Indian reservations in California, there will be convergence to that of the US as a whole in a few decades. These are critical assumptions to note, however, before declaring parity to be just over the horizon for California's Indian Country. For instance, the US economy stands a good chance of rebounding in the coming decade, but it is not necessarily the case that California reservation economic growth will continue along recent rates of growth. The onus still remains for federal and tribal policymakers to maintain and improve the policies and institutions that produce self-determined economic growth.

The estimated trend puts US compound annual growth at about 0.3% and Indian income growth on California reservations at about 1.9% per year over the period. At these rates, real per capita income would converge in around by 2022. Note that the US trend line appears to have linear growth and the Indian one exponential growth. In actual fact, both curves are plotted with compound growth; the low 0.3% US annual growth only appears linear because it increases so slowly.

Figure 9
Projected Real Per Capita Income Growth, 2009 Dollars
California reservations

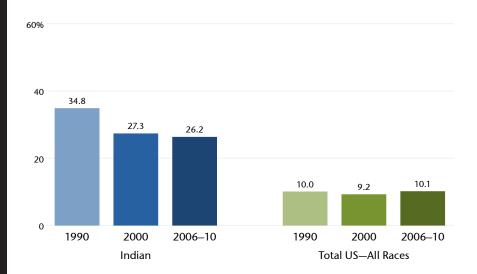


Family Poverty

The Census Bureau uses income thresholds set by the Office of Management and Budget (OMB) to determine family poverty. Income thresholds are common across all geography types and are updated for inflation. Income is measured before taxes and does not include non-cash government transfers such as public housing assistance and Medicaid (US Census, 2013d). A family of two adults and two children fell below the US federal poverty line in 2009 if their income were less than \$14,787 (US Census, 2012). Because the poverty threshold does not take into account differences in the cost of living in various geographic regions, family poverty rates on American Indian reservations may be slightly lower than reported. Furthermore, non-cash resources such as housing and subsistence fishing, farming, and gathering activities, which are not included in the family income calculation, may ease the burdens of poverty.

The proportion of American Indian families in California in poverty decreased from 1990 to 2000 by 8 percentage points from 35% to 27% but remained relatively stable, at 26%, in the subsequent decade (Figure 10). Meanwhile, the family poverty rate for the US as a whole remained constant at about 9–10% and is less than half the rate for American Indians on reservations in California. Poverty is an important indicator and cause of negative long-run outcomes for American Indian children (Akee, Copeland, Keeler, Angold, & Costello, 2009; Costello *et al.*, 2003).

Figure 10
Family Poverty Rate
California reservations



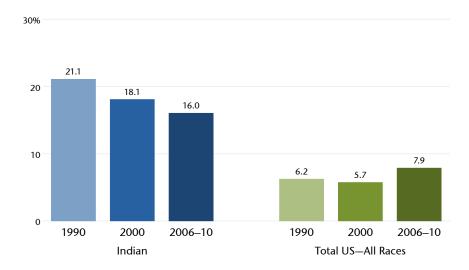
Unemployment Rate

Unemployment is an important indicator of the level of economic activity. Job creation in Indian Country is one of the federal government's priorities in supporting economic development, including tribal government gaming. Persistent unemployment indicates an under-utilization of resources—human resources—and a lack of economic opportunity in a geographic region. Although the unemployment rate on California reservations is still double that of the US as a whole, it is notable that the unemployment rate did not increase as it did for the rest of the US between 2000 and the end of the decade.

Unemployment measures the percentage of working-age individuals (16+) who are actively seeking employment (Bureau of Labor Statistics, 2008). This measure does not include full-time students, people working full-time in the home or not for pay, and people not seeking employment for other reasons.

The unemployment rates on California's Indian reservations and for the US as a whole differ by 8 percentage points in the ACS 2010 five-year average (Figure 11). Although unemployment rates have declined since the 1990 census, the pace of that decline has slowed slightly. The unemployment rate for the US as a whole has increased from 6 to 8% in the aftermath of the recession. Therefore, while the unemployment gap may appear to be closing it is due, in part, to the declining conditions for the US as a whole during the decade of 2000-2010 rather than significant gains in Indian Country.

Figure 11 Unemployment Rate California reservations

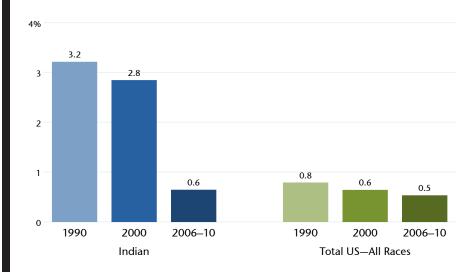


Homes Lacking Complete Plumbing

Plumbing facilities play an important role in public health and sanitation, and there has been a convergence between the quality of the housing stock on California American Indian reservations and that of the rest of the US. Complete facilities indicate overall improvement in the economic development on American Indian reservations and most certainly reflect capital investment by tribal governments into improved infrastructure on reservations in California.

The percentage of homes lacking complete plumbing decreased from about 3% to just 0.6% over the 2000s on California American Indian reservations (Figure 12). For the US as a whole, such homes accounted for less than 1% of the housing stock over all three periods.

Figure 12
Percentage of Homes Lacking Complete Plumbing
California reservations



Educational Attainment and Changes in Human Capital

In this subsection we discuss two different measures of educational attainment—high school degree and college degrees or more. These two measures provide useful insight into the change in the level of human capital on American Indian reservations over time.

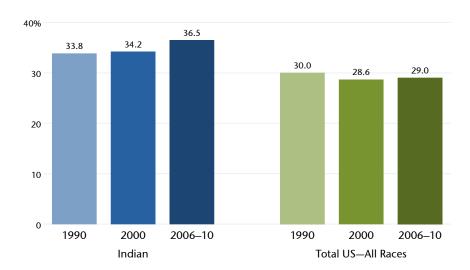
High School Degree or Equivalent

As with housing investments, many tribal governments emphasize investments in education for tribal citizens. A high school degree or the equivalent is a basic measure of the skill level found on reservations. Given US mandatory schooling laws, completion of secondary education is common across the country. Each additional year of education boosts annual wages by approximately 5.2% to 13.2% (Angrist & Krueger, 1991; Card, 1995). The increase in the percentage of adults with a high school diploma may be driven by two things: individuals with a high school degree are moving to reservations or individuals who might previously have dropped out of high school are now more likely to continue on to graduation. Given the structure of the data, is not possible to detect which is driving the results. The census data do not allow us to determine whether reservation residents are new arrivals since the last enumeration.

With increased economic activity on many of the California reservations over this time period, there may be more incentives for individuals to acquire higher levels of training and education. As new industries and employment opportunities have increased, individuals may have found it beneficial to complete their high school degree as this is often a basic requirement of many employment opportunities. We do not account for other forms of human capital and skills acquisition outside of formal educational institutions acquired through cultural experts or training. Additionally, as with all the charts in this paper, these measures are specific to reservation populations and do not account for American Indians in California residing in towns or cities outside of reservations.

The percentage of the California reservation Indian population holding just a high school degree or equivalent has increased from 33.8% to 36.5% (Figure 13). For the US as a whole, that percentage was stable at 29%-30% for all years.

Figure 13
Percentage High School Degree or the Equivalent Only
California reservations

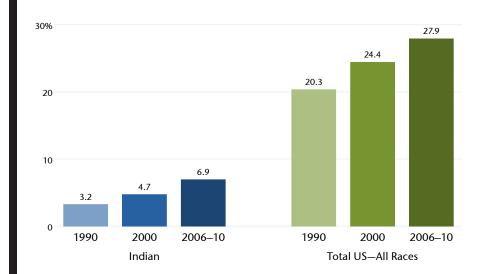


College Graduates or More

Economic growth in the US as a whole has become increasingly skill-biased, making the rewards to education greater over time. The fact that the percentage of adults with post-secondary education has grown on reservations is a positive sign. Once again, the data do not permit us to determine the cause of this increase in educational attainment. It is possible that lifetime residents are acquiring college degrees, and it is also possible that the reservation is attracting highly educated individuals in a "brain gain" scenario. The push for increased educational attainment may be driven by the increasing economic opportunities on many reservations. In either case, conditions seem to be more conducive than ever before to educated Indians' living on reservations—a very propitious sign for human capital accumulation there. Due to limitations in the US Census data collection, we do not account for other forms of human capital and skills acquisition outside of formal educational institutions such as those acquired through cultural experts or training.

The positive trend is that the proportion of the population with a college degree or more has been increasing on California American Indian reservations over time (Figure 14). By the 2010 ACS 5-year average, 6.9% of American Indians on reservations had a college degree or more. However, in comparison with the US as a whole, the percentage with a college degree or more has been steadily climbing over the past two decades and remains over three times the American Indian rate.

Figure 14
Percentage College Graduates or Higher
California reservations



Real All-Races Income Change off the Reservations

Given the small size and population of California reservations, the impacts of tribal gaming facilities would be expected to produce significant spillover effects outside reservation and rancheria borders. Indeed, this assumption was the basis for the creation of the Special Distribution Fund (SDF) in the Davis compact. In addition to the payments from that fund, however, it appears that proximity to a tribal gaming facility brings additional benefits. For example, while median family income and per capita income grew substantially across California in the 1990s and 2000s, income growth near American Indian reservations in California was more rapid than in other areas in the state. Had this been true only at a single distance—say, at five miles—such a result might be considered a coincidence or an artifact. Importantly, our results indicate that income growth in census tracts near Indian casino operations is approximately 7 to 11% stronger than elsewhere across a range of distances.

Table 2 reports changes in the inflation-adjusted income of people of all races in California census tracts. The table provides information on income changes for census tracts that are within five, ten or twenty miles from an Indian casino. The table also provides information on income changes for census tracts that are further than five, ten or twenty miles of an Indian casino. In each case, we present the percentage change from the 1990 decennial census long-form data to the 2010 ACS five-year data. For example, tracts that were closer than five miles to Indian casinos in California experienced an increase of 82% in median family income from 1990 to 2010, while tracts that were further away than five miles experienced a 75% increase in median family income over the same period.

Given that tribal gaming facilities are neither evenly distributed around the state nor located near the largest market opportunities, this income growth differential indicates that the casino operations correlate with net economic benefits in reservation and adjacent communities. Causation cannot strictly be determined in this case; however, these results are similar those of earlier research (Martin *et al.*, 2006). The findings are consistent with Indian gaming in California benefitting non-Indians who reside in close proximity to reservation casinos.

Table 2
Change in Real Income in the Vicinity of Indian Casinos
California census tracts closer and more distant than 5, 10, and 20 miles

		Income Change 1990–2010				
		median family	per capita			
5 miles						
	within 5 miles of a casino	82%	86%			
	greater than 5 miles from a casino	75%	80%			
	difference	7%	7%			
N = 262 census tracts within 5 mi. and 6,787 tracts greater than 5 mi.						
10 miles						
	within 10 miles of a casino	84%	87%			
	greater than 10 miles from a casino	74%	79%			
	difference	10%	8%			
N = 648 census tracts within 10 mi. and 6,401 tracts greater than 10 mi.						
20 miles						
	within 20 miles of a casino	83%	88%			
	greater than 20 miles from a casino	72%	77%			
	difference	11%	11%			
N = 2,083 census tracts within 20 mi. and 4,966 tracts greater than 20 mi.						

Conclusion

Tribal government gaming has created differential outcomes across time and space in Indian Country. The opportunities enshrined in and the constraints created by the Indian Gaming Regulatory Act (IGRA) are still revealing themselves as tribal-state gaming compacts, tribal government capital investment, and federal actions that continue to evolve. As with many federal policies intended to clarify rights across Indian Country, IGRA's compacting provision has instead created a patchwork of regimes that result in differing outcomes across time and geography.

The data analysis provided in this paper reveals the ways that the tribal-state compacting process, as well as the provisions in the predominant compact in the state of California, have affected reservation conditions in that state. While the US Census data is limited in what it can reveal about quality of life, the data presented here demonstrates a record of successful investment wherein tribal self-determination is being strengthened and investment of gaming revenues is improving living conditions on and off reservations. While conditions across Indian Country in California continue to lag behind those of the US as a whole, that gap is closing, suggesting that on-going support for policies of tribal self-determination will continue to provide conditions wherein tribal governments can innovate, invest, and improve.

This analysis is intended to serve as a foundation for further work that examines the regional and state level differences in tribal gaming operations and successes. Given the segmentation of the gaming sector and the differences across American Indian tribes, we expect there to be differences both within California but also across the United States. Analysis that examines the provision of government services, increased employment

opportunities on long-run tribal citizen outcomes has yet to be conducted. We anticipate future work in this area with improved data sources and interest in the topic.

Notes on Method

As in a companion piece (Akee & Taylor, 2014), we relied on the US Census Bureau for the bulk of our information. For income, employment, housing, and education statistics, the 1990 and 2000 censuses provide a one-in-six sample of population characteristics for those years—also known as the census's "long form." The 2010 decennial census dispensed with the long-form survey; its replacement, the American Community Survey (ACS), is an annual sample, but it is too small to provide reliable estimates for all geographic units. The Census Bureau provides three-year averages for locations with populations between 20,000 and 65,000, and five-year averages for geographic and political units that are smaller than 20,000 in population (Macdonald, 2006)—i.e., most Indian reservations.

The Census Bureau's policy change necessitates that we compare US Census long-form information (1990 and 2000) with the 2010 ACS five-year average, which actually reports average conditions from 2006 to 2010. Given that the recent recession took place in the middle of that period, it is concerning that these charts may be comparing apples with oranges. US per capita income, for example, averaged \$26,059 according to the 2010 ACS one-year survey and \$27,334 according to the 2010 ACS five-year average (US Census, 2013b; 2013a). Pre-recession conditions lift the five-year average. Unfortunately, these are the only data that provide more than a simple count of the population.

However, we use the same type of data for both American Indian and non-Indian data at each time period, meaning that observations about relative changes are reasonable; we use the 1990 and 2000 US Census long-form data for both groups and the ACS five-year average data for the period 2006–2010 for both groups. Conclusions about the absolute levels over time should be treated with caution, because the recent data are not from a decennial snapshot.

To further ensure the reliability of our comparisons, the charts that follow use consistent definitions of the indicators in question. When changes in census-taking procedures or definitions prevented consistent comparisons, a substitute indicator, consistent across the decades (as for college graduate or more), was developed. Unfortunately, this could not be done for the proportion of Indians in deep poverty, those with less than a ninth-grade education, or those dependent on public assistance—three indicators that appeared in prior work (Taylor & Kalt, 2005). Thus, those indicators are not included.

It should also be noted that the data herein do not control for migration onto or off the reservation—a limitation for all such cross-sectional data—so the charts do not compare the exact same populations over time. The Census Bureau does not allow researchers to reliably identify where people resided ten years earlier; therefore, it is not possible to estimate exactly the flow on or off the reservations.

Finally, researchers have found that the ACS undercounts the number of American Indians and Alaska Natives relative to the US Census in 2010 (J. Ong & Ong, n.d.). To some extent this is due to the sampling nature of the ACS data. However, in some cases the discrepancy is almost ten times the potential sampling error, clearly indicating that something more is at play. Inaccurate sampling weights may play a role in this discrepancy. Additionally, there is some evidence that the accuracy of count is more problematic for urban settings than for rural ones. This databook focuses on reservation populations, which may alleviate the concern.

Inflation-Adjusted Dollars

Unless otherwise indicated, the dollar figures in this report are adjusted for inflation to 2009 dollars using the Consumer Price Index for urban consumers (CPI-U) (Bureau of Labor Statistics, 2012). That is because the census question asks for income in the prior year—hence the values are for 1989, 1999, and 2009. Thus comparisons over time preserve purchasing power parity.

Income

Census-recorded income includes income from many sources other than earnings—for example, SSI, Social Security, retirement income, welfare transfers, and unemployment benefits. It does not include refunds, rebates, savings withdrawals, capital gains/losses, or in-kind payments. It is self-reported and, of course, not audited or otherwise verified.

Indian

We use the Census Bureau's category American Indian and Alaska Native Alone—a self-reported identification. Since the 2000 census, the bureau has provided Americans with the option to designate more than one racial or ethnic category. Over time, the American Indian and Alaska Native population has risen as a result of strong birthrates and an increasing propensity to self-identify as Indian (Eschbach, 1995).

At the national level, the difference between AIAN Alone and AIAN Alone or in Combination with another race is large. Such a discrepancy would be concerning for a project like this, except that the difference between the two categories shrinks as the scope of analysis approaches the reservation. Indians in New York City and Los Angeles, for example, tend to self-identify with more racial categories than Indians living on reservations or in cities that are close to Indian Country, such as Albuquerque and Rapid City (Ogunwole, 2006).

The narrower definition most likely correlates with a tighter affiliation with reservation economic, political, and social life. Accordingly, wherever we refer to "Indians," we mean American Indian and Alaska Native Alone—not in combination with other races.

Average

Virtually all the summary statistics for Indian areas—reservations, OTSAs, TDSAs—are averages weighted by reservation Indian population. Equivalently, they represent the sum of all numerator values divided by the sum of all denominator values. For example, the sum of all the income earned by all Indians on all reservations divided by the total number of Indians on all reservations yields per capita income. Thus the statistics relate not how the average *reservation* fares but, rather, how the average *Indian* across all reservations fares.

Median

The exception to the rule is median household income. The median must be calculated differently to yield a summary statistic that is an appropriate analog to the weighted average. Because the Census Bureau keeps confidential the individual household data from which an actual median could be calculated, we apply the bureau's method of Pareto interpolation (Stults, n.d.; US Census, 2001) to estimate the median. Essentially, the counts of individuals in census-defined bands of income are added across reservations, and the median is interpolated from the national histogram.

Endnotes

1. Please send comments and observations to rakee@ucla.edu, kspilde@mail.sdsu.edu and <a href="jointhing-iont

- the clear understanding that the investigators have the full right to publish any results obtained by them, without prior approval of any funding organization or individual and subject only to established safeguards for the protection of privacy or confidentiality.
- 2. Population characteristics for 1990 are derived from GeoLytics (2000). Data for 2000 are extracted from the census summary file containing the long-form responses (US Census, 2000b). Data for 2006–2010 are taken from the American Community Survey 2010 five-year average (US Census, 2013a). Deflation of dollars to 2009 was done using the consumer price index for all urban consumers, the CPI-U (Bureau of Labor Statistics, 2012)All Urban Consumers (CPI-U).

References

- Akee, R. K., & Taylor, J. B. (2014). Social and economic change on American Indian reservations: A databook of the US Censuses and American Community Survey, 1990–2010. Sarasota, FL: Taylor Policy Group, Inc. Retrieved from http://taylorpolicy.com/us-databook/
- Akee, R. K., Copeland, W. E., Keeler, G., Angold, A., & Costello, E. J. (2009). *Parents* " *incomes and children*" soutcomes: a quasi-experiment using transfer payments from casino profits. Medford, MA: Tufts University.
- Akee, R. K., Simeonova, E., Copeland, W., Angold, A., & Costello, E. J. (2013). Young Adult Obesity and Household Income: Effects of Unconditional Cash Transfers. *American Economic Journal: Applied Economics*, 5(2), 1–28. doi:10.1257/app.5.2.1
- Angrist, J. D., & Krueger, A. B. (1991). Does compulsory school attendance affect schooling and earnings? *The Quarterly Journal of Economics*, *106*(4), 979–1014.
- Barona v. Duffy. Barona v. Duffy, 694 F.2d 1185 (1982).
- Bureau of Economic Analysis. (2013). Regional economic accounts, Local area personal income, CA1-3 Per capita personal income. *US Department of Commerce Bureau of Economic Analysis*. Retrieved January 23, 2013, from http://bea.gov/bea/regional/reis/drill.cfm
- Bureau of Indian Affairs. (2014). Indian entities recognized and eligible to receive services from the United States Bureau of Indian Affairs. *Federal Register*, 79(19), 4748–4753.
- Bureau of Labor Statistics. (2008). BLS Glossary. *Bureau of Labor Statistics*. Retrieved April 20, 2013, from http://www.bls.gov/bls/glossary.htm#U
- Bureau of Labor Statistics. (2012). Consumer Price Index, All Urban Consumers (CPI-U), US City Average. *Ftp.Bls.Gov*. Washington, DC: US Department of Labor. Retrieved March 15, 2012, from ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt
- California Gambling Control Commission. (2013, April 26). Revenue Sharing Trust Fund report of distribution of funds to eligible recipient Indian tribes. *California Gambling Control Commission*. Sacramento, CA. Retrieved June 2, 2013, from http://www.cgcc.ca.gov/documents/rstfi/2013/RSTF Distrib 46th CommStaffReport FINAL.pdf
- California State Auditor. (2011, February). Indian Gaming Special Distribution Fund. *California Bureau of State Audits*. Sacramento, CA. Retrieved June 12, 2013, from http://www.bsa.ca.gov/pdfs/reports/2013-406.pdf
- California v. Cabazon Band of Mission Indians. California v. Cabazon Band of Mission Indians, 480 United States 202 (1987). US Supreme Court.
- Card, D. (1995). Using geographic variation in college proximity to estimate the return to schooling. In L. N. Christofides, E. K. Grant, & R. Swidinsky, *Aspects of Labor Market Behaviour: Essays in Honour of John Vanderkamp*. University of Toronto Press. Retrieved from http://davidcard.berkeley.edu/papers/geo_var_schooling.pdf

- Casino City. (2013, December). Gaming Directory.com. Casino City Press. Retrieved from http://www.gamingdirectory.com/
- Costello, E. J., Compton, S. N., Keeler, G., & Angold, A. (2003). Relationships between poverty and psychopathology: a natural experiment. *JAMA: the Journal of the American Medical Association*, *290*(15), 2023–2029. doi:10.1001/jama.290.15.2023
- Dunstan, R. (1997, January). Gambling in California. California Research Bureau, California State Library. Sacramento, CA. Retrieved November 9, 2013, from http:// www.library.ca.gov/crb/97/03/crb97003.html
- Eadington, W. R., Wells, R. H., & Gossi, D. (2010). Estimating the impact of California tribal gaming on demand for casino gaming in Nevada. *UNLV Gaming Research & Review Journal*, 14(2), 33–45.
- Eschbach, K. (1995). The enduring and vanishing American Indian: American Indian population growth and intermarriage in 1990. *Ethnic and Racial Studies*, *18*(1), 89–108. doi:10.1080/01419870.1995.9993855
- GeoLytics, Inc. (2000). *Census CD 1990 long form in 2000 boundaries* (Vol. 1). East Brunswick, NJ: GeoLytics, Inc.
- Gordon, C. M. (2000). From hope to realization of dreams: Proposition 5 and California Indian gaming. In A. Mullis & D. Kamper, *Indian Gaming: Who wins?* (pp. 3–13). Los Angeles, CA: UCLA American Indian Studies Center.
- HPAIED, Henson, E. C., Taylor, J. B., Curtis, C. E. A., Cornell, S. E., Grant, K. W., et al. (2008). *The state of the Native nations: conditions under U.S. policies of self-determination*. New York, NY: Oxford University Press.
- Indian Gaming Regulatory Act. Indian Gaming Regulatory Act (1988). 100th: 25 U.S.C. 2701 *et seq.*
- Johnson, M., Filla, J., & McLaughlin, J. (2005). An impact analysis of tribal government gaming in California: California nations institutional development and intergovernmental relations. *Center for California Native Nations*. Retrieved June 5, 2013, from http://ccnn.ucr.edu/publications/InstitutionalDevelopment.pdf
- Koenig, K. A. (2002). Gambling on Proposition 1A: The California Indian Self-Reliance Amendment. *University of San Francisco Law Review*, *36*, 1033–1065. Retrieved from http://heinonline.org.ezproxy2.library.arizona.edu/HOL/Print?collection=journal s&handle=hein.journals/usflr36&id=1043
- Macdonald, H. (2006). The American Community Survey: Warmer (More Current), but Fuzzier (Less Precise) than the Decennial Census. *Journal of the American Planning Association*, 72(4), 491–503. doi:10.1080/01944360608976768
- Marks, M., & Contreras, K. S. (2007, Summer). Lands of opportunity: Social and economic effects of tribal gaming on localities. *Policy Matters*, pp. 1–12. Riverside, CA: University of California, Riverside.
- Martin, J., Contreras, K. S., Deolalikar, A., Gelles, P., González-Rivera, G., Johnson, M., & Marks, M. (2006). An impact analysis of tribal government gaming in California. Riverside, CA: Center for California Native Nations, University of California, Riverside.
- Mason, W. D. (2000). *Indian Gaming: Tribal Sovereignty and American Politics*. University of Oklahoma Press.
- Morain, D. (1999, February 6). Handful of Tribes Broke Initiative Spending Record. *Los Angeles Times*, pp. 1–2. Los Angeles, CA. Retrieved from http://articles.latimes.com/1999/feb/06/news/mn-5471

- National Bureau of Economic Research. (2010, September 20). US Business Cycle Expansions and Contractions. *NBER.org*. Cambridge, MA. Retrieved September 24, 2014, from http://www.nber.org/cycles.html
- National Indian Gaming Commission. (2013). Gaming Revenue Reports. *National Indian Gaming Commission*. Washington, DC: National Indian Gaming Commission. Retrieved April 15, 2014, from http://www.nigc.gov/Gaming Revenue Reports.aspx
- Ogunwole, S. U. (2006). *We the people: American Indians and Alaska Natives in the United States* (pp. 1–23). US Census Bureau.
- Ong, J., & Ong, P. (n.d.). AIAN underrepresentation in the ACS. *UCLA Indian Studies Center*. Los Angeles, CA. Retrieved November 1, 2013, from http://www.aisc.ucla.edu/research/pb1 memo3.aspx
- Osier, V. (2012). American Indian and Alaska Native area to tribe 2012.xls.
- Seminole Tribe of Florida v. Butterworth. Seminole Tribe of Florida v. Butterworth, 658 F.2d 3110 (1982). 5th Circuit.
- Seminole Tribe of Florida v. Florida. Seminole Tribe of Florida v. Florida, 517 United States (1996).
- Senate Committee on Indian Affairs. (1988). Senate Report 100-446 on the Indian Gaming Regulatory Act, to accompany S. 555. In *Congressional Record* (Vol. 134, pp. 3071–3106). WestLaw.
- Shryock, H. S., Siegel, J. S., & Stockwell, E. G. (1976). *The methods and materials of demography*. New York: Academic Press.
- Snipp, C. M. (1989). American Indians: The First of This Land. Russell Sage Foundation.
- Stults, B. J. (n.d.). Deriving median household income. *Mumford1.Dyndns.org*. University of Florida. Retrieved September 7, 2012, from http://mumford1.dyndns.org/cen2000/CityProfiles/Profiles/MHHINote.htm
- Taylor, J. B., & Kalt, J. P. (2005). American Indians on reservations. *Nnidatabase.org*. Cambridge, MA: Harvard Project on American Indian Economic Development. Retrieved August 28, 2014, from https://nnidatabase.org/db/attachments/text/2005_TAYLOR kalt HPAIED databook.pdf
- Trosper, R. L. (1996). American Indian Poverty on Reservations, 1969–1989. In G. D. Sandefur, R. R. Rindfuss, & B. Cohen, *Changing numbers, changing needs: American Indian demography and public health* (pp. 172–195). Washington, DC: National Academy Press.
- US Census. (2000a). Census 2000 Summary File 1 P3. Race. *Social Explorer*. Retrieved March 12, 2014, from http://www.socialexplorer.com
- US Census. (2000b). *Census 2000 Summary File 3*. Washington, DC: Bureau of the Census.
- US Census. (2001). Summary file 3—2000 census of population and housing technical documentation. [Washington, D.C.]: U.S. Dept. of Commerce, U.S. Census Bureau. Retrieved September 5, 2013, from http://www.census.gov/prod/cen2000/doc/sf2.pdf
- US Census. (2011). 2010 Census Summary File 1 United States. US Census Bureau.
- US Census. (2013a). 2006–2010 American Community Survey 5-Year Estimates DP03. US Census Bureau.
- US Census. (2013b). 2010 American Community Survey 1-Year Estimates DP03. US Census Bureau.

- US Census. (2013c). 2013 TIGER/Line Shapefiles. Washington, DC: US Department of Commerce, Bureau of the Census.
- US Census. (2012, October 26). How the Census Bureau Measures Poverty—U.S Census Bureau. Retrieved May 2, 2013, from http://www.census.gov/hhes/www/poverty/about/overview/measure.html
- US Census. (2013d, February 1). Poverty Data—Poverty thresholds—U.S Census Bureau. Washington, DC. Retrieved May 2, 2013, from http://www.census.gov/hhes/www/poverty/data/threshld/index.html
- Walke, R. (2000). Indian-related federal spending trends, FY 1975–2001, US Congressional Research Service memorandum, March 1, 2000. In *Report of the Committee on the Budget, United States Senate to accompany S. Con. Res. 101 together with additional and minority views, Senate Report 106-251*, (pp. 199–250).