

# Institutions and Violent Crime Across American Indian Nations

Florian G. Kern<sup>†</sup>  
University of Essex  
fkern@essex.ac.uk

Kristian Skrede Gleditsch  
University of Essex  
ksg@essex.ac.uk

Rebecca Cordell  
Arizona State University  
Rebecca.Cordell@asu.edu

*\*\*Work in progress. Please do not cite or share without permission of the authors.\*\**

## Abstract

In many American Indian and Alaska Native (AIAN) nations the security situation is dire. Research on the long-term decline of violent crime highlights the important role of legitimate institutions to control violence. Although scholars have studied how institutional characteristics shape economic development in AIAN nations, the role of AIAN institutions for violent crime has not yet received much attention. To fill this void, we analyze how varying types of American Indian polities and justice systems fare in combatting violent crime. We argue that AIAN nations provide an important opportunity to understand the role of autonomous institutional setups and legitimacy in combatting violent crime. We examine variation in violent crime rates and judicial institutions across data for 146 American Indian polities. Our findings indicate that autonomous criminal justice institutions indeed go together with lower violent crime. However, customary dispute resolution mechanisms do not appear to be effective in reducing crime.

## KEYWORDS:

security, crime, governance, American Indian and Alaska Native nations

## *Acknowledgements:*

We thank the Gerda Henkel Foundation for generously funding this research. We are grateful for helpful comments and discussions with Manley Begay, Nils Petter Gleditsch, Katharina Holzinger, Robert A. Johns, Joseph Kalt, Romain Malejacq, Traci Morris, Mauricio Rivera, and Barbara Zarate. We are also grateful to the members of the American Indian and Alaska Native community who provided critical input regarding this project during our field trip in February 2017. A previous version of this manuscript was presented at the International Studies Association (ISA) Annual Meeting (February, 2017), the conference “Development in the Face of Inequalities” (Barcelona, May 2017), and at the workshop on “Beyond Political Violence: Causes and Consequences of Crime and Social Violence” at the University of Essex (February 2018).

<sup>†</sup>Corresponding author, contact: fkern@essex.ac.uk

# 1 Introduction

The security situation is dire in many of the over 500 federally recognized American Indian and Alaska Native (AIAN) reservations, villages and tribal jurisdictional areas in the United States of America (US).<sup>1</sup> A 1999 report on *American Indians and Crime* by the Bureau of Justice Statistics of the US Department of Justice reported that AIAN communities in the US overall “have higher per capita rates of violent criminal victimization than whites, blacks, or Asians in the United States”, and that the mean violent crime rate for AIAN constituents was 2.5 times the national rate (US Department of Justice, 1999, p. 1/2 ).<sup>2</sup> In the year 2000, suspects for violent crime in federal investigations on AIAN reservations, villages and tribal jurisdictional areas accounted for 25 percent of all Federal violent offense investigations by US attorneys (Perry, 2004, p. 18).<sup>3</sup> In 2012, the New York Times reported that the Department of Justice brings charges in only half of all murder investigations on Indian lands, and in only one third of sexual assault cases.<sup>4</sup> “American Indian women are 10 times as likely to be murdered than other Americans ... [and] raped or sexually assaulted at a rate four times the national average, with more than one in three having either been raped or experienced an attempted rape” (Williams, 1997). Furthermore, the high levels of violent crime and insecurity in reservations, villages and tribal jurisdictional areas ensue in a context of severe poverty and inequality. US census statistics show that 29.1 percent of the approximately 5.2 million people identifying as American Indian or Alaska Native were estimated to live in

---

<sup>1</sup> A federal Indian reservation is defined as “an area of land reserved for a tribe or tribes under treaty or other agreement with the United States, executive order, or federal statute or administrative action as permanent tribal homelands, and where the federal government holds title to the land in trust on behalf of the tribe” (US Bureau of Indian Affairs, 2014). However, the majority of federally recognized AIAN nations in Alaska and Oklahoma were not assigned reservations by the federal government but are organized into villages (in the case of Alaska) and tribal jurisdictional areas (in the case of Oklahoma).

<sup>2</sup> See <https://www.bjs.gov/content/pub/pdf/aic.pdf>.

<sup>3</sup> See <https://www.bjs.gov/content/pub/pdf/aic02.pdf>

<sup>4</sup> Media reports on these issues abound. A recent headline in The Atlantic reads “On Indian Land, Criminals Can Get Away With Almost Anything” (Crane-Murdoch, 2013), and the Phoenix New Times reports the murder rate in the largest US reservation (of the Navajo Nation) as four times the national average (Dinell, 2014).

poverty in 2012 (Krogstad, 2014). A 2014 report by the Executive Office of the President assesses the situation for the Native youth as “nothing short of a national crisis” (Executive Office of the President, 2014, p. 38).

Political scientists are becoming increasingly interested in criminal violence and individual security. However, to date there has been little attention to patterns of security and violent crime across AIAN reservations, villages and tribal jurisdictional areas. The lack of attention is surprising, given the salience and scale of these problems in AIAN communities. AIAN institutions have original and inherent self-governing authorities to various degrees. Thus, studying these can allow further insights into the link between institutions and governance, as well as the role this has played in the long-run decline of violence in general and violent crime in particular (Nivette and Eisner, 2013; Nivette, 2014; Pinker, 2011).

Research on patterns in economic development across American Indian reservations and tribal jurisdictional areas highlights various impressive success stories, and attributes these to better “local control, strategic thinking, effective governing institutions, and leadership” (Cornell, 2001, p. 84). The fact that American Indian institutions can enhance economic growth is all the more surprising, as these institutions are generally resource poor, and suggests that success is more likely to be due to greater legitimacy, responsiveness, or what some have termed “cultural match” (Cornell and Kalt, 2000), rather than traditional institutional capacity in a material sense. This argument is reflected in previous studies on indigenous authorities outside of the US, which have shown that indigenous leaders can be effective in providing public services (Baldwin, 2013, 2014, 2015; Díaz-Cayeros, Magaloni and Ruiz-Euler, 2014). However, to our knowledge, no previous analyses have systematically compared contemporary patterns of security and violent crime across AIAN reservations, villages and tribal jurisdictional areas, or focused on whether variation in institutions can account for similar relative success stories in the quality of security provision by AIAN authorities.

To fill this void, we consider in this manuscript how varying types of American Indian

polities fare in providing security, and whether institutional factors can help explain patterns of violent crime across American Indian reservations and tribal jurisdictional areas.<sup>5</sup> We present and test a series of theoretical propositions linking characteristics of institutions to variation in violent crime on American Indian reservations and tribal jurisdictional areas, while controlling for other social and economic characteristics plausibly associated with both institutions and violent crime. To anticipate, we find that self-governed American Indian institutions for criminal sentencing in areas relevant to violent crime are associated with lower rates of violent crime. The comparatively weak capacity of local tribal entities relative to federal units such as the Federal Bureau of Investigation (FBI) make this divergence all the more remarkable since the effects are difficult to attribute to enforcement capacity. Our results reinforce previous studies showing how indigenous authorities can provide services effectively, despite their resource scarcity. Moreover, our findings suggest that the type of institutions – their degree of autonomy and differentiation – can have important long-term effects on human security and violent crime through generating legitimacy and compliance. The content of institutions also matters: The effect is limited to institutions relevant to violent crime. We find no general spill-over effect of local institutions. Finally, a greater reliance on more traditional types of dispute resolution mechanisms seems to go together with higher violent crime rates. Our analysis contributes to understanding AIAN governance across AIAN polities, and helps inform existing debates on federal arrangements and conflict (Brancati, 2006; Deiwiks, Cederman and Gleditsch, 2012; Crawford and Hartmann, 2008), traditional and customary ethnic institutional setups and related policy outcomes (Acemoglu, Reed and Robinson, 2014; Gennaioli and Rainer, 2007; Holzinger, Kern and Kromrey, 2016; Michalopoulos and Papaioannou, 2013; Osafo-Kwaako and Robinson, 2013), as well as how democracy and the legitimacy of political institutions influence crime rates (Nivette and Eisner, 2013; Nivette,

---

<sup>5</sup> Due to data on violent crime not being available for Alaska Native nations, our empirical analysis is limited to American Indian nations only.

2014).

We proceed as follows. First, we review the existing academic literature on violent crime, institutions, and customary governance in AIAN communities. Second, we put forward our own contribution and theoretical propositions on how institutions can influence variation in violent crime. Third, we outline the data used to evaluate empirically the propositions. Fourth, we present the results and their implications. The final section concludes.

## **2 Perspectives on Institutions, Violent Crime, and AIAN Governance**

Ferguson (2016) and others argue in a recent symposium that political science has long neglected political issues concerning AIAN nations, and comparative research on AIAN governance is rare. We argue that comparing AIAN polities promises a unique opportunity to study how variation in governing institutions across units can shape variation in violent crime, given the severity of the problem of violent crime in many units and the widespread attention to the link between institutions and violent crime rates outside AIAN communities.

### **Violent crime in global perspective**

Helped by long-time historical time-series data for many European cities and countries, many scholars have analyzed the evolution in violent crime rates and found a dramatic decline (Gurr, 1981). Based on a review of the evidence, Eisner (2003, p. 84-5) argues that homicide rates in England in the High and Late Middle Ages appear to have been as high as twenty per 100,000, but then declined to about one per 100,000 inhabitants in the twentieth century. Data for other European countries suggest even larger declines than the 20:1 seen in England, in some cases up to a factor of 50:1. Outside Europe, Roth (2001) arrives at an estimated

homicide rate among European settlers in colonial New England of over 100 per 100,000 during the era of frontier violence before 1637, which then subsequently declined to levels comparable to England.

A number of propositions have been set forward to account for this dramatic decline in violent crime. Gurr (1981, p. 295) sees the decline as “a manifestation of cultural change . . . , especially the growing sensitization to violence and the development of increased internal and external control on aggressive behavior”. This echoes many of the ideas in the previous work of Elias (2000, original 1939) on *The Civilizing Process*, which argued that the expansion of the modern state has led to a decrease in crime. On the one hand, this occurred through establishment of the effective monopoly on the use of force and coercive capacity over individuals. But on the other hand we also have the development of greater restraints on violence through increasing individual integration through the division of labor and greater interdependence.

Although the growth of the state and its coercive capacity is well-known and likely to have played a role (Tilly, 1992), the decline of homicide rates in early modern Europe is clearly not a one-to-one relationship with the rise of the absolute state. In particular, there appears to be an important legitimacy component, as crime rates in Northern Europe initially declined with the increasing acceptance or legitimacy of the state, while crime rates remained higher in areas of Southern Europe where popular acceptance of the state was lower (Eisner, 2003). Roth (2001, p. 85) argues that the decline of homicide rates in colonial New England

“did not correlate with improved economic circumstances, stronger courts, or better policing . . . [but] with the rise of intense feelings of Protestant and racial solidarity among the colonists, as two wars and a revolution united the formerly divided colonists against New England’s native in-habitants, against the French, and against their own Catholic Monarch, James II.”

Nivette and Eisner (2013) demonstrate that a similar relationship between higher legiti-

macy, better governance and lower violent crime rates can be found in a global cross-sectional sample (see also Neumayer, 2003; Nivette, 2014). LaFree (1998) argues that social and political institutions can shape human behaviors in important ways, through rewarding desired behavior and controlling unwanted behaviors. In particular, when legitimacy breaks down, or

“members of a society begin to doubt the fairness of their political institutions, . . . they become less enthusiastic agents for the social control of others, . . . do less to defend rules and respond less harshly to rule violations . . . [and] formal punishment by the legal system is less threatening and carries less of a stigma” (LaFree, 1998, p. 80).

If a state engages in perceived illegal or corrupt actions, individuals are likely to increase their use of “self-help” or “private justice” to solve interpersonal conflicts or grievances (Eisner, 2009; Pinker, 2011).

Although the consequences of a breakdown in legitimacy are clear, we admittedly know less about what influences popular perceptions of legitimacy in the first place. However, it seems plausible that legitimacy is enhanced when institutions reflect the identity of a subject, rely on some form of tacit consent, are not externally imposed, and are seen as generating favorable outcomes (Johnson and Ridgeway, 2006; Tyler, 2006). All of these features suggest a possible role through which AIAN institutions can influence the occurrence of violent crime. While AIAN institutions are traditional indigenous institutions in the sense that the tribes predate US territorial conquest, many contemporary AIAN reservations, villages and tribal jurisdictional areas are modern creations and may be far from the traditional homeland of an AIAN community. However, modern indigenous institutions can be more legitimate or representative in the sense of reflecting the members of the community and help foster a sense of autonomous leadership and governance by the community relative to institutions of the federal government. This resonates with ideas of preference heterogeneity and diversity,

as there are trade-offs between gains from scale in larger units and the gains from smaller states, in which it will be easier to reach unanimity among more homogeneous communities (Alesina and Spolaore, 2005; Buchanan and Tullock, 1962) – such as in AIAN constituencies.

## **Governance in AIAN communities compared**

There are a number of highly specialized studies of aspects of AIAN institutions, comparing gaming regulations (Boehmke and Witmer, 2004; Witmer and Boehmke, 2007), the historical contractual relations between American Indian governments and US federal authorities (Spirling, 2012), contemporary interactions with local non-native state authorities (Evans, 2011, 2014), legislation addressing American Indian issues (Witmer, Johnson and Boehmke, 2014), AIAN lobbying efforts (Boehmke and Witmer, 2012), or membership rules in tribal constitutions (Gover, 2010). Yet, comparative analyses of the various forms of governance and politics across AIAN reservations, villages and tribal jurisdictional areas and how they shape related socio-economic outcomes on the tribal area remain scarce.

Notable exceptions to this rule are Cornell and Kalt (1995), Cornell and Kalt (2000), and Akee, Jorgensen and Sunde (2015), all focusing on how different institutional setups of American Indian polities are associated with development and economic well-being. Cornell and Kalt (1995) compare the trajectory of economic development between the White Mountain Apache and the Pine Ridge Oglala Sioux. While both nations are administered with similarly structured, centralized tribal government, these polities were established with the Indian Reorganization Act (IRA) of 1934. The authors argue that, while the previous Apache polity mirrored the IRA setup quite well, the traditional Sioux organization was “almost precisely the opposite” (Cornell and Kalt, 1995, p. 424). They credit the comparatively better developmental performance of the Apache to the less disruptive “match” of formal, externally imposed institutions and internal political culture and organization.

Cornell and Kalt (2000) examine the sources of development in American Indian economies

both qualitatively and statistically with a sample of 63 nations, finding that “tribal constitutional forms appear to be make or break keys to development” (2000, p. 442). The authors argue that institutions of self-governance promote economic development, and that a “cultural match” between a community’s formal institutions and pre-constitutional norms of political legitimacy is crucial for development to occur (2000, p. 466). Based on the nations’ constitutions, the authors assess institutional variables of American Indian polities, such as whether nations elect their leadership directly or indirectly, whether a judiciary is defined in the constitution and whether the latter is independent, and the term length of the tribal chairs. Crucially, they find that employment and growth are positively affected by having a strong legislature, i.e. a council that can hold chairpersons accountable, as compared to a legislative that is made up of all tribal members in a general council. In a Boolean analysis of a smaller sample of American Indian nations, the authors also find – similar to their previous paper – that the cultural match of current institutions and previous organization enables enhanced economic performance. Cornell (2001) provides further comparative qualitative evidence for how positive development trajectories in American Indian communities emerge through tribal self-governance, effective institutions, following a strategic development plan, and if the leadership is perceived to be legitimate.

Akee, Jorgensen and Sunde (2015) also use a collection of over 70 American Indian constitutions of nations with democratic forms of government and a population greater than 750 people. They concentrate on “the implications of the external political conditions at the time of adoption of American Indian constitutions and how they affect long-run economic development for those tribes” (Akee, Jorgensen and Sunde, 2015, p. 845). Among other things, they code the rules for executive leadership selection, independence of the judiciary, staggering of elections, and term length as defined in the constitutions. They show that differences in party ideology of the US president when constitutions came into effect shaped tribal institutional arrangements and long-run economic outcomes: American Indian nations adopting consti-

tutions under Democratic presidents perform better in terms of later economic development. They also find that “[u]nder Democrat US Presidents American Indian tribes tended to adopt an indirectly elected chief executive (parliamentary-type system) and under Republican US Presidents they tended to adopt a directly elected chief executive (presidential-type system)” (2015, p. 845). Their results suggest that at critical junctures, the party of the US president has shaped constitutional design, and that the indirect form of government leads to higher economic development measured as labor force participation and per capita income.

These comparative analyses provide essential insights by juxtaposing the effect of institutional setups across American Indian communities. Yet, they focus on development only. It is of course entirely possible that the disproportionately high crime rates in AIAN communities can be accounted for on purely economic and social grounds, as poverty and marginalization are sometimes seen as the core root causes of crime. However, given the existing comparative work there is in our view also reason to believe that variation in the institutional setups across AIAN governance institutions as well as their effectiveness to deliver services should exert an independent, direct effect on variation in violent crime.

## **Violent crime in non-state societies and AIAN communities**

The role of institutions and legitimacy for crime have also been examined beyond nation states, with a number of studies examining variation in crime and violence among non-state societies or societies with traditional or parallel governance institutions, often using comparative anthropological databases such as the Human Relations Area Files (Nivette, 2011). Levels of violence in stateless societies appear to generally exceed those of modern states. However, the extensive variation across societies also suggest a much more complex issue than the traditional Hobbes/Leviathan vs. Rousseau/“Noble Savage” dichotomy often invoked (Fry, 2006). The review by Nivette (2011, p. 508-10) provides some evidence that non-state societies with stronger social institutions and mechanisms of integration go together with

less crime, in ways that are reminiscent of the cross-national or historical evidence for states. However, many of these studies admittedly suffer from poorly defined and subjective measures (i.e., classifications of high and low crime), and there are often concerns about selection biases in the specific societies considered and reliance on volatile data given short time periods and small units.

Moreover, beyond formally stateless societies, there is some evidence that colonial institutions imposed externally, or post-colonial states with institutions inherited from a metropole, have been generally less effective in addressing crime. This has been attributed to a fundamental lack of legitimacy, or failure to “express the accepted norms, values, and customs of the indigenous people” (Tankebe, 2008, p. 73). This is in our view perhaps the most relevant benchmark for AIAN units, since the US Federal Government exercises ultimate authority, and many nations originally inherited governing institutions based on a template reflecting US practices.

There has been some specific analysis of crime in AIAN communities. However, most of this has focused on either individual level risk factors or AIANs as a population rather than local outcomes in tribal units (Lainer and Huff-Corzine, 2006; Sapra et al., 2014; Yuan et al., 2006), or the role of acculturation or alienation at the community level rather than institutions per se (Levy, Kunitz and Everett, 1969; Levy and Kunitz, 1971). This is in our view an important omission, as AIAN communities can be seen as an enduring case of internal colonialism, given their relations with US federal authorities. Moreover, there is significant variation across AIAN institutions, where some nations rely much more on self-governance than others. Below, we leverage institutional variation across American Indian institutions in criminal justice to provide a comparative analysis of the types of institutions that are likely to generate the legitimacy to reduce crime rates.

### 3 Theory and Propositions

#### **Institutions, legitimacy, and cultural match**

The unique setup of American Indian reservations and tribal jurisdictional areas as federally recognized lands means that American Indian communities have two possible institutional influences on crime, namely the internal American Indian polity as well the external institutions of the US Federal Government. For our purposes, the characteristics of US Federal Institutions are largely externally determined and uniform for all AIAN units, but there is significant variation in how much AIAN polities work through local native institutions in specific areas or how much they rely on alternative external institutions, i.e. by relying in the provision of security (and other services) on Federal agencies such as the Department of Justice, the FBI, or the Bureau of Indian Affairs (BIA). More specifically, we believe the variation in the use of local autonomous institutions offers an opportunity to distinguish material or coercive effectiveness from more intangible features related to the legitimacy of self-governing institutions. If all that mattered for crime was the legislation and capacity to exert control then we would expect that reliance on federal institutions should generally be the most effective, given the superior resources and experience of the federal law enforcement system over the comparatively weaker institutions.

However, as we have seen above, variation in violent crime does not appear to be a deterministic outcome of policy and enforcement capacity. In particular, existing research suggests that institutions that are perceived as effective and legitimate by constituents are helpful for driving down violent crime rates, through fostering the development of internal and external controls by authorities, more effective coercion mechanisms, or greater interdependence among constituents. This means that although the US Federal Government has greater resources and much higher capacity than local AIAN institutions, self-governing AIAN institutions can make up for their lower formal capacity through greater legitimacy, responsiveness,

and local presence.

## **Formal judiciary institutions and self-governance**

We follow Cornell and Kalt (1995, 2000) and Akee, Jorgensen and Sunde (2015), who argue that the political organization of the AIAN polity determines policy outcomes. However, beyond being legitimate, institutions are primarily likely to affect crime if they are *relevant* to combatting violent crime, either through enforcing criminal justice or eliciting compliance with criminal codes. Based on this we would expect that in particular judicial institutions that handle criminal transgressions are most likely to be relevant here, and to influence subsequent behavior with regard to violent crime. Cornell and Kalt (2000) do not find a significant relationship between economic development and a constitutionally defined and independent judiciary. However, these institutional arrangements are likely to be particularly important for an analysis of levels of violent crime, because a functional, autonomous justice system and a more *differentiated judiciary* – featuring a court system that channels diverse types of crime through specified channels and specialized judges and staff (compared to a less differentiated judiciary with a lower degree of specialization) – can promote the rule of law, and respect for legislation, thereby increasing the local level of compliance and security in AIAN communities.

Many AIAN constitutions do not define a judiciary beyond a clause giving the tribal council the authority to appoint judges. Other polities' constitutions have more involved regulations of the judiciary, e.g. explicitly defining the latter as independent, or specifying the number of judges, and the length of their term. Some even elect judges into office instead of appointing them, or feature courts with more customary elements. In general, one might expect that the more clearly specified the judiciary is, the higher the level of security should be on a reservation, village or tribal jurisdictional area, as a differentiated judiciary may be better able to enforce the rule of law. Beyond the constitutional arrangements, many AIAN nations

also have law and order codes that further define the role of the judiciary. Thus, we formulate the following first hypothesis to be tested below:

$H_1$  American Indian reservations or tribal jurisdictional areas with a more differentiated judiciary will have lower violent crime rates.

In the analysis below, we focus on whether American Indian nations self-governing and differentiated authority via courts that handle domestic abuse protection orders. We see these as particularly relevant for evolving crime rates, since much violent crime emanates from domestic abuse, and given the high recidivism rates for crime.<sup>6</sup> We expect that American Indian nations that have self-governing autonomous institutions will perform better than units that rely on external courts for criminal justice. Again, self-governance may come with more legitimacy and local proximity of the courts, thereby making them more effective judicial institutions in reducing levels of violent crime.

## **Indigenous judiciary institutions and self-governance**

Moreover, in AIAN communities, institutional legitimacy can be a double-edged sword, as customary conceptions of governance often coincide with externally imposed institutional setups. Institutional legitimacy may therefore not only depend on whether customary forms of governance are de facto applied, but also how they interlink with and contradict more formal constitutional setups. Begay et al. (2007, p. 47) emphasize the importance of *cultural match* in AIAN communities, i.e., “a fit between the formal institutions of governance and the underlying political culture of the society being governed” (see similar in Cornell and Kalt, 1995, 2000, p. 466). Here the authors do not refer to a necessary comeback of traditional institutions, but rather an institutional setup reflecting the contemporary political culture of

---

<sup>6</sup> Misdemeanor cases may in fact include violent offenses, e.g. domestic violence or simple assault (see US Department of Justice, 2016).

a community, including but not limited to governance traditions. Thus, even if customary, pre-colonial elements of institutions are maintained or re-established, they may conflict with externally imposed constitutional regulations, leading to ineffectiveness of these institutions. An effective match, Cornell (2007, p. 73) and Begay et al. (2007, p. 52) argue, is most likely to be achieved through indigenous control, i.e. self-governing authority and sovereignty over the design of institutional setups by AIAN authorities.

The idea of a customary judiciary, traditional dispute resolution and reconciliation is of course not unique to AIAN communities. Examples of the practice of alternative dispute resolution mechanisms in various countries (Khadiagala, 2001; Mac Ginty, 2008; Zartman, 2000), sometimes employed jointly or in parallel with more formal mechanisms (as shown in studies on legal pluralism, e.g. Benjamin, 2008; Zips and Weilenmann, 2011), or the Gacaca courts in Rwanda (Corey and Joireman, 2004; Rettig, 2008), demonstrate the incorporation of indigenous principles of justice. These indigenous practices may provide legitimate pathways to dispute resolution otherwise inaccessible through the sole application externally imposed, culturally insensitive procedures. A number of AIAN communities have attempted to establish more restorative judiciary institutions with greater cultural match, e.g. through peacemaking circles providing alternative forms of reconciliation. These are restorative forms of justice employed with customary elements.<sup>7</sup> One might assume that such alternative forms of justice exist should reduce violent crime, given the attempt to generate greater cultural fit and the conciliatory character of these approaches to justice. Moreover, similar to the argumentation on autonomous judicial institutions above, alternative types of dispute resolution are frequently employed on lowest levels of administration, and should thus provide even greater control to AIAN governance authorities. Thus follows our second hypothesis:

---

<sup>7</sup> See National Institute of Justice on “Sentencing Circles”, <https://nij.gov/topics/courts/restorative-justice/promising-practices/Pages/sentencing-circles.aspx>.

$H_2$  If the judiciary on the self-governed tribal level incorporates customary approaches to justice, the violent crime rates on the American Indian reservation or tribal jurisdictional area will be lower.

That said, the incongruence of co-existing indigenous and formal institutions of justice may be problematic for the occurrence of violent crime too. Some critics see traditional or religious courts as disproportionately favoring established interests over the rights of victims, in ways that often help to perpetuate rather than combat abuse. For example, some argue that parallel Sharia courts tend to discourage women reporting domestic violence and often make it more difficult for women to obtain a divorce (Zee, 2015). Johnston (2017) similarly argues that local conflict resolution institutions in East Timor have often helped to de facto condone abuse of women by identifying the appropriate “fines” instead of discouraging abuse and promoting changes in behavior. Hence, traditional conflict resolution institutions alone may not be a panacea in the absence of modern judicial institutions relevant to violent crime.

## 4 Empirical Analysis

In order to evaluate the two hypotheses and effects of developed judicial institutions on crime rates we conduct a comparative analysis of 146 American Indian nations.

### Data and Operationalization

Our main outcome variable is a measure of the per capita violent crime rate for each American Indian nation. Our data on total violent crime come from the annual reports compiled by Steven W. Perry for “Tribal Crime in the United States”, published by the US Department of Justice, Bureau of Justice Statistics. We use all the available data for the years 2010-2014 and divide by the number of available years. Combining and averaging data for multiple years

help to reduce the year-on-year variance and to smooth out the potential erratic spikes that may be observed for relatively rare events collected for small units over a short interval. In the appendix we provide descriptive statistics and the total N for all of the 146 American Indian nations in the lower 48 states (the US states except for Alaska and Hawaii) for which we have data. It is difficult to find complete and disaggregated data that are specific to individual tribal units, and we acknowledge that the crime data employed below is not without its limitations. However, we nonetheless believe that they provide the best possible measure of violent crime specific to the local tribal government, and are sufficiently inclusive to provide useful information. Our data cover most of the major tribal units, and most of the missing data appear to pertain to very small reservations and tribal jurisdictional areas with low resident populations.

Since American Indian nations differ dramatically in their total population it is better to look at per capita rates rather than to examine the absolute number of violent crime events. For population, we use data from the US Census Bureau (2010), 2006-2010 American Community Survey. Unfortunately, the data do not provide population estimates for 21 tribal authorities in our sample. We have supplemented these with population data from the US Bureau of Indian Affairs (2013, 2005) American Indian Population and Labor Force Report. The figures collected suggest that most of the nations with missing population data also are small.<sup>8</sup> As a fallback, we have used population estimates from the 2005 report.

Figure 1 plots the geographic distribution of the per capita violent crime rates by tribal authority. We provide the full data with the underlying violent crime incidents and population figures in Table 2 in the Appendix. The average annual violent crime rate across the American Indian nations in our sample is 0.011 per capita – in other words, on average there was about one violent crime for every hundred people overall per year. We have some nations such as

---

<sup>8</sup> Where possible, we have used population data from the 2013 report (collected in 2010). However, the report do not provide population estimates for all American Indian nations.

the Kaw Nation in Oklahoma where no violent crimes were reported between 2010-2014. For other nations we find very high violent crime rates, including the Ysleta del Sur Pueblo in El Paso County in West Texas (at 0.11 per capita) or the Hualapai in Arizona (at 0.14 per capita). Annual violent crime rates of 10-14 per 100 people is orders of magnitude higher than the US violent crime rate, which is less than 0.004 per capita for 2016.

Since American Indian nations occupy a small proportion of the total US area, we provide in Figure 2 a map zooming in on nations in Arizona and the Four Corners area of Southwest US. As can be seen, we find considerable variation within this more confined area too. For example, of the larger nations, the Hualapai Indian Tribe of the Hualapai Indian Reservation in the upper Northwest corner of Arizona have a high violent crime rate of about 0.14 per capita, while the White Mountain Apache Tribe of the Fort Apache Reservation in the centre of the state have a much lower per capita crime rate of less than 0.001.

To test our propositions on the role of institutions in accounting for variation in violence crime we use survey data on judicial institutions from the *Census of Tribal Justice Agencies in Indian Country (CTJA), 2002*. This is a survey of American Indian governments conducted by the US Department of Justice, Bureau of Justice Statistics in 2002, subsequently published in 2005 (US Department of Justice, 2005).<sup>9</sup> This survey covers a range of questions on law enforcement, courts and administration, corrections and intermediate sentences as well as criminal history records and justice statistics. This survey secured high response rates (at over 92%). All but ten of the American Indian nations for which we have crime data participated in the survey, although not all have answered all questions.

---

<sup>9</sup> See <https://www.bjs.gov/content/pub/pdf/ctjaic02.pdf>.

Figure 1: Violent crime rates per capita for tribal authorities, 2010-2014

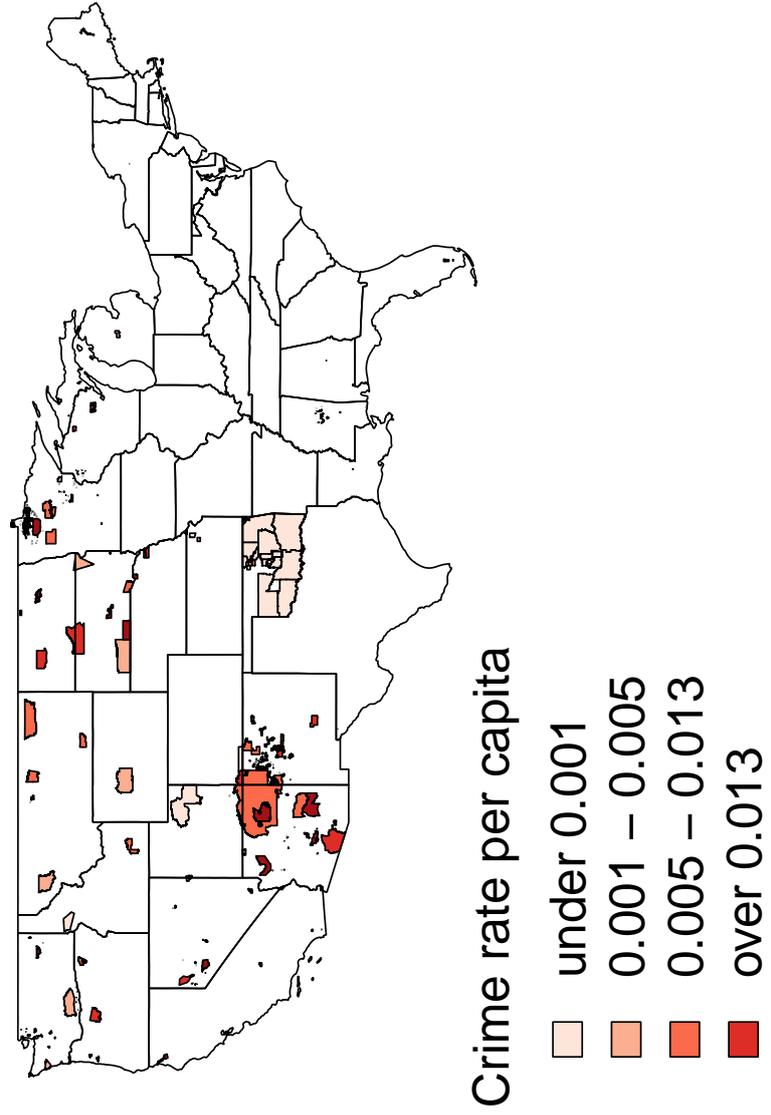
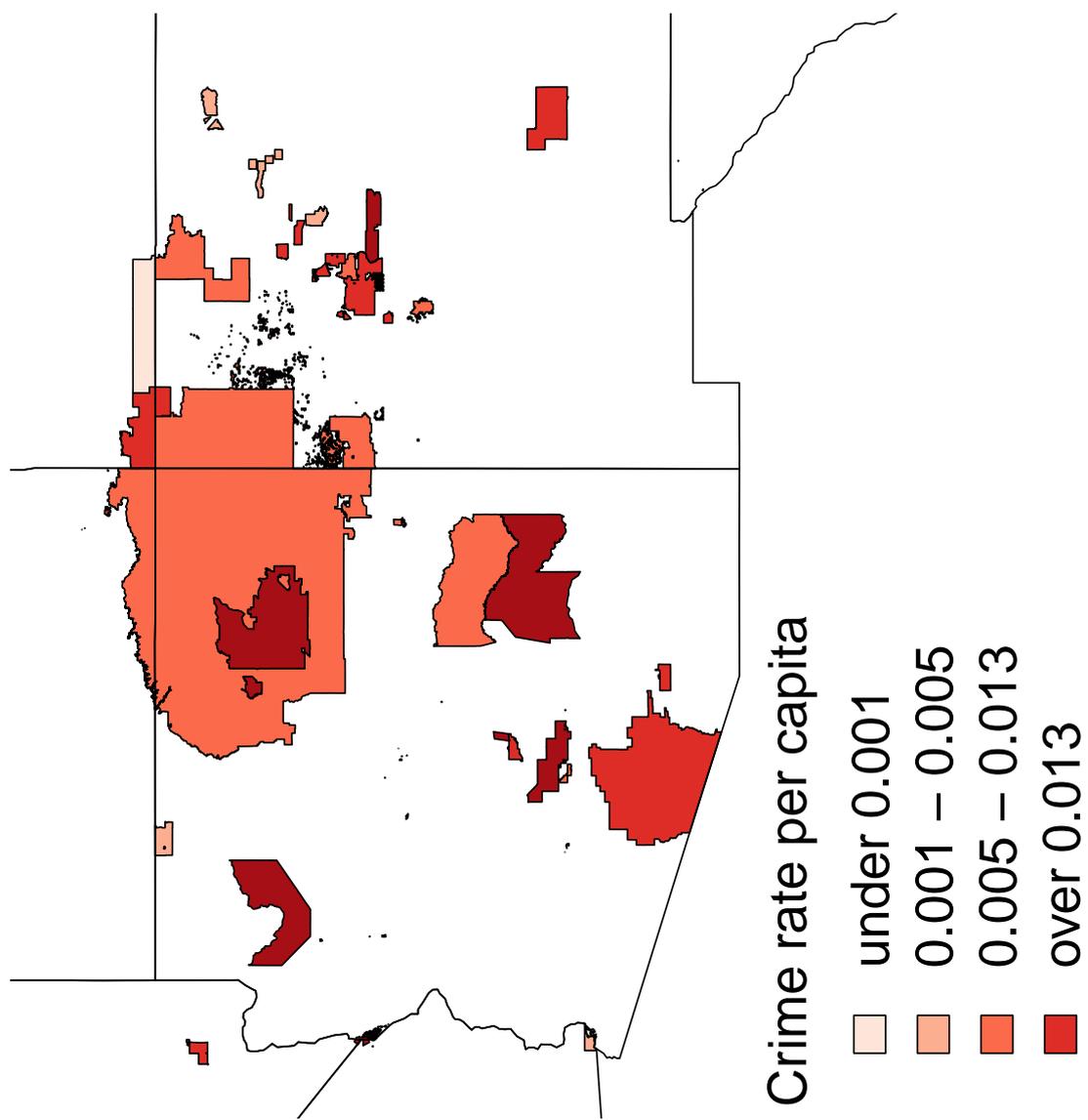


Figure 2: Violent crime rates per capita for Arizona and Four Corners area, 2010-2014



Our first measure of self-governing American Indian judiciary institutions that are relevant to violent crime we consider the tribal justice system handles domestic violence protective orders. This is a binary variable based on CTJA item *b3\_6*. The majority of American Indian nations in our sample do handle domestic violence protective orders (86%), but there are a number of nations that do not (14%) such as the Lower Sioux Indian Community in the State of Minnesota. If local institutions have an edge on legitimacy then we should see generally lower crime rates when nations handle domestic violence protective orders over cases where these are handled by non-tribal institutions.

Second, we compare the effects of formal, domain specific criminal justice institutions to traditional justice institutions to capture the idea of furthering cultural match through alternative forms of justice. To do so we consider two items in the CTJA survey. The first asks respondents whether their tribal justice system have a separate peacemaking/circle sentencing court (*b4\_6*). The second considers whether traditional methods and/or forums operate in the tribal jurisdiction (*b2\_4*). We create a dichotomous indicator flagging whether the answers to any of these questions is yes. While the majority of American Indian nations in our sample do not have these customary functions operating in their judicial system (81%), a number of nations do (19%), such as the Navajo Nation in Arizona, New Mexico and Utah.

We also consider a number of potentially important control variables that may be associated with both features of institutions and crime rates. First we consider the overall size of tribal units. The geographic size may be related to problems of governability. We extract a measure of total area in square kilometers from the US Department of Commerce (2015) US Census American Indian/Alaska Native/Native Hawaiian Areas (AIANNH) National 2014 shapefile data. We log the values, since the impact of size is likely to decrease with the larger base.

Although our crime rate measures are population adjusted, total population size may be related to volatility in per capita crime. Not all American Indian units may have the capacity

to set up autonomous units with complex self-governance institutions, and total size is a plausible proxy for potential resources as very small units are less likely to have the required capacity. There is also some evidence from studies of traditional societies that the size of units tend to be associated with lower crime rates (Nivette, 2011), possibly due to a screening process where small units are less likely to survive challenges from a larger unit. We control for total population of an American Indian nation using population data from the US Census Bureau (2010), 2006-2010 American Community Survey with the supplements discussed above or missing data. We use logged values to decrease differences for large populations.

Finally, we control for AIAN nations affected by Public Law 280 jurisdiction. The act, established in 1953, transferred legal authority from the federal government to state governments concerning civil and criminal matters involving American Indians and Alaska Natives on reservations and in villages. The law required "mandatory states" including Alaska, California, Minnesota, Nebraska, Oregon and Wisconsin to assume jurisdiction and "optional states" including Arizona, Florida, Idaho, Iowa, Montana, Nevada, North Dakota, South Dakota, Utah and Washington to assume full or partial state jurisdiction. The law has been widely criticized for creating confusion and obstacles regarding the role of states in criminal justice systems in AIAN nations, a lack of funding from the federal government and a failure to recognize tribal sovereignty and tribal self-determination (Goldberg-Ambrose, 1997). Therefore, we might expect violent crime rates to be higher when the state has authority over criminal matters on American Indian reservations because of decreased institutional capacity and perceptions of illegitimacy among American Indian constituents. We control for Public Law 280 using data from the National Indian Justice Centre (2014) report on Federal Recognized Indian Nations under State Jurisdiction (PL-280). We create a binary variable, assigning a value of 1 to those American Indian nations where criminal jurisdiction lies with the state, and a 0 otherwise.

There are strong reasons to suspect that crime is related to poverty, and a large literature

on democratization argues that greater wealth tends to go together with more responsive institutions and improved governance. We use two measures of variation in poverty and income. Arguably, the most appropriate measure would be a specific measure of poverty rates on tribal reservations and tribal jurisdictional areas. However, we have been unable to find systematic comparative data on this. As a fallback, we control for the poverty rates in the county where the tribal seat is located, using data from the 2010 US census.<sup>10</sup> Although this is not tribe specific and may not cover the entire reservation, it should provide a good indication of the number of people affected by poverty. In addition, we consider data on median income data for tribal areas reported in from the US Census Bureau (2010), 2006-2010 American Community Survey, where lower median income would correspond to a more impoverished population. We log the median income values to reduce skew.

## **Empirical Results**

In Table 1 we provide estimates for a series of different specifications of a linear regression model of crime rate per capita by tribal area against a series of covariates reflecting our main features of interests and the core control variables. The baseline models 1-2 include just the control variables, without any institutional characteristics. As one would expect, we find a positive association with census county poverty rate and crime in model 1. The results for model 2 shows that we see a drop in the number of observations when we rely on the nation specific median income measure, and we find no evidence that this has a clear covariation with violent crime rates. In light of this, we focus only on the poverty rates measures in the subsequent estimates.

For total population we find a negative association with crime rates, suggesting that larger tribes may have greater capacity reflected in lower crime rates. For total area the coefficient

---

<sup>10</sup>See US Census, US Department of Commerce, [http://www2.census.gov/geo/tiger/TIGER2010DP1/Tract\\_2010Census\\_DP1.zip](http://www2.census.gov/geo/tiger/TIGER2010DP1/Tract_2010Census_DP1.zip), accessed 25 May 2018.

is positive, although it is not statistically significant.

The dramatic range of variation in crime rates make our results potentially sensitive to outliers. As mentioned above we have two extreme outliers that have annual violent crime rates more than 4 standard deviations above the mean. In model 3 we exclude the two nations with annual violent crime rates above 0.10. As can be seen, the fit as measured by the  $R^2$  of the model increases notably, but we see only minor changes for the coefficients.

Table 1: Empirical estimates for models of variation in violent crime rates

	Dependent variable:							
	Violent crime per capita							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Area, ln	0.001 (0.001)	0.001 (0.001)	0.0004 (0.0004)	0.0004 (0.0005)	0.0004 (0.0005)	0.0003 (0.0005)	0.0004 (0.0005)	0.0003 (0.0004)
Total population	-0.004*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
Poverty rate	0.0005** (0.0002)	0.0005** (0.0002)	0.0004*** (0.0001)	0.001*** (0.0002)	0.001*** (0.0002)	0.001*** (0.0002)	0.0005*** (0.0002)	0.0004*** (0.0001)
Median.income, ln		0.001 (0.005)						
Jud. sys: Domestic violence protective orders				-0.005** (0.002)				
Jud. sys: Criminal misdemeanors					-0.003 (0.002)			
Jud. sys: Traffic offenses						-0.003 (0.003)		
Trad.methods or peacemaking/circle sentencing							0.004 (0.003)	
PL280								0.005** (0.002)
Constant	0.030*** (0.007)	0.025 (0.047)	0.025*** (0.004)	0.026*** (0.005)	0.025*** (0.005)	0.025*** (0.005)	0.023*** (0.005)	0.022*** (0.005)
Observations	146	144	144	134	134	134	134	144
R <sup>2</sup>	0.151	0.149	0.203	0.232	0.218	0.213	0.214	0.231
Adjusted R <sup>2</sup>	0.133	0.124	0.186	0.208	0.194	0.189	0.190	0.209
Residual Std. Error	0.017 (df = 142)	0.017 (df = 139)	0.011 (df = 140)	0.011 (df = 129)	0.011 (df = 139)			
F Statistic	8.420*** (df = 3; 142)	6.079*** (df = 4; 139)	11.896*** (df = 3; 140)	9.756*** (df = 4; 129)	8.988*** (df = 4; 129)	8.739*** (df = 4; 129)	8.782*** (df = 4; 129)	10.420*** (df = 4; 139)

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

In model 4 we introduce the measure of whether American Indian jurisdictions handle domestic abuse protection orders. As can be seen, we find a negative coefficient, consistent with our claim ( $H_1$ ) that self-governance and differentiated institutions that are functional and legitimate can reduce violent crime. To put this in perspective, the estimated magnitude of the difference in crime for self-governing institutions is comparable to an over 10 percentage point difference in median income.

For example, Navajo Nation has a far above the median poverty rate (38.7 versus the median 18.20). The predicted value from model 4 conditional on handling domestic violent protective orders is 0.0066. However, the predicted value would increase by almost 75% if the tribe did not handle domestic violent protective orders. Hence, we can see that the coefficient for domestic abuse protection orders entails difference of large substantive magnitude.

We can compare the effects of institutions that are plausibly relevant to crime against general autonomy and self-governance and other institutions that one would not expect to be relevant to violent crime. In model 5, we first consider tribal units that have a justice system that handles criminal misdemeanor cases, as opposed to outsourcing this to federal units and in model 6 we consider whether the tribal justice system handles traffic violations. If there was some kind of general spillover effect of self-governing authority we should expect to see similar results here. However, it is clear from the results in column 6 that we find little support for a general spillover effects of self-governing criminal justice institutions, as the coefficient estimates are negative but not significant.

In model 7 we consider our measure of the use of customary justice institutions. Although such institutions perhaps may have some degree of cultural match and legitimacy among constituents, they do not appear to be effective in reducing violent crime, thus not supporting our hypothesis  $H_2$ . As can be seen, we actually find a positive coefficient estimate for such institutions on the violent crime rate. Hence, there is no evidence for the idea that a parallel system of tribal, customary and formal justice institutions may be too conflictive to effectively

reduce crime rates. Indeed, the results are consistent with a greater tendency to neglect victims and brush domestic abuse and violence under the carpet in the absence of designated institutions to deal with relevant issues.

Finally, in model 8 we test the effects of Public Law 280. We find that violent crime rates are higher in American Indian nations where the state has assumed jurisdiction over crimes involving American Indians on the reservation. This finding further supports our argument that greater autonomy for tribal units go together with lower levels of violent crime, excluding justice systems that have a traditional or customary element.

We have also considered a number of additional tests for alternative measures of institutions and possible confounding characteristics, but found no evidence that these change our main substantive conclusions. Following Cornell and Kalt (2000), we considered whether a tribal leader is directly (presidential) or indirectly elected (parliamentary), using their coding scheme and a nation's most recent constitution (up to and including versions ratified in 2013). However, we find no evidence that this is associated with clear differences in per capita violent crime rates. Given the role of gambling on many American Indian reservations and tribal jurisdictional areas and its plausible connection with crime, we have also considered data on whether a tribal area has gaming operations (and the number), using data from the National Indian Gaming Commission (NIGC).<sup>11</sup> However, we find no evidence that this is associated with any consistent differences in the violent crime rate among American Indian units.

## 5 Discussion and Conclusion

The results presented above suggest an interesting conundrum for how varying institutional setups can shape the prevalence of violent crime. Self-governance by American Indian au-

---

<sup>11</sup>See here: [www.nigc.gov](http://www.nigc.gov)

thorities with legitimacy among constituents seems to be crucial: specialized judiciary institutions in American Indian communities – i.e., differentiated courts dealing with criminal misdemeanor cases or domestic violence protection orders – appear to go together with lower violent crime in American Indian communities, even though the latter rarely have superior resources or enforcement capacity compared to external and US Federal institutions. This is consistent with the idea that local self-governance can increase legitimacy through institutions perceived as more representative and responsive to local concerns (Alesina and Spolaore, 2005; Buchanan and Tullock, 1962). This of course does not mean that it is straightforward to set up such institutions in the first place, and not all nations may have the capacity to do so, although we stress the control for size as rough proxy for capacity. Our current data do not allow us to study the evolution of judicial institutions or its relationship with governance capacity, but we hope to be able to extend this in subsequent research via surveys with tribal leaders and AIAN constituents.

Then again, not every type of local self-governance of tribal authorities is necessarily beneficial in and of itself unless it is relevant to the subject matter, as seen in the results for judicial institutions handling other issues not clearly related to violent crime such as traffic violations. Our findings even suggest that applying indigenous forms of justice actually is associated with higher violent crime in American Indian nations. The latter finding is somewhat surprising on the surface, given our propositions about the positive effects of self-governance powers to legitimate authorities and the importance that many have attributed to the “cultural match” of formal institutions and community norms and previous studies on service provision by indigenous authorities. Indigenously controlled and designed judicial institutions should have the greatest cultural match and legitimacy among constituents, and thereby provide the most effective provision of local security. However, our findings do not support this proposition, and in American Indian nations these approaches seem to go together with a higher prevalence of violent crime.

On the one hand, this may simply underscore the problematic nature of indigenous approaches to justice and how these cannot adequately manage the intricate “modern” issues of violent crime, and reconcile customary norms with evolving values about e.g. domestic violence. This interpretation of our findings might reflect American Indian community norms about a higher tolerance for domestic violence, which are mirrored by indigenous justice institutions which sanction violent crimes insufficiently. This may be especially problematic given that the economic problems of AIAN communities and the poverty of the public sector of AIAN governance institutions further exacerbate the context for violent crime. AIAN governments might consider indigenous dispute resolution mechanisms the financially cheaper option compared to more differentiated justice systems, thereby aggravating the occurrence of violent crime. Moreover, traditional justice mechanisms may be more skewed toward reconciliation in the community rather than protection of victims of violence, and thus insufficient in reducing violent crime sustainably. This finding also highlights the role of institutional effectiveness in generating legitimacy, emphasizing the warning of Begay et al. (2007) about a too simplistic conception of cultural match.

On the other hand, the findings may point to a more complex problem. That is, the parallelism of indigenous and formal justice systems may be a greater obstacle to combating violent crime than having a self-governed, but more singular formal approach to justice. This would not mean that indigenous justice institutions *per se* lack legitimacy, but that legitimacy of *all* types of judiciary institutions is undermined by the co-existence of possibly incompatible or incongruent systems – in the case of AIAN communities, an externally imposed and an internally fitting one. This type of incongruence complements the idea of a “cultural mismatch” emphasized by Begay et al. (2007, 49), according to which externally imposed, formal institutions lack the cultural appropriateness and legitimacy of a community. Yet, our results also suggest that it is less the cultural appropriateness of formal institutions, but rather the mismatch of applied indigenous versus formal institutions that may generate

negative outcomes with regard to violent crime.

These findings have repercussion beyond the analysis of AIAN communities: First, in order to reduce violent crime, it is not only the extent to which the modern, formal state expands its reach – even within AIAN nations – but the way these formal institutions can match with indigenous practices of security and justice. Second, where e.g. legal pluralism is practiced, the ambiguity of varying judicial approaches to violent crime, rather than having one formal system, may have detrimental effects on policy outcomes. Third, our analysis further highlights the role of legitimacy in reducing violent crime while adding a new comparative perspective on judiciary institutions: self-governing powers of legitimate tribal justice authorities may lessen the level of insecurity in societies. Fourth, our study corroborates previous findings on traditional governance authorities and indigenous leaders' effectiveness in providing certain public goods. The main difference to arguments presented by Acemoglu, Reed and Robinson (2014) and Baldwin (2013, 2014, 2015) is that AIAN communities for the most part are elected democratically by the nation's constituents, and thus may draw on both traditional and more formal sources of legitimacy. Moreover, the most effective indigenous authorities in our study seem to be those who are able to match their communities' needs in combatting violent crime with a formal type justice institution.

Regarding AIAN communities suffering from endemic violent crime, a conclusion from our analysis for both Federal and AIAN authorities is to, on the one hand, lobby for and establish even greater judiciary self-governance to create a differentiated justice system capable of dealing with a variety of violent crime. On the other hand, AIAN governments should consider the appropriateness of indigenous approaches to justice, and eliminate problematic lack of congruence between such procedures and more formal institutional setups.

## References

- Acemoglu, Daron, Tristan Reed and James A. Robinson. 2014. "Chiefs: Economic Development and Elite Control of Civil Society in Sierra Leone." *Journal of Political Economy* 122(2):319–368.
- Akee, Randall, Miriam Jorgensen and Uwe Sunde. 2015. "Critical Junctures and Economic Development – Evidence from the Adoption of Constitutions Among American Indian Nations." *Journal of Comparative Economics* 43(4):844–861.
- Alesina, Alberto and Enrico Spolaore. 2005. *The Size of Nations*. Cambridge, MA: MIT Press.
- Baldwin, Kate. 2013. "Why Vote with the Chief? Political Connections and Public Goods Provision in Zambia." *American Journal of Political Science* 57(4):794–809.
- Baldwin, Kate. 2014. "When Politicians Cede Control of Resources: Land, Chiefs and Coalition-Building in Africa." *Comparative Politics* 46(3):253–271.
- Baldwin, Kate. 2015. *The Paradox of Traditional Leaders in Democratic Africa*. Cambridge: Cambridge University Press.
- Begay, Manley J., Stephen Cornell, Miriam Jorgensen and Joseph P. Kalt. 2007. Development, Governance, and Culture: What Are They And What Do They Have to Do with Rebuilding Native Nations? In *Rebuilding Native Nations: Strategies for Governance and Development*, ed. Miriam Jorgensen. Tucson, AZ: The University of Arizona Press pp. 34–54.
- Benjamin, Charles E. 2008. "Legal Pluralism and Decentralization: Natural Resource Management in Mali." *World Development* 36(11):2255–2276.
- Boehmke, Frederick J and Richard Witmer. 2004. "Disentangling Diffusion: The Effects of Social Learning and Economic Competition on State Policy Innovation and Expansion." *Political Research Quarterly* 57(1):39–51.
- Boehmke, Frederick J. and Richard Witmer. 2012. "Indian Nations as Interest Groups: Tribal Motivations for Contributions to US Senators." *Political Research Quarterly* 65(1):179–191.
- Brancati, Dawn. 2006. "Decentralization: Fueling the Fire or Dampening the Flames of Ethnic Conflict and Secessionism?" *International Organization* 60(03):651–685.
- Buchanan, James M and Gordon Tullock. 1962. *The Calculus of Consent*. Ann Arbor, MI: University of Michigan Press.
- Corey, Allison and Sandra F. Joireman. 2004. "Retributive Justice. The Gacaca Courts in Rwanda." *African Affairs* 103(410):73–89.
- Cornell, Stephen. 2001. "Enhancing Rural Leadership and Institutions: What Can We Learn from American Indian Nations?" *International Regional Science Review* 24(1):84–102.

- Cornell, Stephen and Joseph P Kalt. 1995. "Where does economic development really come from? Constitutional rule among the contemporary Sioux and Apache." *Economic Inquiry* 33(3):402–426.
- Cornell, Stephen and Joseph P Kalt. 2000. "Where's the glue? Institutional bases of American Indian economic development." *The Journal of Socio-Economics* 29:443–470.
- Cornell, Stephen P. 2007. Remaking the Tools of Governance: Colonial Legacies, Indigenous Solutions. In *Rebuilding Native Nations: Strategies for Governance and Development*, ed. Miriam Jorgensen. Tucson, AZ: The University of Arizona Press pp. 57–77.
- Crane-Murdoch, Sierra. 2013. "On Indian Land, Criminals Can Get Away With Almost Anything." *The Atlantic* (February 22, 2013).  
**URL:** <https://www.theatlantic.com/national/archive/2013/02/on-indian-land-criminals-can-get-away-with-almost-everything/273391/>
- Crawford, Gordon and Christof Hartmann. 2008. *Decentralisation in Africa: A Pathway Out of Poverty and Conflict*. Amsterdam: Amsterdam University Press.
- Deiwiks, Christa, Lars-Erik Cederman and Kristian Skrede Gleditsch. 2012. "Inequality and Conflict in Federations." *Journal of Peace Research* 49(2):289–304.
- Díaz-Cayeros, Alberto, Beatriz Magaloni and Alexander Ruiz-Euler. 2014. "Traditional Governance, Citizen Engagement, and Local Public Goods: Evidence from Mexico." *World Development* 53(0):80 – 93.  
**URL:** <http://www.sciencedirect.com/science/article/pii/S0305750X13000144>
- Dinell, Sarah. 2014. "Navajo Nation Murder Rates High Above National Average." *Phoenix New Times* (April 30, 2014).  
**URL:** <http://www.phoenixnewtimes.com/news/navajo-nation-murder-rates-high-above-national-average-6648224>
- Eisner, Manuel. 2003. "Long-Term Historical Trends in Violent Crime." *Crime and Justice; A Review of Research* 30:83–142.
- Eisner, Manuel. 2009. "The uses of violence: An examination of some cross-cutting issues." *International Journal of Conflict and Violence* 3:40–59.
- Elias, Norbert. 2000, original 1939. *The Civilizing Process: Sociogenetic and Psychogenetic Investigations*. Oxford: Blackwell.
- Evans, Laura E. 2011. "Expertise and Scale of Conflict: Governments as Advocates in American Indian Politics." *American Political Science Review* 105(4):663–682.
- Evans, Laura E. 2014. "Tribal-State Relations in the Anglosphere." *Annual Review of Political Science* 17:273–289.

- Executive Office of the President. 2014. *2014 Native Youth Report*. Washington, D.C.: The White House.  
**URL:** <http://bit.ly/2ot2eJQ>
- Ferguson, Kennan. 2016. "Why Does Political Science Hate American Indians?" *Perspectives on Politics* 14(4):1029–1038.
- Fry, Douglas P. 2006. *Beyond War: The Human Potential for Peace*. Oxford: Oxford University Press.
- Gennaioli, Nicola and Ilija Rainer. 2007. "The Modern Impact of Precolonial Centralization in Africa." *Journal of Economic Growth* 12(3):185–234.
- Goldberg-Ambrose, Carole. 1997. *Planting Tail Feathers: Tribal Survival and Public Law 280 (Contemporary American Indian Issues No. 6)*. UCLA American Indian Studies Center.
- Gover, Kirsty. 2010. *Tribal Constitutionalism: States, Tribes, and the Governance of Membership*. Oxford: Oxford University Press.
- Gurr, Ted Robert. 1981. Historical Trends in Violent Crime: A Critical Review of the Evidence. In *Crime and Justice: An Annual Review of Research*, ed. Michael Tonry and Norval Morris. Vol. 3 University of Chicago Press.
- Holzinger, Katharina, Florian G. Kern and Daniela Kromrey. 2016. "The Dualism of Contemporary Traditional Governance and the State: Institutional Setups and Political Consequences." *Political Research Quarterly* 69(3):469–448.
- Johnson, Cathryn, Timothy J. Dowd and Cecilia L. Ridgeway. 2006. "Legitimacy as a Social Process." *Annual Review of Sociology* 32:53–78.
- Johnston, Melissa. 2017. "Beyond hybridity: A feminist political economy of Timor-Leste's problematic postconflict peacebuilding." Typescript, Murdoch University.
- Khadiagala, Lynn. 2001. "The failure of popular justice in Uganda: Local councils and women's property rights." *Development and change* 32(1):55–76.
- Krogstad, Jens Manuel. 2014. "One-in-Four Native Americans and Alaska Natives Are Living in Poverty." Pew Research Centre Fact Tank - News in the Number, June 13, 2014.  
**URL:** <http://www.pewresearch.org/fact-tank/2014/06/13/1-in-4-native-americans-and-alaska-natives-are-living-in-poverty>
- LaFree, Gary. 1998. *Losing legitimacy: Street crime and the decline of social institutions in America*. Oxford: Westview.
- Lainer, Christina and Lin Huff-Corzine. 2006. "American Indian Homicide - A Country-Level Analysis Utilizing Social Disorganization Theory." *Homicide Studies* 10(3):181–194.

- Levy, Jerrold E. and Stephen J. Kunitz. 1971. "Indian Reservations, Anomie, and Social Pathologies." *Southwestern Journal of Anthropology* 27(2):97–128.
- Levy, Jerrold E., Stephen J. Kunitz and Michael Everett. 1969. "Navajo Criminal Homicide." *Southwestern Journal of Anthropology* 25(2):97–128.
- Mac Ginty, Roger. 2008. "Indigenous peace-making versus the liberal peace." *Cooperation and Conflict* 43(2):139–163.
- Michalopoulos, Stelios and Elias Papaioannou. 2013. "Pre-Colonial Ethnic Institutions and Contemporary African Development." *Econometrica* 81(1):113–152.
- National Indian Justice Centre. 2014. *Federal Recognized Indian Nations under State Jurisdiction (PL-280)*.
- Neumayer, Eric. 2003. "Good policy can lower violent crime: Evidence from a cross-national panel of homicides." *Journal of Peace Research* 40:619–640.
- Nivette, Amy. 2014. "Legitimacy and crime: Theorizing the role of the state in cross-national criminological theory." *Theoretical Criminology* 18(1):93–111.
- Nivette, Amy E. 2011. "Violence in non-state societies: A review." *British Journal of Criminology* 51:578–59.
- Nivette, Amy E. and Manuel Eisner. 2013. "Do legitimate polities have fewer homicides? A cross-national analysis." *Homicide Studies* 17(1):3–26.
- Osafo-Kwaako, Philip and James A. Robinson. 2013. "Political Centralization in Pre-Colonial Africa." *Journal of Comparative Economics* 41(1):6–21.
- Perry, Steven W. 2004. *American Indians and Crime. A BJS Statistical Profile, 1992-2002*. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Pinker, Steven. 2011. *The Better Angels of Our Nature: Why Violence Has Declined*. New York: Viking.
- Rettig, Max. 2008. "Gacaca: truth, justice, and reconciliation in postconflict Rwanda?" *African Studies Review* 51(03):25–50.
- Roth, Randolph. 2001. "Homicide in Early Modern England, 1549-1800: The Need for a Quantitative Synthesis." *Crime, Histoire et Société - Crime, History and Society* 55(2):33–68.
- Sapra, Katherine J, Sarah M Jubinski, Mina F Tanaka and Robyn RM Gershon. 2014. "Family and partner interpersonal violence among American Indians/Alaska Natives." *Injury Epidemiology* 7(1):1–14.
- Spirling, Arthur. 2012. "US treaty making with American Indians: Institutional change and relative power, 1784-1911." *American Journal of Political Science* 56(1):84–97.

- Tankebe, Justice. 2008. "Colonialism, legitimation, and policing in Ghana." *International Journal of Law, Crime and Justice* 36:67–84.
- Tilly, Charles. 1992. *Coercion, Capital, and European States, ad 990-1992*. Cambridge, MA: Blackwell.
- Tyler, Tom R. 2006. "Psychological Perspectives on Legitimacy and Legitimation." *Annual Review of Psychology* 57:375–400.
- US Bureau of Indian Affairs. 2005. "2005 American Indian Population and Labor Force Report." Published online.  
**URL:** <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- US Bureau of Indian Affairs. 2013. "2013 American Indian Population and Labor Force Report." Published online.  
**URL:** <https://www.bia.gov/knowledge-base/american-indian-population-labor-force-reports>
- US Bureau of Indian Affairs. 2014. "Why Tribes Exist in the United States." Published online.  
**URL:** <http://www.bia.gov/FAQs/index.htm>
- US Census Bureau. 2010. "2006-2010 American Community Survey." Published online.  
**URL:** <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- US Department of Commerce. 2015. "TIGER/Line Shapefile, 2014, Series Information File for the Current American Indian/Alaska Native/Native Hawaiian Areas (AIANNH) National Shapefile." Published online.  
**URL:** <http://bit.ly/2nwNKrh>
- US Department of Justice. 1999. "American Indians and Crime." Published online.  
**URL:** <https://www.bjs.gov/content/pub/pdf/aic.pdf>
- US Department of Justice. 2005. "Census of Tribal Justice Agencies in Indian Country, 2002." Published online.  
**URL:** <https://www.census.gov/aian/>
- US Department of Justice. 2016. "Misdemeanor Crimes of Domestic Violence (MCDV)." Published online.  
**URL:** <https://www.fbi.gov/file-repository/misdemeanor-crimes-of-domestic-violence-mcdv.pdf>
- Williams, Timothy. 1997. "Higher Crime, Fewer Charges on Indian Land." *New York Times* October 20, 1997.
- Witmer, Richard C., Joshua Johnson and Frederick J. Boehmke. 2014. "American Indian Policy in the States." *Social Science Quarterly* 95(4):1043–1063.

- Witmer, Richard and Frederick J. Boehmke. 2007. "American Indian Political Incorporation in the Post-Indian Gaming Regulatory Act Era." *The Social Science Journal* 44(1):127–145.
- Yuan, Nicole P., Mary P. Koss, Mona Polacca and David Goldman. 2006. "Risk Factors for Physical Assault and Rape Among Six Native American Tribes." *Journal of Interpersonal Violence* 21(12):1566–1590.
- Zartman, William I., ed. 2000. *Traditional Cures for Modern Conflicts. African Conflict "Medicine"*. London: Lynne Rienner Publishers.
- Zee, Machteld. 2015. *Choosing Sharia? Multiculturalism, Islamic Fundamentalism and British Sharia Councils*. The Hague: Eleven International Publishing.
- Zips, Werner and Markus Weilenmann. 2011. *The governance of legal pluralism: empirical studies from Africa and beyond*. Münster: LIT Verlag.

## 6 Appendix

Table 2: Violent crime incidents per annum, number of observations, population, and per capita rates for tribal units, by state

Tribes	State	Viol. crime p.a.	N	Population	Viol. Crime p.c.
Poarch Creek Tribal	Alabama	12.00000	4	517	0.02321
Ak-Chin Tribal	Arizona	4.50000	4	906	0.00497
Fort McDowell Tribal	Arizona	20.67000	3	1080	0.01914
Fort Mojave Tribal	Arizona	35.75000	4	1555	0.02299
Gila River Indian Community	Arizona	216.00000	2	11380	0.01898
Hopi Tribal	Arizona	140.50000	4	8515	0.01650
Hualapai Tribal	Arizona	93.67000	3	658	0.14236
Kaibab Paiute Tribal	Arizona	0.75000	4	288	0.00260
Navajo Nation	Arizona	626.75000	4	169052	0.00371
Pascua Yaqui Tribal	Arizona	17.00000	3	4093	0.00415
Quechan Tribal	Arizona	7.25000	4	2377	0.00305
Salt River Tribal	Arizona	61.60000	5	6458	0.00954
San Carlos Apache	Arizona	190.25000	4	11323	0.01680
Tohono O'odham Nation	Arizona	106.67000	3	9753	0.01094
Tonto Apache Tribal	Arizona	2.33000	3	142	0.01641
White Mountain Apache Tribal	Arizona	102.75000	4	12424	0.00827
Yavapai-Apache Nation	Arizona	11.67000	3	736	0.01586
Yavapai-Prescott Tribal	Arizona	2.50000	4	167	0.01497
Hoopa Valley Tribal	California	135.33000	3	2701	0.05010
La Jolla Tribal	California	2.00000	1	235	0.00851
Sycuan Tribal	California	5.00000	1	73	0.06849
Tule River Tribal	California	47.25000	4	1196	0.03951
Yurok Tribal	California	27.33000	3	1302	0.02099
Southern Ute Tribal	Colorado	8.80000	5	12448	0.00071
Ute Mountain Tribal	Colorado	12.00000	5	1436	0.00836
Mashantucket Pequot Tribal	Connecticut	5.75000	4	796	0.00722
Mohegan Tribal	Connecticut	7.75000	4	1611	0.00481
Micosukee Tribal	Florida	7.00000	5	400	0.01750
Fort Hall Tribal	Idaho	36.00000	2	5351	0.00673
Nez Perce Tribal	Idaho	16.00000	2	18677	0.00086
Iowa Tribal	Kansas	0.00000	2	277	0.00000
Kickapoo Tribal	Kansas	1.50000	2	4626	0.00032
Potawatomi Tribal	Kansas	4.20000	5	1412	0.00297
Sac and Fox Tribal	Kansas	0.50000	4	258	0.00194
Tunica-Biloxi Tribal	Louisiana	14.50000	4	358	0.04050
Penobscot Nation	Maine	3.50000	4	616	0.00568
Grand Traverse Tribal	Michigan	4.33000	3	644	0.00672
Hannahville Tribal	Michigan	21.00000	3	520	0.04038
Keweenaw Bay Tribal	Michigan	1.33000	3	3664	0.00036
Lac Vieux Desert Tribal	Michigan	5.00000	4	426	0.01174
Saginaw Chippewa Tribal	Michigan	30.50000	2	26352	0.00116
Sault Ste. Marie Tribal	Michigan	17.25000	4	1993	0.00866
Fond du Lac Tribal	Minnesota	4.00000	2	4173	0.00096
Leech Lake Band of Ojibwe	Minnesota	51.00000	3	10270	0.00497
Lower Sioux Tribal	Minnesota	18.00000	2	497	0.03622
Mille Lacs Tribal	Minnesota	22.00000	2	5444	0.00404
Red Lake Agency	Minnesota	121.67000	3	5684	0.02141
Upper Sioux Community	Minnesota	0.00000	1	319	0.00000
White Earth Tribal	Minnesota	30.80000	5	9862	0.00312
Choctaw Tribal	Mississippi	87.50000	4	8320	0.01052
Flathead Tribal	Montana	54.50000	2	28119	0.00194
Fort Belknap Tribal	Montana	20.50000	4	2798	0.00733
Fort Peck Assiniboine and Sioux Tribes	Montana	51.60000	5	9528	0.00542
Northern Cheyenne Agency	Montana	35.80000	5	4635	0.00772
Rocky Boys Tribal	Montana	41.60000	5	3099	0.01342
Omaha Tribal	Nebraska	46.25000	4	4943	0.00936
Santee Tribal	Nebraska	34.60000	5	960	0.03604
Winnebago Tribal	Nebraska	37.60000	5	2526	0.01489
Ely Shoshone Tribal	Nevada	1.00000	4	333	0.00300
Fallon Tribal	Nevada	2.67000	3	245	0.01090
Lovelock Paiute Tribal	Nevada	2.50000	2	282	0.00887
Moapa Tribal	Nevada	4.50000	2	346	0.01301
Pyramid Lake Tribal	Nevada	20.00000	4	1360	0.01471
Reno-Sparks Indian Colony	Nevada	16.67000	3	1210	0.01378
South Fork Band Tribal	Nevada	0.33000	3	226	0.00146
Walker River Tribal	Nevada	11.00000	3	508	0.02165
Washoe Tribal	Nevada	35.00000	3	3490	0.01003
Yerington Paiute Tribal	Nevada	6.00000	2	1037	0.00579
Yomba Shoshone Tribal	Nevada	3.50000	4	199	0.01759
Isleta Tribal	New Mexico	70.40000	5	3271	0.02152
Jemez Pueblo	New Mexico	18.00000	5	1918	0.00938
Jicarilla Tribal	New Mexico	14.50000	4	3113	0.00466
Laguna Tribal	New Mexico	70.00000	3	4646	0.01507
Mescalero Tribal	New Mexico	39.20000	5	4025	0.00974
Ohkay Owingeh Tribal	New Mexico	9.20000	5	6419	0.00143
Pojoaque Tribal	New Mexico	9.25000	4	3281	0.00282
Santa Ana Tribal	New Mexico	2.60000	5	935	0.00278

Santa Clara Pueblo	New Mexico	10.60000	5	11231	0.00094
Taos Pueblo	New Mexico	12.60000	5	5258	0.00240
Tesuque Pueblo	New Mexico	1.00000	4	865	0.00116
Zuni Tribal	New Mexico	35.80000	5	10876	0.00329
Oneida Indian Nation	New York	8.50000	4	1000	0.00850
St. Regis Tribal	New York	4.25000	4	3134	0.00136
Fort Totten Tribal	North Dakota	95.00000	1	4040	0.02351
Standing Rock Agency	North Dakota	125.60000	5	8194	0.01533
Three Affiliated Tribes	North Dakota	70.00000	1	6162	0.01136
Turtle Mountain Agency	North Dakota	71.20000	5	8271	0.00861
Absentee Shawnee Tribal	Oklahoma	11.25000	4	114525	0.00010
Cherokee Nation	Oklahoma	9.75000	4	496119	0.00002
Chickasaw Nation	Oklahoma	64.00000	3	298670	0.00021
Choctaw Nation	Oklahoma	3.00000	4	229719	0.00001
Citizen Potawatomi Nation	Oklahoma	8.75000	4	114525	0.00008
Comanche Nation	Oklahoma	6.00000	4	193105	0.00003
Concho Agency	Oklahoma	4.25000	4	169942	0.00003
Eastern Shawnee Tribal	Oklahoma	1.75000	4	725	0.00241
Iowa Tribal	Oklahoma	0.75000	4	6668	0.00011
Kaw Tribal	Oklahoma	0.00000	4	5894	0.00000
Kickapoo Tribal	Oklahoma	5.25000	4	20443	0.00026
Miami Tribal	Oklahoma	0.00000	4	4162	0.00000
Muscogee Nation Tribal	Oklahoma	7.75000	4	742695	0.00001
Osage Nation	Oklahoma	8.75000	4	47192	0.00019
Otoe-Missouria Tribal	Oklahoma	4.25000	4	745	0.00570
Pawnee Tribal	Oklahoma	1.75000	4	16489	0.00011
Ponca Tribal	Oklahoma	4.75000	4	2038	0.00233
Quapaw Tribal	Oklahoma	4.00000	2	6059	0.00066
Sac and Fox Tribal	Oklahoma	3.50000	4	57114	0.00006
Seminole Nation Lighthorse	Oklahoma	0.33000	3	22797	0.00001
Tonkawa Tribal	Oklahoma	2.25000	4	4059	0.00055
Wyandotte Nation	Oklahoma	7.50000	4	1622	0.00462
Grand Ronde Tribal	Oregon	0.50000	2	4985	0.00010
Siletz Tribal	Oregon	1.50000	2	541	0.00277
Umatilla Tribal	Oregon	19.00000	3	2748	0.00691
Warm Springs Tribal	Oregon	41.33000	3	3976	0.01039
Narragansett Tribal	Rhode Island	0.50000	4	2732	0.00018
Flandreau Tribal	South Dakota	4.40000	5	414	0.01063
Lower Brule Tribal	South Dakota	41.80000	5	1620	0.02580
Pine Ridge Sioux Tribal	South Dakota	44.40000	5	18710	0.00237
Rosebud Tribal	South Dakota	361.25000	4	10670	0.03386
Sisseton-Wahpeton Tribal	South Dakota	16.60000	5	10624	0.00156
Yankton Tribal	South Dakota	25.00000	4	6504	0.00384
Ysleta del Sur Pueblo Tribal	Texas	71.50000	4	651	0.10983
Goshute Tribal	Utah	0.50000	2	309	0.00162
Uintah and Ouray Tribal	Utah	8.00000	3	21871	0.00037
Kalispel Tribal	Washington	26.00000	4	360	0.07222
La Push Tribal	Washington	14.50000	2	474	0.03059
Lower Elwha Tribal	Washington	3.67000	3	706	0.00520
Lummi Tribal	Washington	53.40000	5	4253	0.01256
Makah Tribal	Washington	12.50000	4	1435	0.00871
Nisqually Tribal	Washington	1.50000	2	588	0.00255
Nooksack Tribal	Washington	5.50000	2	844	0.00652
Port Gamble S'Klallam Tribal	Washington	4.50000	2	861	0.00523
Puyallup Tribal	Washington	38.00000	3	46358	0.00082
Quinalt Indian Nation	Washington	2.00000	3	1421	0.00141
Skokomish Tribal	Washington	2.33000	3	698	0.00334
Spokane Agency	Washington	37.00000	3	1819	0.02034
Suquamish Tribal	Washington	21.00000	3	7031	0.00299
Swinomish Tribal	Washington	2.80000	5	3206	0.00087
Tulalip Tribal	Washington	74.00000	1	10055	0.00736
Upper Skagit Tribal	Washington	1.00000	3	329	0.00304
Yakama Nation	Washington	30.00000	3	31692	0.00095
Lac du Flambeau Tribal	Wisconsin	36.00000	5	3389	0.01062
Menominee Tribal	Wisconsin	37.25000	4	2797	0.01332
Oneida Tribal	Wisconsin	19.60000	5	23520	0.00083
Red Cliff Tribal	Wisconsin	4.25000	4	865	0.00491
St. Croix Tribal	Wisconsin	1.60000	5	604	0.00265
Stockbridge Munsee Tribal	Wisconsin	3.80000	5	736	0.00516
Wind River Agency	Wyoming	55.20000	5	26215	0.00211