Temporary Assistance with Lasting Effects: A Report on Policies of Self-Determination in Native America

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Abstract—Native American reservations are marked by poverty rates that remain persistently above national averages through generations, but a recent shift in policy toward greater tribal control over previously federal and state-operated programs shows great promise in improving the situation. This report seeks to better understand the economic impact of such self-governance policy, first by examining the marginal effect of having a tribe administer its own Temporary Assistance for Needy Families (TANF) program, and second by examining results from 75 household surveys that I conducted on the Rosebud Sioux Reservation. I find that the implementation of a TANF program by a reservation government produced a fivepercentage-point drop in the poverty rate above and beyond any reduction in poverty that occurred in state-run programs on Native reservations. Further, within tribal TANF programs, there seem to be community gains associated with both geographical proximity and administrative proximity, that is, having decisions made by a single local reservation government as opposed to a consortium of reservation governments. The survey shows similarly positive effects associated with proximity and gives some reason to suggest that local programs would be preferred to federal programs. Finally, I end the report with a brief look at the Rosebud Reservation's preferences for future economic development programs as revealed in the survey.

I. INTRODUCTION

Present economic conditions on Native American reservations are concerning and leave much to be hoped for, but there is good reason to have hope. Concerning, because the 2010 Census revealed that an estimated 23% of Native American families were below the poverty line (U.S. Department of the Interior, 2014), and this poverty has brought with it a host of other problems. Among major ethnic groups, Native Americans have the highest rates of depression, anxiety, and behavioral problems requiring treatment or counseling, and they are also the most likely to report difficulty in receiving specialty care (Flores, 2013). They are victims of violent crime at double the rate of an average US citizen (Perry, 2004; Sarche & Spicer, 2008), and in 2000, one of every four suspects in federally prosecuted violent crime cases examined by government attorneys hailed from Native reservations (Perry, 2004).

Particularly impoverished are reservations in South Dakota, which has the highest rate of Native American poverty in the nation. This report will place special emphasis on one South Dakota reservation called Rosebud. 2010 Census data reveal that the Rosebud Sioux Tribe faced unemployment rates of 50.8% (U.S. Department of the Interior, 2014) and that those who were working received

an average annual salary of \$30,000 (United States Census Bureau, 2010). More recent census data placed Todd County, which is encompassed by the Rosebud Reservation, as the second poorest county in the nation based on a poverty rate of 47.4% (Release Highlights of 2014, 2015).

As difficult as the conditions on Native reservations are, however, recent progress is giving strong reason for hope. After a century of policies ostensibly designed to benefit Native Americans by forcefully assimilating them into the broader US culture, the late 1900s showed a gradual transition toward policies of self-determination, granting reservations and the tribes that govern them more freedom to chart their own economic futures. The results have far surpassed those of past programs (Kalt et al., 2008). In the 1990s, policies of self-determination were correlated with an income growth on reservations three times that of the United States as a whole (Begay, Cornell, Jorgenson, & Kalt, 2007). This trend has largely continued, leading Joseph Kalt of the Harvard Project on American Indian Development to say that for the first time in a century, the United States seems to have found a policy that works, and Indian nations are taking hold of self-determination and making the most of it (Kalt et al., 2008, p. 112).

While this general positive trend is now well established in the literature, relatively little scholarly analysis has been dedicated to the specific implementation of these policies (King, 2007). Part of the problem is that Native Americans have historically been a rather difficult ethnic group on which to collect data for several reasons. First, a high degree of intermarriage has blurred the lines between Native Americans and other ethnic groups, so that the same individual might primarily identify with one of two separate races depending on the circumstance. Second, there is a great degree of cultural difference between Native tribes, not unlike differences between Europeans who emigrated to the United States. Third, Native Americans tend to spread out widely across rural reservations and urban environments rather than concentrate in certain areas (Ericksen, 1996).

Census data is often the only type available, which is unfortunate. Not only does the census leave out important details about tribes (U.S. Department of the Interior, 2014), but the Census Bureau has historically misrepresented Native American tribes through undercounting (Goodluck & White Hat, 2011). This lack of information limits the ability of policymakers to evaluate the effects of self-determination

policies. In the case of employment programs like Native Employment Works (NEW), for example, official unemployment rates can underestimate the problem by as much as 75 percentage points by only counting those who are actively seeking work as being unemployed. Similar data shortfalls for Temporary Assistance to Needy Families (TANF) make it difficult for states to determine whether Native families are getting the welfare they need (Brown et al., 2001).

I will use recently released datasets to better understand the effects that certain self-determination policies have had on Native American reservations and to inform future selfgovernment policy. First, the Akee Taylor 2014 dataset on Native American reservations is used, which I have supplemented with variables pulled from government documents (United States Government Accountability Office, 2011; Fourth Annual Report to Congress, 2002) and Dippel's 2014 work on Forced Coexistence to assess the economic effects of TANF programs operated by Native governments. For each program that I examined, the US government provided a near equivalent program to reservations that did not elect to administer their own, and so difference in differences analysis will provide a useful estimation of these programs' effects. Second, I will use survey data that I collected on the Rosebud Native American Reservation to examine the implications of possible self-government in a more local context, acknowledging that each Native American reservation has its own respective culture and will experience policies of selfgovernment differently.

In both sections, my hypothesis is that services provided by tribal institutions are preferred to, and achieve better results than, similar services provided by the US government. Also, I predict that tribal institutions in closer proximity to the people they represent achieve greater results than those that are farther away. This hypothesis is largely confirmed: The implementation of a TANF program by a reservation government seems to yield a five-percentage-point drop in the poverty rate above and beyond any reduction in poverty that occurs under state-run TANF programs on reservations. Further, within tribal TANF programs, there seem to be community gains associated with both geographical proximity and administrative proximity, that is, having decisions made by a single local reservation government as opposed to a consortium of such governments. The survey results also largely confirm my hypothesis by showing that people who live closer to a tribal government are more likely to view it positively and by giving some reason to suggest that local programs would be preferred to federal programs. I end with a brief look at the Rosebud Reservation's preferences for future economic development programs as revealed in the survey.

II. HISTORY

Self-governance on Native American reservations is not a new idea. It was the norm before Columbus' journey, of course, but even during the colonization period, Natives were treated as belonging to separate nations (Strommer & Osborne, 2014). The trend continued for some time after

the United States became a nation, so that some 367 intergovernmental treaties were ratified with Native tribes during the first 90 years. Concessions made in those agreements still form much of the basis for the federal government's present obligations to Native tribes, as they were intended to justify taking much of the land that the United States still occupies (Warne & Frizzell, 2014). It was an official show of goodwill that belied an underlying racism toward Native Americans. In federal government documents, they were recognized as civilized peoples, but private letters cast them as uncivilized savages (Strommer & Osborne, 2014). Nevertheless, the formal documents remained, and broad promises to provide all proper care and protection typical of those treaties created an official responsibility to seek the well-being of Native tribes (Warne & Frizzell, 2014).

Unfortunately, this unspoken rule of self-governance on a tribal level was soon altogether reversed by assimilationist policies intended to forcefully incorporate Natives into the broader economic systems and cultural norms of the United States. Following the confinement of Native Americans onto reservations, the first major attempt of the United States in ostensibly honoring their responsibilities to Native tribes came as the General Allotment Act of 1887, which provided for the distribution of reservation land to individual Native Americans living on those lands (Washburn, 2006). The idea was to make them into independent farmers, much like the white settlers in rural areas. Whatever the government's intentions, though, this and other assimilationist policies that characterized the era are now understood largely as failed endeavors that, in most cases, contributed directly to reservation poverty (Kalt et al., 2008). The assimilationist era was brought to an end by the Meriam Report in 1928, which revealed conclusively that the General Allotment Act had resulted in a large loss of land for Native Americans as outside groups came in to buy up the best parcels (Washburn, 2006).

Eventually federal policy shifted once again toward greater self-determination, searching for a balance in what it meant for tribes to be sovereign nations yet still under the authority of the federal government. President Lyndon B. Johnson created the Office of Economic Opportunity during his War on Poverty, which all but ignored state and local governments in favor of partnering with grassroots community organizations. Native tribes fit the bill, and so from 1965 to 1967, community action program grants to Native tribes went up by \$16.5 million (Washburn, 2006). The trend continued under Nixon, who is quoted as saying that Indians will get better programs and that public monies will be more effectively expended if the people who are most affected by these programs are responsible for operating them (Strommer & Osborne, 2014, p. 17). One year after Nixon's presidency ended, this positive sentiment finally found its way into legislation with the passing of the Indian Self-Determination and Education Assistance Act of 1975 (ISDEAA). The ISDEAA allowed Native tribes to contract with the Bureau of Indian Affairs (BIA) for federal funding to provide certain services (Washburn, 2006). Even then, however, tribes were held back from taking full advantage of the law because their federal partners were hesitant to approve applications and thereby cede control (Strommer & Osborne, 2014).

Ironically, this unwillingness of certain agencies to fully comply with ISDEAA helped tribes form an even stronger case to Congress that more sovereignty was needed (Strommer & Osborne, 2014). This time rebranded as Self-Governance, the new movement began with the Tribal Self-Demonstration Project Act of 1991. Under this act, 20 tribes were selected to pilot a new program in which they could not only apply for federal funds toward certain programs, but would also have a great degree of freedom to tailor those programs for their own individual needs (Tribal Self-Governance, 1991). John McCain, in a statement for the Senate Committee on Indian Affairs, would later affirm that this project has been a success and deserves to be established as a permanent option for all tribes (McCain, 1993, p. 1), a sentiment that held for the entire committee (Strommer & Osborne, 2014). As though making good on McCain's promise, the 1994 Tribal Self-Governance Act (TSGA) did just that, allowing all tribes to modify and administer programs not just from the BIA, but from those offered by other federal agencies as well (King, 2007; Washburn, 2006; Strommer & Osborne, 2014).

A decade later, self-governance programs comprised around half the annual budget for both the BIA and the Indian Health Service (IHS) (Washburn, 2006). Since then, however, there have been no major developments in the relationship between tribes and the federal government. This is baffling both because the language used in the legislation is sufficiently broad to allow Native tribes more sovereignty (King, 2007) and because tribes now have an unprecedented level of influence in Washington to further a policy that has been shown successful (Washburn, 2006). The literature generally predicts that self-governance is on the brink of more and greater change (Washburn, 2006; King, 2007; Kalt et al., 2008) and calls for deeper analysis on the implementation of past programs to inform the possibility of new ones (Washburn, 2006; King, 2007). This study aims to take humble steps in that direction.

III. THE EFFECTS OF TRIBAL SELF-DETERMINATION

As tribes were gaining more freedom to implement their own programs, the economic conditions on reservations improved tremendously. From 1970 to 2010, during which time real per capita incomes for the entire United States rose by 49%, those of Native Americans on reservations grew by a full 104% (Akee & Taylor, 2014). Changes in per capita income on reservations seem to be clustered around the passing of key self-determination legislation, first increasing in the 1970s around the ISDEAA, then decreasing during the Reagan-era funding cuts, and finally increasing again over the 1990s around the TSGA, this time at a rate three times that of the national average (Vinje, 1996; Akee & Taylor, 2014; Begay et al., 2007; Kalt et al., 2008). The shift has also been linked to an increase in privately owned Native businesses, a number that more than doubled from

1992 to 2002 (Kalt et al., 2008). Unfortunately, the original disparities were great enough that even changes as significant as these made little dent in the average per capita income disparity between Native Americans on reservations and the rest of the US population. Even if the current trends of accelerated growth were to continue, real per capita incomes on reservations would not intersect the averages of the United States until 2054 (Akee & Taylor, 2014).

Still, this is a remarkable movement in the right direction, and there are good reasons to believe that rising standards of welfare are more than just correlated with self-determination policy. The first is the strength of the correlation even outside of these particular policies. In its thirty years of research across a variety of tribal contexts, the Harvard Project on American Indian Economic Development presents as its primary conclusion that self-determination is fundamental to successful development on Native reservations, especially when backed by effective Native government institutions (Ritsema, Dawson, Jorgensen, & Macdougall, 2015; Kalt et al., 2008). Second, this correlation arose even as federal spending on Native programs decreased in real terms. Adjusting for inflation, all major federal expenditures on Native Americans, save those of the Indian Health Service (IHS), decreased from 1975 to 1996 (United States Senate, 1995). A report by the US Commission on Civil Rights over this period found that the federal agencies primarily responsible for Native welfare were not only failing to meet their special obligations to Native groups, but also providing services of lesser quality than those offered to the general American public (United States Commission on Civil Rights, 2003). This lower funding is contrasted against relatively higher federal funding before 1975, during which time there are no successful cases where federal planning and management has produced sustained economic development in Indian Country (Kalt, 1996, p. 4).

There are also good theoretical reasons to believe that selfdetermination would improve outcomes, both in terms of cultural resonance and more pragmatic efficiency. It is well established in social contract theory that groups of people tend to work together best when their governance is carried out according to mutually agreed upon principles (Cornell & Kalt, 1995). In the Native context, numerous studies suggest that the extent to which a reservation's current system of government aligns with its cultural norms prior to the intervention of the United States has a positive and statistically significant effect on its current standards of wellbeing (Cornell & Kalt, 2000; Akee, Jorgenson, & Sunde, 2015; Dippel, 2014). By this reasoning, it seems natural that the level of government closest to individual Natives would best represent their interests and thereby achieve greater outcomes, especially considering how much tribal groups want sovereignty. Freedom to chart their own futures is the most common self-reported goal of Native nations in the context of economic development (Kalt et al., 2008), and all but one of the tribal respondents to a Government Accountability Office survey listed the flexibility to address local cultural issues as a major benefit of administering their own TANF programs (Temporary Assistance for Needy, 2000).

With a greater understanding of, and closer proximity to, Native clients also comes efficiency gains for tribal groups administering previously federal programs. In surveys, tribal administrators universally felt that they had a better understanding of their tribe's unique needs than state TANF workers did (Hillabrant & Rhoades, 2003) and that the ability to shape local TANF programs to fit those needs constituted a major benefit (Temporary Assistance for Needy, 2000). Locally driven programs can uniquely fit an area in ways that cookie-cutter programs from the federal government cannot, allowing for a spectrum of programs ranging from computer skills training for elders on the Mille Lacs Reservation to encouraging subsistence hunting in the Yukon Flats (Begay et al., 2007). Proximity also allows tribal members greater access to tribal programs than their counterparts operated by the state, and greater ability to coordinate with other local welfare efforts in employment, child care, and the like (Hillabrant & Rhoades, 2003; Brown et al., 2001).

Equally true is that proximity begets greater accountability for tribal groups, which comes with both benefits and challenges. Unlike the BIA, which is accountable mainly to the federal government, tribal governments and consortia are forced to answer directly to their constituents. This greater accountability is a benefit to self-determination policies, but with it comes the reality that if tribal groups fail, there is little federal safety net to catch them (Kalt et al., 2008). As the BIA gradually released a portion of its control, the ability of reservations to govern themselves was put to the test, and they diverged from each other as certain reservations were better equipped to take on this task than others (Dippel, 2014; Kalt et al., 2008). This difference may very well have been greater were it not the case that reservations needed to self-select into taking on programs from the government; a reservation that knew itself to be unprepared might have been content to stay with the state program.

On the surface, this suggests a mixed approach, where only certain tribal governments should be given increased control. Recent research, however, has again linked much of this divergence in tribal performance to how well a government's structure and ideology align with the cultural values of its constituents. Cornell and Kalt (1995) studied how well the constitutions imposed on tribes by the United States fit with each tribe's previous systems of government by examining four characteristicsstructure, scope, location, and sourcein terms of their effect on modern unemployment and per capita income. Rosebud, for example, came from the Sioux Tribe whose original governmental characteristics were almost exactly opposite those of the imposed constitution in each of the four categories. The study found a clear negative effect associated with the imposed constitution being a poor cultural fit, but an effect that was only allowed to become prominent when recent self-determination policies allowed tribal governments a real say in how federal dollars should be spent. Cornell and Kalt then made the bold conclusion that a match between extra-constitutional cultural norms and

formal institutions is a necessary condition for existence of an economy based on real production [as] opposed to federal transfers (1995, p. 406). A subsequent study over 67 tribes gave their results further weight (Cornell & Kalt, 2000), and work by Akee, Jorgenson, and Sunde (2015) also showed similar results.

Aside from a tribal government's constitution, another factor which lay dormant until the advent of self-determination policy was whether the United States had forcefully joined politically distinct peoples onto a single reservation. When the federal government was forming reservations, it decided to group the Native Americans based on their tribe. Many of these tribes, while being interconnected by language and family structures, had not previously been politically unified. Dippel (2014) conducted a study to test the impact of this forced coexistence on current per capita incomes on reservations and found that forced coexistence was associated with a 30% lower per capita income in the year 2000. Strikingly, most of this difference was created only once selfdetermination policies came into effect. Another regression within Dippel's paper helps explain the reason by showing that governments on reservations with forced coexistence had three times as many incidents of internal conflict over that same period as measured by the number of newspaper reports.

To the extent that negative tribal outcomes can be thus explained, the situation seems to call for still greater sovereignty of a kind that helps tribes better express themselves at a fundamental and constitutional level, especially given the overarching trend of success for policies of selfdetermination on Native reservations. Constitutional reform initiatives like this are gaining traction in reservations across the United States, spurred in part by success stories of reforms in the Mescalero Apache Tribe, the Mississippi Band of Choctaw, the Confederated Salish and Kootenai Tribes of the Flathead Reservation, and others (Kalt et al., 2008). This along with more federally-funded capacity building will likely help tribes manage their new responsibilities (Hillabrant & Rhoades, 2003). Nevertheless, the larger positive trends can disguise what is happening on a program-byprogram level, and more information is needed to ascertain the effects of each independently. The next section of this paper seeks to do this for tribal TANF programs.

IV. TRIBAL TANF

When the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) replaced the Aid to Families with Dependent Children (AFDC) program with TANF, it kept with the spirit of the TSGA by allowing for Native tribes to operate their own TANF programs. Should a tribe apply to do so and be approved, the tribe is provided a yearly block grant to cover the expenses of operating the program and has the responsibility to do so for the people within its jurisdiction (U.S. Department of Health, 2000). Any reservation that does not administer its own program, either because it did not apply or was not approved, is covered under its respective state program

(Brown et al., 2001). Both states and tribes were given a considerable amount of flexibility in operating their own programs. Toward the end of promoting work, responsibility, self-sufficiency, and strong families, states and tribes are free to allocate their funding according to their own eligibility levels and service types (U.S. Department of Health, 2000).

TANF provides an ideal case by which to study the relative impact of state policy versus tribal policy under selfdetermination for several reasons: First, all reservations are provided TANF services under PRWORA. This creates clear treatment and non-treatment groups, with some reservations receiving TANF from their own tribal governments and some from the state government. Of course, there is the possibility of self-selection bias for tribes electing to operate their own programs, but if factors can be found that help to explain the bias, a still fuller picture will be created as to why some reservations prosper while others struggle. Second, funding for tribal administration of TANF was held constant at the level provided to that tribe under AFDC in 1994, and did not increase relative to the states (Brown et al., 2001). In fact, as will be shown below, tribal services received lower funding than the state system. Third, the ways tribal and state programs could differ from one another are precisely those relevant to the question at hand. Namely, given a certain allocation of resources, are programs operated by tribes or by states able to achieve greater results on reservations?

V. METHODS

This ideal testing scenario is met, unfortunately, by a less than ideal dataset on which to do the testing. Specifically, there are several factors that should be controlled for which the following Ordinary Least Squares (OLS) models are not able to incorporate. First, it would be useful to have a plausible proxy for reservation motivation, that is, the extent to which a government is trying to take advantage of new opportunities under self-determination. One such proxy for this case might be to include a dummy variable for all tribes who applied to operate a TANF program even if that application was not approved. For example, Rosebud and six other Sioux tribes from its area jointly applied to operate their respective TANF programs as a consortia of tribes (Humphrey, 1997), but funding decisions by the state of South Dakota led to it not being approved (Brown et al., 2001). Data listing which other reservations might be in this same situation would be relevant for two reasons: First, such tribes would provide a better comparison for the treatment group wherein a tribal TANF program was implemented because, in both cases, the desire to implement a program was present, and the only change was the ability to do so. There may be some bias here as well in that the rejection of applications is also non-random, but nevertheless, such data would provide a step in the right direction. Second, such tribes may have found other ways to help needy families in their area that tribes with no desire did not, and the impact of those possible initiatives would also be relevant to questions about the effectiveness of tribally led poverty-relief programs. Unfortunately, I was not able to find any kind of reliable data across all reservations that listed whether they did or did not want to implement a program.

Another limitation on the dataset I am using is that it does not include information on the exact level of funding available to reservations relative to the level of funding available to states. Such funding is often obtained from multiple levels, including local, state, and federal coffers, and so I was unable to get reliable numbers across both states and reservations for the time periods this study covers. Nevertheless, because reservation programs were generally underfunded compared to state programs, this lack of information should, if anything, bias the regression results in favor of state programs. Funding levels for tribal TANF programs were based upon AFDC funding for that tribe in 1994, which, in turn, was determined by census data that systematically undercounted the number of Native families in need. Furthermore, unlike the states, which already had the necessary infrastructure for TANF administration in place, tribes were starting fresh programs and had no additional funding to cover their start-up costs (Brown et al., 2001; Hillabrant & Rhoades, 2003). While states could receive performance bonuses, tribes could not (US Department of Health and Human Services, 2000), and while states served an even distribution of TANF clients, tribal caseloads were dominated by clients classified as hard-to-serve (Brown et al., 2001). Thus, because the data do not reflect this funding disparity, they naturally make tribal programs seem worse relative to state programs, and will thereby underestimate the positive effects per dollar spent of TANF programs administered by reservation governments.

For each of the OLS regressions below, I began by merging Akee and Taylor's Native American Databook (2014) with Dippel's data on forced coexistence (2014). 1 Between these two datasets, most of the indicators for reservations are available at three dates: 1990, 2000, and 2010. Then, using government documents (United States Government Accountability Office, 2011; Fourth Annual Report to Congress, 2002), I entered dummy variables based on whether each reservation had elected to provide a particular service itself, or receive that same service from the federal government. TTANF2000, for example, is a dummy variable that takes on a value equal to 1 if a reservation decided to offer TANF on or before the year 2000, and 0 if they did not. Finally, I reduced the dataset to only those reservations that had more than 10 families in 1990, 2000, and 2010. This action eliminated reservations that were too small for questions of unemployment to take on any real significance and those that were subsumed into another between 1990 and 2010. The result was a sample of 163 reservations with data recorded over three dates each, for a total of 489 observations.

For the OLS regressions involving TANF services, specifically, I made further modifications to the dataset. First, I entered dummy variables to capture whether a tribe admin-

¹ To clarify, I only included reservations occupied by Native Americans on the mainland of the United States. Akee and Taylor's dataset also included measures for Alaskan Natives, which I removed for the purposes of my regressions.

istered its own TANF program in the years 1997, 1998, 2000, 2001, 2006, or 2010, where the earliest possible time they could have begun doing so was 1997. Data for the other indicators only existed for the years 1990, 2000, and 2010, so to correct for this I only allowed each dummy variable to affect the regression in years at or after it had been put in place. The TTANF2000 dummy variable, for example, which indicates whether a reservation was administering their own TANF program in the year 2000, was set to zero in 1990 even if a tribe would later begin administering a TANF program in 2000. TTANF2000 provides the most useful point of comparison for this dataset because each reservation involved can be traced from a decade before this treatment to a decade after, and so it will be the main variable of interest in the regressions that follow. To remove interference from TTANF programs added later, I removed from the dataset those 2010 values of any reservation that added a new program after 2000 but before 2010. Next, I included an additional dummy variable called TTANFConsortia to account for whether the tribal TANF programs operated in the year 2000 were administered by a single tribe, or as a grouping of multiple tribes in a tribal consortium. The resulting dataset had a total of 463 observations. A fuller description of these and other variables used in this section is provided in Appendix 1. The regression equation for difference in differences analysis is:

$$\begin{split} PFamPov_{i,t} = & \beta_0 + \mu_t + PFamPov_{i,1990} \\ & + \gamma TTANF2000_{i,t} + \sum_{j=1}^J \beta_j x_{j,i,t} + \epsilon_{i,t} \end{split}$$

Where PFamPov is the percentage of families in poverty indexed by reservation i and time t = 2000, 2010 conditional on a constant β_0 , the set of year fixed effects μ_t , $PFamPov_{i,1990}$, which remains constant at reservation is poverty rate in 1990, a dummy variable TTANF2000 that equals 1 for reservation i if that reservation was implementing its own TANF program by the year 2000, and an error term. Beginning with that baseline model, J other reservation controls $x_{i,i,t}$ are added in subsequent models to further establish the effects of $TTANF2000_{i,t}$. To be clear, the regression coefficient associated with $TTANF2000_{i,t}$ will not measure the impact of the TANF program per se. All reservations participated in some version of the TANF program, and so the effects of that program as a whole are difficult to separate from the general trends of poverty reduction that occurred over this time period. Instead, the γ coefficient measures the expected benefit or loss associated with a reservation government administering the program as opposed to a state government. This is an important clarification because it sidesteps a larger debate on the efficacy of TANF as a whole, which, while largely applauded, has also been criticized for inadequately transitioning recipients off welfare (Bavier, 2001; Katz, 2012). Even if it were the case that TANF as a whole had a negative effect, a positive coefficient associated with TTANF2000 would show that tribal implementation yields positive results relative to state implementation.

Before running any regressions, it useful to examine a few basic statistics of the data. As noted earlier, the percentage of families in poverty across reservations decreased from 1990 to 2010, a trend illustrated graphically in Figure 1. A second conclusion that appears immediately is that the correlation between TTANF2000 and PFamPov in the year 1990 is positive at around 0.1186. This shows that poorer reservations in 1990 were more likely to take on their own TANF programs when that option became available, which is exactly what would be expected if reservations were effectively using self-determination opportunities to provide programs consistent with their community's unique needs. TTANF2000 is also positively correlated with the unemployment rate in 1990, which underscores the need to control for these original values in the regressions to isolate the effects of TTANF.

Fig. 1: Percentage of American Indian Families in Poverty by Reservation

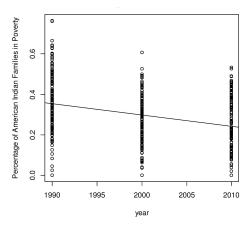


Table 1 presents the regression results of six different variations on the reservation controls portion. Overall, TTANF2000 is found to have a clear downward effect on the percentage of families in poverty equivalent to about five percentage points, and one that generally becomes only stronger as more reservation controls are added. This is a significant effect considering how in 1990, the average family poverty rate across Native American reservations was 36.59 percent. For a reservation to administer its own TTANF program, then, took approximately a seventh off its original family poverty rate in addition to the general downward trend in poverty that occurred over the next two decades. Multiplying .05 by the mean number of families on a Native American Reservation in 1990 puts the results in human terms: An average of 26 additional families were raised out of poverty on each reservation that administered its own TANF program.

The first model does not include the TTANF2000 variable, and instead provides a slightly more rigorous description of the downward trend in family poverty rates established by Figure 1. Adding TTANF2000 into Model 2 shows that it has a downward effect on the family poverty rate with a p value of .107, which is just above typical

standards for statistical significance. That p value decreases to .006 by Model 3 with the addition of several key internal reservation controls. First, Unemployment1990 is added, providing a constant measurement of each reservation i's unemployment rate in 1990. It is particularly important to control for unemployment because TANF recipients are required to either hold a job or complete employment-related activities as defined by the agency administering their benefits. The comparative lack of available jobs on reservations, then, makes this a large obstacle for tribal programs. Second, PHighSchoolDiploma measures the percentage of the Native population ages 25 or older in reservation i during year t with a high school diploma or higher degree. This is included for reasons similar to those used *Unemployment*1990 because a worker's ability to pull his or her family out of poverty is in part determined by the human capital that they can leverage for that purpose. Finally, the log of the Native American population in reservation i in year t is included to account first for how larger reservations are typically poorer, and second for the added administrative challenge of administering a TANF program over a larger reservation. ² Controlling for these terms, then, helps to isolate the effect of TANF programs and reveals that those operated by reservation governments have significantly greater benefits.

Once tribal TANF programs have been associated with a downward shift in family poverty rates, we are in a position to test the second portion of my hypothesisthat tribal institutions in closer proximity to the people they represent achieve greater results than those that are farther away. There are at least two relevant ways of interpreting proximity to answer that question within the given dataset, one of which being physical proximity, that is, the geographic distance between the site administering TANF and TANF recipients. If physical proximity were important to the success of a tribal TANF program, then it would be expected that reservations farther from the next major city would experience greater gains from operating their own TANF programs than reservations closer to those cities where the state government might have more influence. This is tested by two separate models above, the first being Model 4. In it, logdist_00 is included to measure the natural log of the distance in miles between a reservation and the next major city measured in the year 2000. The result is statistically significant at .01, and describes the same upward effect on family poverty rates that the theory predicts. Model 5 is less conclusive, which includes an interaction term between logdist_00 and TTANF2000 to test the specific relationship between reservation TANF programs and that reservations distance from a city. The sign of the interaction term is negative as the theory would suggest, but to compensate the TTANF2000 variable now predicts a positive change in the poverty rate, and neither variable takes on statistical significance. Nevertheless, these regressions together give

strong evidence that proximity to external population centers is important for the family poverty rate, and somewhat less precise evidence that more isolated reservations achieve greater gains for operating their own TANF programs.

Another relevant way to interpret proximity is administrative proximity, or the degree to which a program is locally run. Among tribal programs, some are operated by a single reservation government, while others are jointly operated by a consortium of such governments. Using model 4 as a baseline, the relative effect of having a tribal consortium implement a program can be found by adding the dummy variable TTANFConsortia that only equals 1 when reservation i administered its TANF program as part of a consortia in the year 2000. To clarify, all nonzero values in TTANFConsortia are also nonzero in TTANF2000, and so TTANFConsortia will only be significant if there is some benefit or harm in consortia programs that cannot be explained by an analysis of tribal TANF programs as a whole. The results, shown as Model 6, are that a consortium program is associated with a .034 increase in family poverty, while TTANF2000 moves down to -.058 to compensate and retains a .01 significance. Because the TANF programs under tribal consortia are included in TTANF2000, this means that tribal consortia programs are still associated with about a two-percentage-point reduction in family poverty levels. A program administered by a single reservation government, however, is expected to reduce poverty rates by 5.8 percentage points. There is, therefore, a clear positive benefit associated with having a single tribal government administer its own TANF programeven greater than that of Tribal TANF programs generally.

VI. SURVEY METHODS

Having argued for the effectiveness of TANF programs conducted with Self-Determination on Native American reservations, I now turn to a more local analysis of the Rosebud Sioux Reservation to inform future self-determination policy. The data used are from a survey that I conducted between July and August in 2016. In preparing this survey, there were several unique challenges presented by the reservation environment. The ordinary method of conducting a survey like this would involve randomly selecting a sample of home addresses from some central list, but such a method is unfeasible on the Rosebud Reservation for a few reasons: First, it is a predominantly rural area, with some isolated communities as far as a three-hour drive from the central capital. Second, once at those communities, it is not commonly accepted for outsiders to visit individual homes. On the few occasions where I had opportunity to visit individual homes on the reservation, I was often greeted by guard dogs and No Trespassing signs. Third, and finally, a centralized list of addresses from which to pull a sample does not exist. The closest thing would be the 911 directory, but even if that were to be made available to a visiting researcher like myself, many addresses amount to the red house five miles down Highway 83 and cannot be meaningfully sorted.

It may seem here that a dummy variable should also be included to control for whether or not a particular reservation i was operating a casino in the year 2000, but I have excluded that variable from this analysis because it does not take on statistical significance in any of the regression models.

Instead of surveying at individual houses, then, I used a form of cluster sampling. Most of the eighteen communities on the Rosebud Reservation have both monthly community meetings and an annual pow-wow. By calling the tribal council member overseeing that community, I could sometimes obtain permission to attend one of those meetings as a guest to administer surveys. This method removes much of the challenges associated with surveying at individual homes but does bring with it the risk of possibly doublecounting some households. Due to the sensitive nature of some financial information on the survey, no information was collected on the surveys that could personally identify a respondent. The accompanying consent form did include a signature line where respondents listed their names, but again, privacy demanded that a list of such names not be taken to each new community for cross-referencing purposes. Therefore, it would have been possible for one member of a household to take a survey in the Corn Creek community, for example, and a second member of that same household to enter the same information on a survey in the Mission community. While this possibility cannot be ruled out, the clustering method was still used because the chances of such a double-counting occurring are probably very low. I never went to a meeting in the same community twice, and there were no incentives associated with the survey that might move a household to try and take the survey more than once. Further, having now completed my review of the surveys, it does not appear that any survey contains the same household information as another.

In sum, I administered 75 household surveys representing a total of 279 respondents across seven of the Rosebud communities: Corn Creek, Milks Camp, Mission, Rosebud, Soldier Creek, St. Francis, and Upper Cut Meat. Before looking at the research questions this survey attempts to answer, it is useful to briefly describe some of the demographics of the sample. A full 52% of households surveyed were receiving food stamps, and among such households, food stamps accounted for an average of 77% of the household's monthly food budget. It was a predominantly young sample, with 42% of household members being children under the age of 18, and only 6% over the age of 60. Finally, and significant for this study, 17% of households were receiving TANF benefits from the state government. A fuller description of the variables used in the regressions that follow is deferred to Appendix 2.

VII. SURVEY RESULTS

Because the Rosebud Sioux Tribe is more limited than other tribes in terms of the self-determination policies it has taken over at a tribal level, this survey sought mainly to investigate the possible effects of expanding such programshow they would be received and what areas they ought to focus on. In determining how they would be received, each household was asked to compare their experiences with the Rosebud Sioux Tribal Council against those with state and federal programs acting in the area, both in terms of the services they received from each level of government and

the extent to which they believe each level of government to be looking out for their best interest. Perhaps it comes as no surprise that government is unpopular at all levels, as summarized in Figure 2, and that a respondent's opinion of whether a governing group is looking out for their best interest exhibits a high positive correlation with their opinion of said government's services: .812 in the case of the Rosebud tribal government, and .740 in the case of the US government.

Comparing average responses on this five-point scale, respondents ranked services from the Rosebud Sioux tribal government slightly lower on average than services from the US government, but considered the Rosebud Sioux tribal government to be looking out for their best interest slightly more than the US government. Taken together, these two facts seem to suggest that respondents would welcome a shift in programs from the federal or state to the tribal level, where intentions better reflect those of the people, but where there is currently a relative lack of meaningful services. Alternatively, this difference in the respondents' relative rating of Rosebud tribal services could also be explained not as a problem with the quality of current services but rather the quantity. Under this second interpretation, I would argue that because the intentions of the Rosebud Sioux tribal government are ranked higher in either case, the answer still involves placing more programs under tribal oversight in Rosebud. That shift, nevertheless, should be made in tandem with capacity-building efforts so that the intentions of the Rosebud tribal government are better conveyed in the results.

As can be seen in Figure 2, however, there is very little difference in average responses between questions relating to the Rosebud Sioux Tribe and parallel questions regarding the US government. In fact, none of these differences is statistically significant in the data, and even if such a difference could be shown conclusively, respondents' rankings of their local government are not so positive as my initial hypothesis would have predicted. In the aggregate, respondents to this survey did not seem to have a strong preference toward either their local tribal government or the US government but clearly would give low rankings to both. This, in part, confirms the results of Cornell and Kalt's (1995) study mentioned earlier, which connected a poor match between the Rosebud Sioux Tribe's original governmental structure and the constitutions imposed on them by the United States to a downward effect on present economic outcomes. For them, the answer seems to be still greater sovereignty of a kind that comes alongside tribes like Rosebud and helps them to restructure their own constitutions (Kalt et al., 2008).

Before moving to examine what possible federal programs the Rosebud Sioux tribal government might seek to operate for themselves, a secondary prediction of my hypothesis was that proximity matters when it comes to a person's experience of governments, where those closer to the place where decisions are made and programs are administered are more likely to have a better experience with government. The communities that I visited to administer these surveys are geographically spread far enough apart to meaningfully test

this by adding a variable that controls for the driving distance to Rosebud, the capital of the Rosebud Sioux Reservation. A simple regression for each respondent i measures the effect of this distance variable on the respondent's opinion of how well the Rosebud Sioux tribal government looks out for their best interest, while controlling for J other rankings x of opinions and services on the same five-point scale:

 $RosebudSiouxTribeBestInterest_i =$

$$\beta_0 + \gamma \log \left(DistanceToRosebud_i \right) + \sum_{i=1}^{J} \beta_j x_{j,i} + \epsilon_i$$

The full results of this regression are shown in Table 2. For model 1, I control only for the respondent's opinion of the services provided by the Rosebud Sioux Tribe. As predicted, the physical distance between a respondent's community and Rosebud has a negative effect on their opinion of the Rosebud Sioux Tribe's intentions statistically significant at .1. What is more significant for the purposes of this paper, however, is the respondent's opinion of the Rosebud Sioux tribal government relative to their opinion of the US government. Therefore, to control for this in model 2, I also include controls for the respondent's opinion of whether the United States is looking out for their best interest and providing services that improve their quality of life. Here, the downward effect of a respondent's distance to Rosebud becomes stronger and more statistically significant. Thus, while there is some uncertainty over which level of government the people of Rosebud view more favorably, there is stronger evidence that proximity does matter.

VIII. COMMUNITY PREFERENCES FOR FUTURE PROGRAMS

Should the Rosebud Reservation decide to take over more programs from the US government, the next step will be to determine which programs to focus on. To that end, the second portion of the survey included the question: How important is it that new programs are created in each of the following areas on the Rosebud Reservation? followed by a scale on which to rank several categories of programs which can currently be administered either by the federal or local government. The results of this question are presented in Figure 3. Again, it is perhaps unsurprising that very few respondents ranked any of these programs as Not Important or Not Very Important, considering that they are all good things described in words with positive connotations.

Popular vote is by no means an economically rigorous way of choosing economic development programs, but it is a significant one in the context of tribal self-determination. To reference an argument made earlier in this paper, programs which are initiated locally and fit the culture of a given area generally tend to do better than cookie-cutter initiatives imposed by the federal government. Insofar as this data accurately represents the preferences of Rosebud, then, there is reason to believe that programs like these should be invested in more heavily. Furthermore, while this sort of survey does not take into account the relative costs of these

different programs, it does provide one means of aggregating community preferences. It goes without saying that all survey respondents were rational agents making decisions based upon their own preferences, which in the aggregate become local indifference curves, that is, local values.

The two program areas ranked by respondents as most highly importantwork skills and housingare areas where the Rosebud Sioux tribal government has already taken some initiative in designing local programs. This is encouraging because I have claimed that this type of community responsiveness should be an advantage of local tribal governments. Still, both areas demand more investment. For work skills, the Family Support Act of 1988 allowed reservations to operate their own Job Opportunities and Basic Skills Training (JOBS) programs in 1990 much like reservations would later be able to administer TANF, and Rosebud was one of the tribes to do so. A General Accounting Office report undertaken two years later in 1992, however, said that the positive effects of the JOBS program would likely be limited for Rosebud because there simply were not jobs enough for the labor force, no matter how skilled (Delfico et. al, 18). A locally sponsored survey taken near that time in 1985 showed that there were only 1,406 full-time positions among a labor force of 7,241 people, and a mere 214 of these positions were in the private sector (Hargreaves & Chang, 1989). Eventually, the JOBS program became the NEW program, and the Rosebud Sioux Tribe has continued to operate this program to present day (Grants amount allocated, 2015). Still, the same problems associated with few job openings remain. Augmenting this program with other programs designed to create local businesses and jobs, which was the third most desired policy by respondents, will therefore be crucial.

The second most desired programs were in the category of housing. Rosebud's remote and rural location strains local infrastructure in the provision of energy, water, and roads to individual homes, and among those homes that are adequately supplied, overcrowding can be a challenge. Studies prepared for the Rosebud Economic Development Corporation (REDCO) show that there is an immediate need for over 500 homes in the area (Keya Wakpala, 2016). This is a large challenge, but in responding to this challenge REDCO and the broader Rosebud Sioux Tribe have exemplified the potential of locally driven development initiatives. Community meetings and local surveys were used to identify key values that local people wanted to have represented in future housing developments, which were in turn used as a basis for the Keya Wakpala WAAGEYAPI Initiative, a plan to develop some 590 acres of tribally owned land into a residential area. In 2015, the plan was recognized with an international Social Economic Environmental Design (SEED) award, and REDCO is currently in the process of putting it in place (REDCO Lakota, 2015).

IX. CONCLUSION

Self-Governance programs of the 1990s came with, and are generally accepted to have been a major factor in,

improved living conditions across Native American reservations. Using these results to determine the future of selfgovernance policy, however, demands a more nuanced understanding of what specifically worked and what did not within the broad reforms of the TSGA and subsequent acts. The contribution of this study has been to focus in one such facet of self-governance and provide the humble beginnings of an analysis on whether there are benefits associated with a reservation government administering its own TANF benefits. In answer, I found that there are, in fact, benefits on the order of an additional five-percentage-point drop in the poverty rate beyond any poverty reduction that occurs in state-run TANF programs. Further, these relative benefits are expected to be even greater the closer a tribal TANF program is to the individuals receiving TANF benefits, both in terms of physical and administrative proximity. Similar research will be needed to assess the relative costs and benefits associated with other facets of self-governance policy toward the end of a more complete picture that can be used in informing future government policy.

Should the government continue giving tribal entities greater sovereignty over their portion of federal dollars, the beliefs and preferences of individual communities will become even more important than they already are in terms of shaping local economic outcomes. The survey portion of this report focused on the beliefs of one such community, the Rosebud Sioux Reservation, and described both their opinions on the different levels of government as well as their preferences for future economic development programs. This result does not constitute an official vote by the Rosebud Sioux Tribe, nor does it necessarily prescribe what should be done, but instead provides an initial view of what may be done as the Rosebud Sioux Tribe continues to define itself apart from programs imposed by state and federal governments.

Just like my analysis of tribal TANF programs, this survey will also need to be supplemented with further work defining the local preferences of the Rosebud Sioux Tribe, but no group is as well-positioned to do that as the Rosebud Sioux Tribe itself and its tribally-chartered partners like REDCO. If nothing else, the message of this study is not only that such groups can be trusted with chartering the economic futures of Native American reservations, but, when supported with the proper capacity-building efforts, are often the optimal groups to do so. The present economic conditions on Native American reservations are truly concerning and leave much to be hoped for, but tribal entities like these give strong reason for hope.

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REFERENCES

- [1] Akee, R. K. Q., and Taylor, J. B. (2014, May). Social and economic change on American Indian reservations: A databook of the US censuses and the American Community Survey 19902010. [PDF file]. Sarasota, FL: The Taylor Policy Group. Retrieved from https://staticl.squarespace.com/static/52557b58e4b0d4767401ce95/t/5379756ce4b095f55e75c77b/1400468844624/AkeeTaylorUSDatabook2014-05-15.pdf
- [2] Akee, R., Jorgenson, M., and Sunde, U. (2015, November). Critical junctures and economic development evidence from the adoption of constitutions among American Indian nations. *Journal of Comparative Economics*, 43(4), 844861. http://dx.doi.org/10.1016/j. jce.2015.08.004
- [3] Bavier, R. (2001, July). Welfare reform data from the Survey of Income and Program Participation [PDF file]. Monthly Labor Review, 124(7), 1324. Retrieved from http://www.bls.gov/ opub/mlr/2001/07/art2full.pdf
- [4] Begay, M. A., Cornell S., Jorgenson M., and Kalt, J. P. (2007). Development, governance, culture: What are they and what do they have to do with nation building? [PDF file]. Rebuilding Native Nations: Strategies for Governance and Development. Retrieved from http: //isites.harvard.edu/fs/docs/icb.topic524968. files/RNB_NNB-SGD_Dev_Gov_Cult_09-06.pdf
- [5] Brown, E. F., Whitaker, L. S., Springwater, M., Cornell, S., Jorgenson, M., Hale, M., and Nagle, A. (2001, November). Welfare, work, and American Indians: The impact of welfare reform. Report to the National Congress of American Indians. Retrieved from https://buder.wustl.edu/research/Documents/Welfare,%20work,%20and%20american%20indians-the%20impact%20of%20welfare%20reform.pdf
- [6] Cornell, S., and Kalt, J. P. (1995, July). Where does economic development really come from? Constitutional rule among the contemporary Sioux and Apache [PDF file]. *Economic Inquiry*, 33(3), 402426. Retrieved from http://www.sfu.ca/~allen/indian.pdf
- [7] Cornell, S., and Kalt, J. P. (2000). Where's the glue? Institutional and cultural foundations of American Indian economic development [PDF file]. *Journal of Socio-Economics*, 29, 443470. Retrieved from https://www.innovations.harvard.edu/sites/default/files/cornell_kalt_2000.pdf
- [8] Delfico, J. F., Bentsen, L., Packwood, B., Rostenkowski, D., and Archer, B. (1992, March). Welfare to work: Effectiveness of Tribal JOBS programs unknown [PDF file]. Retrieved from http://www. gao.gov/assets/80/78318.pdf
- [9] Dippel, C. (2014, November). Forced coexistence and economic development: Evidence from Native American reservations. *Econometrica*, 82(6), 21312165. doi:10.3982/ECTA11423
- [10] Dippel, C. (2014, May). Forcedcoexistance_webfinal.dta [Data file]. Retrieved from http://www.anderson.ucla.edu/ faculty/christian.dippel/forcedcoexistence_ webfinal.dta
- [11] Ericksen, E. P. (1996). Problems in sampling the Native American and Alaska Native populations. In G. D. Sandefur, R. R. Rindfuss, and B. Cohen (Eds.), *Changing numbers, changing needs: American Indian demography and public health* (pp. 113129). Washington, DC: National Academy Press. Retrieved from https://www.nap.edu/read/5355/chapter/9

- [12] Flores, G., and Lin, H. (2013). Trends in racial/ethnic disparities in medical and oral health, access to care, and use of services in US children: Has anything changed over the years? *International Journal for Equity in Health*, 12, 10. doi:10.1186/1475-9276-12-10
- [13] Fourth Annual Report to Congress. (2002, April). Administration for Children & Families Archives, US Department of Health & Human Services. Retrieved fromhttp://archive.acf.hhs.gov/programs/ofa/data-reports/ar2001/indexar.htm
- [14] Goodluck, C., and White Hat, M. (2011, September). Reclaiming Futures initiative from a Sicangu Lakota tribal perspective: Lessons shared. *Children and Youth Services Review*, 33(Supplement 1), S29S33. http://dx.doi.org/10.1016/j.childyouth. 2011.06.010
- [15] Grant amounts allocated to American Indian entities administering a federal TANF program, a federal NEW program, and a federal Tribal TANF Child Welfare Coordination Grant program. (2015). Rep. Office of Family Assistance. Retrieved from https://www.acf.hhs.gov/sites/default/files/ofa/tanf_new_and_ttcw_grant_amounts_fy_2015.pdf
- [16] Hargreaves, M. B., and Chang, H. N.-L. (1989, April). Evaluating the impact of federal welfare reform legislation on Indian country: A case study of the Rosebud Sioux Reservation [PDF file] (Rep. no. PRS 89-2). Harvard Project on American Indian Economic Development. Retrieved from http://hpaied.org/sites/default/ files/publications/PRS89-2.pdf
- [17] Hillabrant, W., and Rhoades, M. B. (2003, August). Operating TANF: Opportunities and challenges for tribes and tribal consortia. Report submitted to United States Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from https://aspe.hhs.gov/report/operating-tanf-opportunitiesand-challenges-tribes-and-tribal-consortia
- [18] Humphrey, K. (1997, May). Seven Sioux tribes favor joining forces on TANF. *Indian Country Today* [Oneida]. Retrieved from ProQuest.
- [19] Kalt, J. P. (1996, September). Statement of Professor Joseph P. Kalt before the United States Senate Committee on Indian Affairs [PDF file]. Harvard Project on American Indian Development. Harvard University. Retrieved from http://hpaied.org/sites/default/files/publications/senatfnl.pdf
- [20] Kalt, J. P., Cornell, S., Curtis, C. E. A., Henson, E. C., Grant, K. W., Jorgensen, M. R., Lee, A. J., and Taylor, J. B. (2008). The state of the native nations: Conditions under U.S. policies of self-determination. New York, NY: Oxford University Press.
- [21] Katz, S. (2012, July). TANF's 15th anniversary and the great recession: Are low-income mothers celebrating upward economic mobility? Sociology Compass, 6(8), 657670. doi:10.1111/j.1751-9020. 2012.00479.x
- [22] Keya Wakpala Green Development. (2016). REDCO. Retrieved from http://sicangucorp.com/community-development/keya-wakpala-green-development
- [23] King, M. A. (2007). Co-management or contracting? Agreements between Native American tribes and the U.S. National Park Service pursuant to the 1994 Tribal Self-Governance Act. *Harvard Environmental Law Review*, 31(2), 475530. Retrieved from http://www.law.harvard.edu/students/orgs/elr/vol31_2/king.pdf
- [24] McCain, J. (1993, October). Implementation on the tribal Self-governance Demonstration Project (S. Doc. 103-441). Hearing before the Committee on Indian Affairs U.S. Senate, 103rd Congress, First session. Washington, DC: U.S. Government Printing Office.
- [25] Perry, S. W. (2004, December). American Indians and crime: A BJS statistical profile for 19922002. The Bureau of Justice Statistics. Retrieved from http://www.bjs.gov/content/pub/ pdf/aic02.pdf
- [26] REDCO Lakota Nation building project wins international design award. (2015, January 24). Lakota Voice. Retrieved from http://www.lakotavoice.com/2015/01/24/redco-lakota-nation-buildingproject-wins-international-design-award/
- [27] Release highlights of 2014. (2015, December). Small area

- income and poverty estimates. U.S. Census Bureau. Retrieved
 from http://www.census.gov/did/www/saipe/data/
 highlights/2014.html
- [28] Ritsema, R., Dawson, J., Jorgensen, M., and Macdougall, B. (2015). Steering our own ship? An assessment of self-determination and self-governance for community development in Nunavut. *The Northern Review*, 41, 157180. Retrieved from http://journals.sfu.ca/nr/index.php/nr/article/view/474/510
- [29] Sarche, M., and Spicer, P. (2008). Poverty and health disparities for American Indian and Alaska Native children: Current knowledge and future prospects. *Annals of the New York Academy of Sciences*, 1136, 126136. doi:10.1196/annals.1425.017
- [30] Strommer, G. D., and Osborne, S. D. (2014). The history, status, and future of tribal self-governance under the Indian Self-determination and Education Assistance Act. American Indian Law Review, 39(1), 375. Retrieved from http://digitalcommons.law.ou.edu/cgi/viewcontent.cgi?article=1001&context=ailr
- [31] Temporary Assistance for Needy Families (TANF) Program:
 Third annual report to Congress [PDF file]. (2000 August).
 U.S. Department of Health and Human Services. Retrieved from http://archive.acf.hhs.gov/programs/ofa/data-reports/annual3/annual3.pdf
- [32] Tribal Self-Governance Demonstration Project Act (H.R. 3394). (1991, December). Bill passed 102nd Congress, First session. Washington, DC: U.S. Government Printing Office.
- [33] U.S. Department of Health and Human Services, Administration for Children and Families. (2000, September). Temporary Assistance for Needy Families (TANF). Almanac of Policy Issues. Retrieved from http://www.policyalmanac.org/social_welfare/archive/tanf.shtml
- [34] United States Senate. (1995, May). Report of the Committee on the Budget United States Senate to accompany S. Con. Res. 13 together with additional and minority views (S. Rept. 10482). Report to the 104th Congress, First session. Retrieved from ftp://ftp.loc.gov/pub/thomas/cp104/sr082.txt
- [35] U.S. Department of the Interior, Office of the Assistant SecretaryIndian Affairs. (2014, January). 2013 American Indian Population and Labor Force Report [PDF file]. Retrieved from http://www.bia.gov/cs/groups/public/documents/text/idc1-024782.pdf
- [36] United States Government Accountability Office. (2011, September). Temporary Assistance for Needy Families: HHS needs to improve guidance and monitoring of tribal programs (GAO-11-758). Report to the ranking member, Committee on Natural Resources, House of Representatives. Retrieved from http://www.gao.gov/new.items/d11758.pdf
- [37] United States Census Bureau. (2010). Rosebud Sioux Tribe's 2010 statistical profile. South Dakota Department of Tribal Relations. Retrieved from http://www.sdtribalrelations.com/new/ tribalstatprofiles/rststatprofile2011.pdf
- [38] United States Commission on Civil Rights. (2003, July). A quiet crisis: Federal funding and unmet needs in Indian country [PDF file]. Retrieved from http://www.usccr.gov/pubs/na0703/ na0204.pdf
- [39] Vinje, David L. (1996). Native American Economic Development on Selected Reservations: A Comparative Analysis. The American Journal of Economics and Sociology, 55(4). 427-442. JSTOR. Retrieved from http://www.jstor.org.ezp2.lib.umn.edu/ stable/pdf/3487617.pdf
- [40] Warne, D., and Frizzell, L. B. (2014, June). American Indian health policy: Historical trends and contemporary issues. American Journal of Public Health, 104(Supplement 3), S263S267. doi:10.2105/AJPH.2013.301682
- [41] Washburn, K. K. (2006, May). Indian law at a crossroads: Tribal self-determination at the crossroads. *Connecticut Law Review*, 38, 777796. Retrieved from http://www.lexisnexis.com.ezp2. lib.umn.edu/hottopics/lnacademic/

APPENDIX

TABLE I: Examining the Effects of Tribal TANF Programs on Family Poverty Rates

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept β_0	.110***	.110***	.077′	.041	.030	.030
Year μ_t	011	010	026	002	001	001
$PFamPov_{i,1990}$.439***	.449***	.272***	-260***	.266***	.270***
TTANF2000		027	044**	049**	.038	058**
PUnemployed 1990			.173*	.095	.058	.081
$PHighschool Diploma_{i,t}$			024***	254***	261**	258***
$log(Population)_{i,t}$.023***	.022***	.022***	.022***
$logdist_00$.022**	.024**	.023**
$TTANF2000*logdist_00$					024	
TTANF Consortia						.034
R^2	.125	.356	.379	.4362	.608	.457

p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Fig. 2: Views of Federal and Local Government

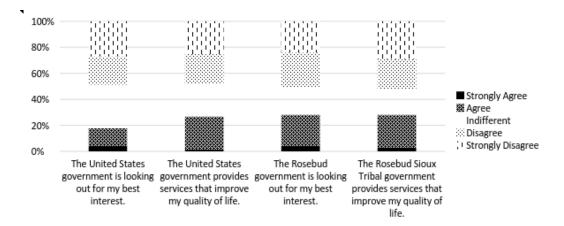
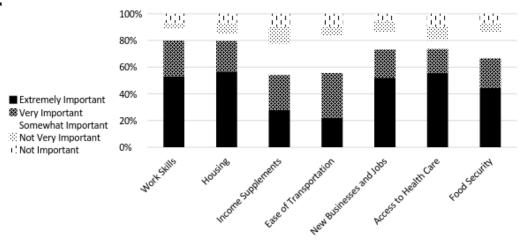


TABLE II: Relative Views of Government Controlling for Distance to the Capital City

Variables	(1)	(2)
Intercept	.839***	.011*
Log(Distance to Rose bud)	103 ′	111*
Rosebud Sioux Tribe Services	.804***	.747***
USBestInterest		.030
USServices		.126
R^2	.125	.356

' p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Fig. 3: Importance of Economic Development Program



Tribal TTANF Variable Summary

Variables	Description	Mean/Percentage of Tribes and (Standard Deviation) across 1990, 2000, and 2010
PFamPov	This will be the regressand for all regressions on TANF. It gives the percentage of Native American families for reservation in poverty.	.3015 (.1393)
Intercept/ μ_t	μ_t is a dummy variable that takes on a value of 1 in the year 2010. By this structuring, the constant term can be interpreted as the baseline constant effect in the year 2000.	
TTANF2000	A dummy variable that takes a value of 1 if a tribal group was administering the TANF program for reservation in the year 2000, a 0 if one was not. This variable is set to zero for all reservations in 1990 because at that point, the effects of a program administered in 2000 would not have been felt.	14.11%
PUnemployed90	The unemployment rate in 1990 for reservation given by the number of Native Americans unemployed divided by the number of Native Americans in the labor force.	.2064 (.0924)
PHighschool Diploma	The percentage of Native Americans aged 25 or older on reservation that have either a high school diploma or a college degree, given by the sum of Native Americans who have obtained either a high school diploma or college degree by age 25 divided by the Native population ages 25 and older. This variable can change from year to year in the regression for a given reservation.	.4041 (.0936)
$\log(AIANPopulation)$	The natural log of the sample population on reservation as reported by US Censuses. This variable is also allowed to change from year to year for each reservation.	6.778 (1.367)
$logdist_00$	The natural log of the distance between the border of reservation and the nearest major city, defined as any city with 50,000 people or more.	3.611 (1.014)
PFamPov90	The percentage of families in reservation that were in poverty in the year 1990. This is held constant through all years in the regression.	.3659 (.1470)
TTANFConsortia	A dummy variable that equals 1 when a consortium of tribes together administered the TANF services to some reservation, and 0 if a reservation elected to administer TANF services on its own or simply received TANF services from the state government.	2.808%

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Survey Summary

Variable	Description	Mean and (Standard Deviation)
Rosebud Sioux Tribe Best Interest	Respondents were asked to what extent they agreed or disagreed with the statement The Rosebud Sioux Tribal Council is looking out for my best interest with the options strongly disagree, disagree, indifferent, agree, and strongly agree. These answers were coded 1-5 such that an answer of strongly agree would equal 5 and an answer of strongly disagree would equal 1. This is the regressand for the survey regressions.	2.5733 (1.21)
Log(Distance ToRosebud)	Gives the natural log of the distance in miles along recognized roads between a particular community and Rosebud, the capital of the Rosebud Reservation. In some cases, this may have overestimated the driving distance between two communities because there are many backroads on the Rosebud Reservation that cut through private property but are, nevertheless, widely used. For surveys administered within Rosebud, that distance was zero, and so zero is used for those values of Log(Distance to Rosebud). The next closest community surveyed was 7.2 miles away, and so Log(Distance to Rosebud) never takes on negative values.	2.606 (1.419)
RosebudSiouxTribeServices	Respondents were asked to what extent they agreed or disagreed with the statement The Rosebud Sioux Tribal Council provides services that improve my quality of life with the options strongly disagree, disagree, indifferent, agree, and strongly agree. These answers were coded 1-5 such that an answer of strongly agree would equal 5 and an answer of strongly disagree would equal 1.	2.493 (1.234)
USServices	Respondents were asked to what extent they agreed or disagreed with the statement The United States government provides services that improve my quality of life with the options strongly disagree, disagree, indifferent, agree, and strongly agree. These answers were coded 1-5 such that an answer of strongly agree would equal 5 and an answer of strongly disagree would equal 1.	2.547 (1.166)
USBestInterest	Respondents were asked to what extent they agreed or disagreed with the statement The United States government is looking out for my best interest with the options strongly disagree, disagree, indifferent, agree, and strongly agree. These answers were coded 1-5 such that an answer of strongly agree would equal 5 and an answer of strongly disagree would equal 1.	2.460 (1.149)