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The Impact of Surety Bonding on American Indian and Tribally Owned Contractors

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By Ahna Minge and Andrew Twite

Abstract: This paper assesses the impact of surety bonding on American Indian contractors and tribally owned contracting firms. We identify common barriers to acquiring bonding, including both non-American Indian-specific (e.g., challenges in accessing capital) and American Indian-specific barriers (e.g., issues resulting from trust land and sovereign immunity). We also include case studies of successful American Indian-owned contracting firms to identify techniques for bonding acquisition. We then estimate a series of simple proportionality models, which suggest that American Indian contractors living off reservations receive a disproportionately large share of federal construction contracts relative to their population, while American Indian contractors based on reservations receive a disproportionately small share of federal construction contracts. We conclude with a discussion of the Small Business Administration's Surety Bond Guarantee Program, including a presentation of policy options to improve access to surety bonds for American Indian contractors and tribally owned contracting firms.

Introduction

Many American Indian reservations are consistently among the nation's most impoverished regions: unemployment and poverty rates are dramatically above the national average and educational attainment is well below.[1] In this context, one sector that is particularly conducive to economic development in Indian Country is construction, which provides relatively high-paying jobs that require little formal education. This paper analyzes the impact of a set of financial instruments referred to broadly as "surety bonds" on American Indian and tribally owned construction firms.

Surety bonds insure a property owner or funder against the possibility that a contractor will fail to successfully complete a construction project. Such instruments are becoming increasingly prevalent in all realms of construction work. Inability to acquire them can stall development or diminish the ability of American Indian businesses to successfully compete for and conduct business.

[1] For a thorough discussion of the state of social and economic conditions in Indian Country, see e.g., Harvard Project on American Indian Economic Development, *The State of Native Nations: Conditions Under U.S. Policies of Self-Determination*, 2008.

Increased access to bonds for American Indian contractors has been identified as a policy priority.[2] However, little research has been done to date on the true scope and nature of the issue. This study builds on a broader investigation into the subject conducted as a master's thesis at the Hubert H. Humphrey School of Public Affairs in 2012.[3] That report introduced broad themes related to the problems of surety bonding for American Indian contractors, both in and out of Indian Country. It also identified potentially useful quantitative methods for investigating the magnitude of the issue.

This study, conducted by two authors of the 2012 report, works to enhance the earlier work through a narrowed focus and improved methodology, including additional interviews, case studies to demonstrate major themes, and a more geographically specific empirical analysis. We seek to identify both the unique features of bonding in Indian Country, but also strategies through which American Indian contractors and tribally owned contracting firms can overcome Indian-specific barriers to acquire bonding.

We begin by providing an introduction to and overview of surety bonding. We then discuss the salient factors affecting American Indian and tribally owned contracting firms. Next, we present the results of quantitative analysis into the impact of civil-dispute resolution jurisdiction on American Indian contractors' success. Finally, we describe the Small Business Administration's Surety Bond Guarantee Program and offer several policy options to improve access to surety bonds for American Indian contractors and tribally owned contracting firms.

Surety Bonding Overview

A surety bond is an insurance product in which a third party (the surety) guarantees fulfillment of a contract between an obligee (the project owner) and the principal (the contractor). All federal construction contracts over $150,000 require surety bonds, as do most state- and locally- financed construction projects.[4] It is also common for private construction project owners to require surety bonds—often as a requirement of their lending institution—and it is becoming more common for subcontracting work to

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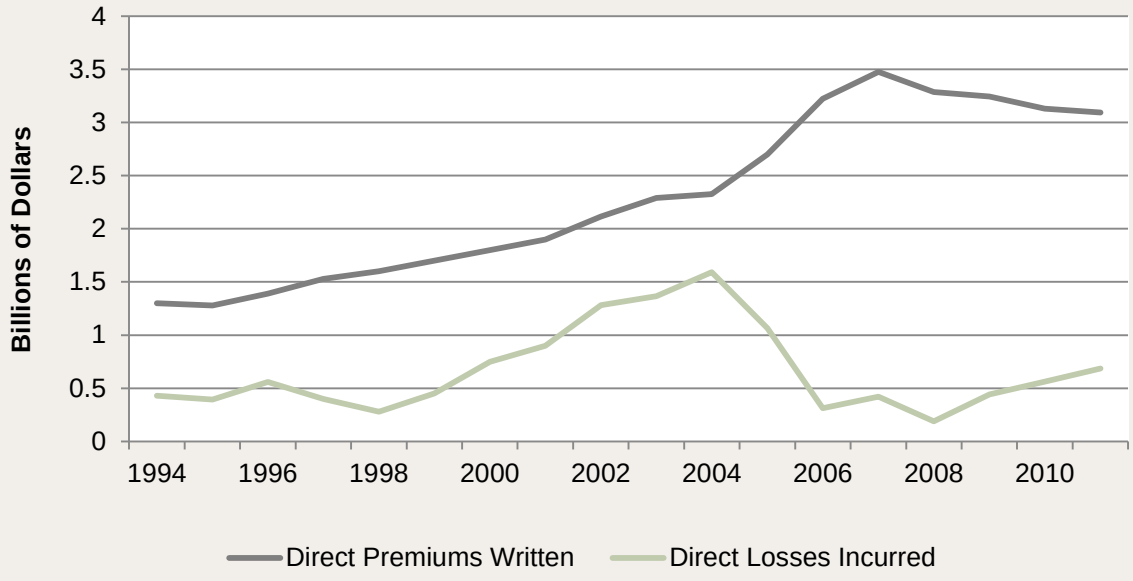
[2] See e.g.: Susan Woodrow, *Growing Economies in Indian Country: Taking Stock of Progress and Partnerships*, Board of Governors of the Federal Reserve System, April 2012; W. Ron Allen, *Testimony to the United States Senate Committee On Indian Affairs*, August 17, 2011.
[3] Sahar Angadjivand, Elyse Bailey, Jennifer Bendewald, Nicole Mickelson, Ahna Minge, Robert Pickering, and Andrew Twite, *Risky Business? The Complex Case of Surety Bonding in American Indian Country*, master's thesis, University of Minnesota Humphrey School of Public Affairs, 2012.
[4] U.S. Small Business Administration, *Surety Bonds: The Basics*.

require bonding.[5] As Figure 1 below shows, surety bonding has more than doubled over the past two decades.[6]

Surety bonds are necessitated by the inherent risk of the construction industry. This risk predates the bursting of the housing bubble: of the 853,000 construction firms active in 2002, more than 240,000 (28 percent) were out of business by 2006.[7] In spite of this volatility, however, default rates on surety bonds are low: for example, over its 42-year history, the average default rate for the Small Business Administration's Surety Bond Guarantee Program is about 2 percent.[8]

Figure 1: Surety Bonding Premiums and Losses, 1994–2011



Source: The Surety & Fidelity Association of America, *Twelve-Year Experience*.

There are three main types of surety bonds: bid bonds, payment bonds, and performance bonds. Bid bonds ensure that the bidder will enter into the contract if it is awarded. Payment bonds certify that all suppliers and subcontractors will be paid for their work. Performance bonds guarantee that the principal

[5] Angadjivand et al.
[6] For a discussion of the increasing gap between premiums and losses, see ibid, page 10.
[7] Surety Information Office, *10 Things You Should Know About Surety Bonds*, 2007.
[8] Congressional Research Service, *SBA Surety Bond Guarantee Program*, October 6, 2011.

will perform as stated in the contract.[9] Payment bonds are the most frequently requested and, typically, are also the most expensive.[10]

Contractors obtain surety bonds either directly, from licensed surety companies, or indirectly via surety agents. While each surety has its own underwriting criteria, all typically include a detailed review of what CCI Surety, Inc., calls "the three C's": credit, capabilities, and capital.[11] Sureties examine not only contractors' professional credit histories, but also their personal credit histories and previous work projects completed. The most important aspect of the underwriting process is the assessment of contractors' capital resources, which is also the most common cause of denial. It is also common for sureties to require personal indemnities, requiring owners of the contracting company and their spouses to make personal assets available in the event of a surety bond default.[12]

Bond premiums can vary from .5 percent to 3.5 percent of the total cost of the project, with the average premium around 2 percent. The amount of the premium is determined primarily by three factors: the perceived risk of contractor default, the total value of the contract, and the type of construction work being performed. The single greatest premium determinant is the capital resources of the contractor. Firms with greater capital assets pay lower premiums because of their lower default rates and higher recovery rates.[13]

Surety bonds differ from traditional insurance, in which the insurer compensates its client in the event of catastrophic loss. Surety bonds are more akin to lines of credit, wherein the contractor is liable to the surety for any losses the surety pays out to the project owner. Surety bond approval is contingent upon an indemnity agreement, in which the contractor accepts liability to the surety for any losses paid on its behalf.[14] Collateral, such as a bank letter of credit or a cashier's check, is often required for contractors that have been determined to be at high risk of default.[15]

In the case of a contractor default, the surety company completes an investigation to determine whether or not the contractor was at fault. If fault is found, the surety company will take the necessary steps to

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[9] U.S. Small Business Administration, *Surety Bonds: The Basics*.
[10] Angadjivand et al.
[11] Ibid.
[12] Ibid.
[13] Ibid.
[14] Ibid.
[15] Alpha Surety & Insurance Brokerage, *What is a Surety Bond Indemnity Agreement?*

resolve the issue, which may entail paying suppliers and subcontractors or hiring a new contractor to finish the project. This process, which may take several months, can set construction projects back considerably.

Obtaining surety bonds is especially challenging for small and emerging businesses. Sureties examine a wide variety of criteria that are particularly problematic for those businesses, including references and reputation, experience, necessary equipment, financial strength, credit history, and liquid assets.[16] Accordingly, small and emerging contracting firms are often forced to initially rely solely on contracts that do not require bonding, which are becoming more rare.

Small and emerging contracting firms have faced even greater challenges in recent years. The combination of reduced government spending and lack of housing market growth has substantially reduced demand for contracting services. Reduced demand impacts small contractors disproportionately, as they face increased competition from larger firms that can obtain lower surety bond premiums.[17]

American Indian Contractors

When examining contracting in American Indian Country, it is important to distinguish between American Indian contractors and tribally owned contracting firms. Because of tribes' status as sovereign nations, tribally owned contracting firms' business activities—whether inside or outside of Indian Country—fall under the purview of sovereign immunity, which precludes the tribe from being sued without its express permission. In contrast, American Indians who own their own construction firms do not have sovereign immunity, even if they are enrolled tribal members living on reservations. We will consider these groups independently, beginning with American Indian contractors.

Many of the challenges experienced by American Indian contractors in obtaining surety bonds are due to inexperience and lack of capital, two factors shared with many other small and minority contractors.[18] Despite efforts to increase the presence of American Indian contractors by policymakers, procurement goals rely on the ability to obtain required bonding. One crucial factor considered by bonding companies

[16] Marla McIntyre and Dev Strischek, "Surety Bonding in Today's Construction Market: Changing Times for Contractors, Bankers, and Sureties," *The RMA Journal*, May 2005: 31.
[17] *Engineering News-Record*, "2011 Surety Market Report," June 27, 2011: S 4.
[18] Congressional Research Service, 2011.

is a contractor's work history and past performance on similar projects.[19] Lack of experience was cited in one interview as the greatest barrier facing American Indian contractors in obtaining surety bonds.[20] In some cases, this disadvantage can be overcome by additional capital or through the use of joint ventures (see Case Study One).

Case Study One: Contractor Experience and Joint Ventures

This American Indian-owned contracting firm is located on a reservation in Arizona. The firm is relatively new, doing construction work for several years. During this time, it completed smaller jobs with less stringent requirements for work history and capital. The firm wanted to break into larger contracting, but lacked the demonstrable work history to obtain bonding for a contract.

During this time, the firm visited a technical assistance center established by the federal government for the purposes of making American Indian contracting firms more successful. The center suggested that through partnering with a more experienced organization, the firm may be better situated to win larger contracts and obtain bonding. This form of partnership—the mentor-protégé program—allows an emerging contractor to draw on the strength and resources of a larger firm. In this case, the larger firm had a demonstrated work history of conducting large projects.

This joint venture bid on and successfully won a contract valued at over $40 million. Through the completion of this project, the smaller firm was able to gain and document experience with large contracts. When the contractor feels as though it is able to compete individually, the joint venture can come to an end. The smaller contractor will be able to use the experience as evidence of capacity for future bonding and contracting requests.

Joint ventures can be valuable tools in overcoming many issues facing new contractors. In addition to bonding capacity, mentors may provide additional workforce or assistance in proposal development.

Another important factor in acquiring surety bonding is access to credit and capital. American Indians, particularly those living on reservations, face unusual limitations in their access to capital. The Native American Contractors Association cites "trust-land issues, jurisdictional disputes, and cultural misunderstandings" as barriers to accessing private capital.[21] Although private capital is, in some ways, distinct from surety bonding, it is important to consider for two reasons. First, inability to obtain loan funding contributes to contractor default.[22] Second, the considerations taken by lenders are very similar to

[19] Angadjivand et al.
[20] Venessa Gleich, technical assistance provider, interviewed on May 3, 2013.
[21] Native American Contractors Association, *Native American Business Provisions in the American Economy Recovery Act to Aid Native American and Alaska Native Economies*, January 14, 2009.
[22] Angadjivand et al.

those by bonding companies and it is likely that they are impacted by similar historic considerations. The trust status of much reservation land creates an addition level of complication for contractors residing on a reservation. When land is held in trust, it is difficult to use it as collateral to obtain finance. There was not consensus among interview participants as to how greatly the trust status of land affected surety bond access. While some understood it to be the driving factor, others felt it was not an issue. Another issue is geographic proximity to financial services and bonding agents: many American Indian reservations are located in remote areas with fewer financial institutions. A lack of relationships with established financial institutions may also hinder access to credit and capital. Knowledge of formal financial systems is important in effectively navigating the bonding process.[23] The value of interpersonal relationships and trust is something that was also mentioned repeatedly in our interviews.[24] A lack of trust and understanding between American Indians and financial institutions may hinder the ability to build relationships.[25]

An additional factor driving access to surety bonding derives from the legal institutions present on American Indian reservations. Perceptions around the stability and predictability of laws and courts are important when obtaining bonding. The strength of legal institutions impacts a surety company's ability to recover assets from a contractor in the case of default. Several interviews and conversations indicated skepticism among sureties about the enforceability of contracts on reservations or the willingness of tribal courts to grant a judgment against a tribal member. As a result, sureties may be less willing to grant bonds or may charge a risk premium when working with an Indian contractor who is based on a reservation.

[23] Ibid.
[24] Venessa Gleich.
[25] Native American Contractors Association.

Case Study Two: Importance of Working Capital

This contractor is an American Indian-owned firm located on a reservation in northern Minnesota. The contractor has been in operation for almost 20 years. The firm has 7 employees, although it had 12 at its peak. The firm used to operate more as a prime contractor, but has been doing more work as a subcontractor in recent years. Over the years, the firm has worked with two sureties, though the owner has maintained the same bonding agent since starting the company. The owner switched over to the new surety company when business slowed over the last several years. The owner expressed that, as a smaller company, the new surety is more likely to "take on guys like me that are a bit more risky."

The contractor has performed many jobs requiring bonding. Interestingly, he doesn't think it's gotten easier to get bonding: "It's been a battle every year since I've been in business." Despite these challenges, the only times he hasn't been able to get a bond is when the projects were "too large" or he didn't have the equity or working capital the sureties wanted. The owner feels his firm likely pays a premium above non-minority contractors.

The owner expressed that surety bonding impacts many of his business decisions. When providing quotes for subcontracting work, he typically specifies that he will not obtain a bond. Prime contractors sometimes agree, but often require that he obtain a bond. In addition, the number of prime contracts on which he bids is much smaller than it used to be.

The owner of the firm repeatedly stressed the importance of experience and working capital in obtaining bonding. In addition, his reliance on a single bonding agent over time may be indicative of the importance of relationships between companies and sureties.

Tribally Owned Contracting Firms

Tribally owned contracting firms face many of the same problems, including lack of experience and challenges in accessing capital, and many also struggle to acquire surety bonds. As W. Ron Allen, Chairman and CEO of the Jamestown S'Klallam Tribe, put it, "Although, construction is an area with a much higher probability of providing direct employment for Tribal citizens, surety bonding is one of the largest barriers for Tribes seeking entry and growth in this highly competitive and capital intensive sector."[26] As with American Indian contractors, the surety bonding process can be so frustrating that it can discourage some tribally owned firms from even bidding on projects requiring bonds.[27]

In addition to these issues, surety bonding is complicated further for tribally owned firms due to issues surrounding sovereign immunity. Federally recognized American Indian tribes enjoy a limited form of

[26] W. Ron Allen, *Testimony to the United States Senate Committee On Indian Affairs*, August 17, 2011.
[27] Angadjivand et al.

sovereign immunity, which precludes legal action against a tribe without its express permission. This protection leaves many project owners unwilling to enter into contracts with tribally owned firms without a waiver of sovereign immunity. However, sovereign immunity is an important facet of American Indian culture; some tribal governments and elders value this protection so highly that they refuse even limited waivers applying only to specific contracts. In addition, misconceptions surrounding sovereign immunity are common, and some sureties may lack an understanding of its implications.[28]

Amenability to limited sovereign immunity waivers varies greatly between tribes. Some tribes, for cultural and historical reasons, are unconditionally opposed to sovereign immunity waivers, even when limited to a specific construction contract. In practice, this likely precludes these tribes from developing successful tribally owned contracting firms, as too many project owners will be unwilling to enter into a contract with a sovereign nation without an immunity waiver. However, the general consensus appears to be that most tribes are willing to provide limited sovereign immunity waivers for individual contracts.[29]

Despite the fact that the vast majority of construction contracts are completed without incident, cases in which sovereign immunity becomes an issue tend to receive a disproportionate amount of attention.[30] The impact of such contentious, high-profile legal battles stretches far beyond the parties involved. Wagner (February 2013), describing a recent high-profile lawsuit, writes, "Experts on economic development in Indian country said [the lawsuit] could hurt Indian reservations across the United States if investors evaluating deals on tribal land fear being wiped out by tribal condemnation proceedings."[31] Thus, while these cases may be outliers, the mere possibility of such a result may lead to heightened scrutiny of tribally owned firms by surety companies.

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[28] Ibid.
[29] Ibid.
[30] A recent court case illustrates the problems that can arise when a project is undertaken without a sovereign immunity waiver. In 2003, investor and developer David Jin entered into an agreement with the Hualapai Tribe of Northern Arizona to build a glass-floored skywalk over the Grand Canyon on the Hualapai reservation. When the relationship turned sour in 2009, Jin attempted to litigate the issue through binding arbitration. The tribe refused to participate, and a long, protracted legal battle ensued. As of this writing, the case is still not resolved: in February of 2013, a U.S. District Court awarded Jin a $28.6 million judgment. In the wake of the ruling, the Tribe filed for bankruptcy, and in April of 2013, the 9th U.S. Circuit Court of Appeals sent the case to Hualapai Tribal Court (Wagner, April 2013). In the spring of 2014, the two sides will argue whether the bankruptcy filings were legal. Meanwhile, attorneys for Jin have sued members of the Hualapai Tribe for defamation (O'Reiley, January 2014). A more detailed account of this legal battle can be found in Angadjivand et al.
[31] Dennis Wagner, "Grand Canyon Skywalk judgment could devastate tribe." *USA Today*, February 19, 2013.

Fortunately, sureties and contractors are becoming more adept at contracting for limited sovereign immunity waivers, and tribal governments are increasingly recognizing the importance of limited waivers in economic development.[32] As the case study below demonstrates, a close relationship between the tribal government and the contracting firm and a willingness to provide limited sovereign immunity waivers is conducive—and perhaps even essential—to the development of a successful tribally owned contracting firm. However, though sovereign immunity waivers appear to be necessary for tribally owned construction firms to get bonding, they may not be sufficient: the Native American Contractors Association argues that the perceived risk of sovereign immunity has led some tribally owned firms to be denied access to surety bonding even when sovereign immunity is waived.[33]

Case Study Three: A Tribally Owned Firm and Sovereign Immunity

This tribally owned contracting firm is located on a federally recognized reservation in Minnesota. The firm, which has been in business for 36 years, typically employs around 50 full-time workers, though at times it has employed as many as 120. The firm, which bids primarily as a prime contractor, performs work both inside and outside Indian Country. It prides itself on the fact that, over nearly four decades, it has not had a single contractual dispute. However, the firm's representative referenced the recent legal battle described in footnote 30; he noted that that tribe's actions affect all tribes, quipping, "Sometimes we can be our own worst enemies."

Notably, the firm has had considerable success in attaining surety bonding. In fact, the majority of the projects the firm bids on require bonds. The firm has developed a strong relationship with its surety company, which has been its sole provider of bonds for over 15 years. The firm's representative believes the surety provides it "a very good rate," which does not include a premium beyond that which the surety would charge a non-tribally owned business. But while the firm has a solid relationship with its surety at present, there was a time in which it struggled to acquire bonding. The most frequent cause of bonding difficulty was weak financials, often the result of low sales in the previous year.

An examination of the firm's history reveals several key elements that are integral to success for tribally owned firms. First, the firm is willing to provide a limited sovereign immunity waiver whenever it is requested. This is possible because the firm has the full support of the tribal council. Moreover, the tribal council allows the firm a certain amount of autonomy from the council. As the firm's representative put it, "[F]irst and foremost [...] you have to separate the business from tribal politics." Another key to success could be applied to all contracting firms: the firm bid projects within its expertise, and did not overextend itself. The firm's representative was pragmatic when recounting times it had been denied surety bonds, noting, "If we couldn't get bonding, we may have been overreaching." A final piece of advice delivered by the representative was that contracting is a "people-based business," and that it is vital to recruit a dependable, professional crew and supervisory staff.

[32] Angadjivand et al.
[33] Native American Contractors Association.

Quantitative Analysis

With a better grasp of the barriers faced by contractors in American Indian Country, we now turn to quantitative analysis to help to determine whether these barriers have tangible impacts on American Indian contractors' success. In order to do so, we employ a simple proportionality method. Our models test the assumption that each person within a population is equally likely to win a construction contract. If this were the case, the percentage of contracts won would be equal to the percentage of the population that the group constitutes. For example, if American Indians comprise 5 percent of a given state's population, assuming equal conditions we would expect that American Indian contractors would win 5 percent of the contracts awarded to contractors in the state.

Our data are drawn from the Federal Procurement Data System (FPDS), which contains information about all federal contracts. The FPDS was chosen because most federal contracts require bonding, and the federal government is a major funder of construction in American Indian Country. The FPDS includes information for every state and useful indicators, such as whether a bid-winning company is American Indian or tribally owned.

Because of our emphasis on the construction industry, we included only those contracts identified as construction (NAICS code 23). Outcomes were aggregated to state-level observations for the years 2006–2011, producing 288 observations. Alaska and Hawaii were excluded because of their differences in policies toward the establishment of reservations.

In total, we use four proportionality models to test the assumption that the percentage of contracts awarded to a group is proportional to the percentage of the state population that the group represents.[34] The first is as follows:

$$1) \qquad FC\%(AI) = \alpha + \beta[Pop\%(AI)] + \varepsilon$$

Where FC%(AI) is the percentage of federal contracts awarded to contractors in the state that went to American Indian contractors. In each specification, we repeat this model using the total percentage of

[34] Proportionality models are used as convenient benchmarks for summarizing and analyzing some of the factors associated with the share of contracts going to Native Americans. They are not intended to serve as normative statements about the appropriate share of contracts that any group should receive.

federal contract *value*. Pop%(AI) is the percentage of the state's population that is American Indian.[35] Thus, if the coefficient on β is less (or more) than one, American Indian contractors were awarded less (or more) than their proportional "share" of contracts.

The second model distinguishes between American Indians living on- and off-reservation:

2) $$FC\%(AI) = \alpha + \beta_1[Pop\%(on\text{-}rez\ AI)] + \beta_2[Pop\%(off\text{-}rez\ AI)] + \varepsilon$$

Where Pop%(on-rez AI) is the percentage of the state's population that is made up of American Indians living on federally recognized reservations, and Pop%(off-rez AI) is the percentage of the state's population that is American Indians not living on federally recognized reservations. When combined, these two independent variables equal the Pop%(AI) variable from Model 1. Thus, a comparison of β_1 and β_2 will indicate whether it is beneficial or detrimental for an American Indian contracting firm to be based on a reservation.

While Model 2 is simple and intuitive, its dependent variable lacks the precision required to accurately estimate the impact of basing a construction firm on a reservation. The dependent variable, the percentage of federal contracts awarded to contracting firms in the state that were awarded to American Indian contractors, is more effective when the location of the contractor within the state is irrelevant. Moreover, as shown in Appendix B, in 42 of the 48 states examined here, American Indians living on reservations comprise less than 1 percent of the total state population, and in all but two states, the total is less than 4 percent. Without targeting the dependent variable geographically, it is impossible to determine whether the contract-winning firms are based on- or off-reservation. When considering how sparse most states' on-reservation populations are, this dependent variable is too blunt an instrument to detect the true effect of basing a contracting firm on a reservation.

Accordingly, we constructed another dependent variable, which is narrowed to the percentage of contracts (or contract value) awarded to contractors within a state that went to American Indian contractors *based on reservations*. This variable was created using the contractor ZIP Code and a geographic weighting mechanism. A shape file containing geographic data of reservations and tribal lands was joined to a shape file of United States ZIP Codes. For each ZIP Code, a variable was generated to indicate the percentage of

[35] Population figures are tabulated using the U.S. Census Bureau classification "American Indian and Alaska Native alone or in combination with one or more other races."

its geographic area covered by tribal land. This percentage was applied as a measure of likelihood that a contractor located within the ZIP Code was located within tribal land. This weight was used to weight contracts by matching the corresponding ZIP Code with the ZIP Code of the contractor. These weighted values were then summed to construct the state-level variable.

Models 3 and 4 employ these more precise dependent variables. Model 3, which attempts to measure more accurately the impact of basing a construction firm on a reservation, is as follows:

3) $FCR\%(AI) = \alpha + \beta[Pop\%(on\text{-}rez\ AI)] + \varepsilon$

Where FCR%(AI) is the geographically weighted dependent variable measuring the percentage of federal contracts (or contract value) in the state won by American Indian contractors based on reservations. Pop%(on-rez AI) is identical to that in Model 2. As in Model 1, a coefficient on β that is significantly higher (or lower) than one will suggest a benefit (or detriment) to basing a construction firm on a reservation.

The second set of analyses primarily attempts to identify the impact of jurisdiction of American Indian contracting outcomes. As described above, legal jurisdiction over disputes in Indian Country may contribute to the ease of obtaining bonding for American Indian contractors living on reservations. *Jurisdiction* refers to the ability to make and enforce laws governing an area. On reservations, jurisdiction is not a simple issue. As sovereign domestic nations, American Indian tribes have an inherent right to self-governance. This right, however, is subject to the authority of Congress.[36] For many years the federal government maintained jurisdiction over severe crimes and certain civil actions. Over time, however, Congress granted greater authority to states. One of the most sweeping examples of this trend occurred with the enactment of Public Law 280 (PL 280).[37] PL 280 delegates to certain states the aspects of legal jurisdiction over reservations normally exercised by the federal government, and it does so without the consent of the affected tribes. The law referred specifically to reservations in six states, although other states were able to opt in to the law. It was proposed as a solution to perceived "lawlessness" on reservations as well as a lack of suitable legal institutions.[38] Although the primary purpose of the law was

[36] Vanessa J. Jiménez and Soo C. Song, "Concurrent Tribal and State Jurisdiction Under Public Law 280," *American University Law Review*, August 1998.
[37] Carole Goldberg and Duane Champagne, "Is Public Law 280 Fit for the Twenty-First Century? Some Data at Last," *Connecticut Law Review*, May 2006.
[38] Jimenez and Song.

to address criminal issues, the statute does confer some civil jurisdiction to state courts. Legal scholars argue that PL 280 does not represent a supplanting of tribal jurisdiction with state jurisdiction, but rather *concurrent* jurisdiction of both governments.[39] Although a state court may have the authority to hear a case concerning a civil dispute in Indian Country, the tribal court has not necessarily lost that authority. Some argue that the intent of the law was to provide greater support to the institutions in Indian Country.[40]

Our analyses specifically consider whether American Indian contractors living on reservations experiencing concurrent state and tribal jurisdiction over civil cases have different contracting outcomes than those who live on reservations under tribal jurisdiction.[41] Sureties contracting in locations with concurrent jurisdiction may be better able to avail themselves of state courts. To identify the impact of jurisdiction, we conduct a series of analyses to test whether contracts are awarded to groups proportionately.

Model 4 further breaks down the percentage of the population living on reservations into those living on reservations under concurrent or tribal jurisdiction. These determinations were based on review of the status of PL 280 or similar legislation affecting each state. It also considers states where jurisdiction is not consistent within a state. Using data from the 2010 Census, values were calculated for each state based on its status under PL 280 or similar legislation affecting civil jurisdiction. For states with non-uniform jurisdiction (such as states with reservations excluded by PL 280 or with retroceded authority), reservations were individually categorized as being under concurrent or tribal jurisdiction. The results of this calculation are displayed in Appendix B.

Model 4, which attempts to measure the impact of tribal jurisdiction on contracting outcomes for American Indians, is as follows:

$$4) \qquad FCR\%(AI) = \alpha + \beta_1[Pop\%(280\ rez\ AI)] + \beta_2[Pop\%(non\text{-}280\ rez\ AI)] + \varepsilon$$

Where Pop%(280 rez AI) is the percentage of the state's population that is made up of American Indians living on reservations subject to PL 280, and Pop%(non-280 rez AI) is the percentage of the state's

[39] Ibid.
[40] Ibid.
[41] By "tribal jurisdiction," we refer to the concurrent federal and tribal authority that prevails where PL 280 has not delegated the federal role over civil cases to a state government.

population that is made up of American Indians living on non-PL 280 reservations. Thus, a statistically significant difference between β_1 and β_2 would suggest one jurisdiction is more conducive to on-reservation contracting than the other.

As an alternative measure of proportionality, we next repeat all four models using American Indians' percentage of the state's income share, rather than population. These results are displayed in Tables 3 and 4 below. For the reader's convenience, the box below summarizes the dependent and independent variables used in our models.

	Dependent Variables
FC%(AI)	The percentage of federal contracts (or contract value) awarded to contractors in the state that went to American Indian contractors.
FCR%(AI)	The percentage of federal contracts (or contract value) awarded to contractors in the state that went to American Indian contractors located on reservations (geographically weighted).
	Independent Variables
% (AI)	The percentage of the state's population (or income share) that is American Indian.
% (on-rez AI)	The percentage of the state's population (or income share) that is American Indians living on federally recognized reservations.
% (off-rez AI)	The percentage of the state's population (or income share) that is American Indians not living on federally recognized reservations.
% (280rez AI)	The percentage of the state's population (or income share) that is American Indians living on PL 280 reservations.
% (non-280rez AI)	The percentage of the state's population (or income share) that is American Indians living on non-PL 280 reservations.

Table 1 displays the results by population share for Models 1 and 2. As the table shows, for both the percentage of contracts (1N) and the percentage of contract value (1V), contracting companies identifying as being owned by American Indians received a disproportionately large share of federal contracts relative to their population share. This may be due to a number of factors, such as a greater concentration of American Indian small businesses in the construction sector, a successful procurement strategy to increase American Indian contracting outcomes, or a greater number of contractors identifying as American Indian-owned to access preferential bidding processes.[42]

[42] It should be noted that the population share variable comes from the 2010 Census, which may capture self-identified race differently than contracting procedures.

Table 1. Impact of Population and Jurisdiction on Contracting Outcomes for American Indian Contractors

	Number of contracts		*Contract value*	
	1N	2N	1V	2V
State AI population	1.878***		2.083***	
	(0.158)		(0.297)	
State off-reservation AI population		2.654***		3.098***
		(0.162)		(0.412)
State on-reservation AI population		0.234°°°		-0.067°°°
		(0.149)		(0.347)
Constant	0.025°°°	0.019°°°	0.208°°°	0.013°°°
	(0.004)	(0.004)	(0.006)	(0.007)
$\bar{R}^2$	0.415	0.488	0.328	0.408

N = 288. The dependent variable is the percentage of the contracts awarded to contractors based in the state that went to American Indian contractors. Population data are taken from 2010 Census and include American Indian alone or in combination with one or more other races. State and tribal jurisdiction is based on venue for civil contract dispute. Standard errors in parentheses. *s indicate coefficients that are statistically significantly larger than 1; °s indicate coefficients that are statistically significantly smaller than 1. Two sided significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.

Specifications 2N and 2V display the results for Model 2, which breaks down the American Indian population variable into those living on reservations and those living off of reservations. While the coefficient on the off-reservation population increases and remains significantly larger than one, the coefficient on on-reservation population is significantly *smaller* than one, suggesting that American Indian contractors based on reservations won a disproportionately small percentage of contracts.[43] This may be the result of the unique barriers that American Indian contractors living on reservations face in acquiring surety bonding. The result may also be indicative of unique cultural or economic factors present on American Indian reservations. For example, reservation-based contractors may be farther removed from many contracting opportunities.

Moreover, as described above, the state-level dependent variable used in Models 1 and 2 produces more reliable estimates for statewide American Indian contractors than for those living on reservations. Table 2 displays the results by population share for Models 3 and 4, which employ our geographically targeted dependent variables.

[43] There is a chance that the correlation between the two variables could be suppressing some of the impact, as those states with large American Indian populations often have large numbers on and off of reservations.

Table 2. Impact of Population and Jurisdiction on Contracting Outcomes for Reservation-Based American Indian Contractors

	Number of contracts		*Contract value*	
	3N	4N	3V	4V
State on-reservation AI population	0.751°		0.444°°°	
	(0.141)		(0.105)	
State PL 280 reservation AI population		1.461		0.939
		(0.675)		(0.463)
State non-PL 280 reservation AI population		0.753°		0.446°°°
		(0.141)		(0.105)
Constant	0.001°°°	0.001°°°	0.001°°°	0.009°°°
	(0.001)	(0.001)	(0.000)	(0.000)
$\bar{R}^2$	0.308	0.307	0.301	0.301

N = 288. The dependent variable is the percentage of the contracts awarded to contractors based in the state that went to American Indian contractors based on a reservation. Population data are from 2010 Census and include American Indian alone or in combination with one or more other races. State and tribal jurisdiction is based on venue for civil contract dispute. Standard errors in parentheses. *s indicate coefficients that are statistically significantly larger than 1; °s indicate coefficients that are statistically significantly smaller than 1. Two sided significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.

As the table shows, for both the percentage of contracts (3N) and the percentage of contract value (3V), American Indians living on reservations receive a disproportionately small share of federal construction contracts. This finding is consistent with specifications 2N and 2V above, but the geographically targeted dependent variable provides more precise and reliable estimates of the true relationship.

Specifications 4N and 4V display the results of Model 4 by population for number of contracts and contract value, respectively. The results seem to suggest a positive impact of concurrent jurisdiction: for both number and value of contracts, the coefficient on PL 280 reservations is larger than non-PL 280 reservations, with the coefficient on non-PL 280 reservations remaining statistically significantly smaller than one, while the coefficients on PL 280 reservations become statistically indistinguishable from one. This suggests that perceived or actual enforceability of contracts may impact contractor success, which is consistent with some previous research.[44] However, while the coefficients on concurrent jurisdiction are larger than those of tribal jurisdiction, the two coefficients are not significantly different from each other at the $\alpha = 0.10$ level for either number of contracts or contract value.

[44] Dominic P. Parker, *The Effects of Legal Institutions on Access to Credit: Evidence from American Indian Reservations*, 2012.

Table 3. Impact of Income Share and Jurisdiction on Contracting Outcomes for American Indian Contractors

	Number of contracts		*Contract value*	
	1Ci	2Ci	1Vi	2Vi
State AI income share	3.492***		3.916***	
	(0.210)		(0.504)	
State off-reservation AI income share		4.020***		4.703***
		(0.244)		(0.661)
State on-reservation AI income share		1.394		0.786
		(0.571)		(0.893)
Constant	0.021°°°	0.019°°°	0.016°°°	0.013°°°
	(0.004)	(0.004)	(0.007)	(0.007)
$\bar{R}^2$	0.443	0.461	0.357	0.385

N = 288. The dependent variable is the percentage of the contracts awarded to contractors based in the state that went to American Indian contractors. Population data are from 2010 Census and include American Indian alone or in combination with one or more other races. State and tribal jurisdiction is based on venue for civil contract dispute. Standard errors in parentheses. *s indicate coefficients that are statistically significantly larger than 1; °s indicate coefficients that are statistically significantly smaller than 1. Two sided significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.

As an alternative proportionality measurement, we next consider the percentage of contracts and contract value awarded to American Indian contractors relative to their state income share. The results for Models 1 and 2 are presented in Table 3, and the results for Models 3 and 4 are presented in Table 4.

The coefficients displayed in Table 3 follow a similar pattern to those in Table 1, with one main exception: the coefficients are all considerably larger by income share than by population share; this result is unsurprising, given the disproportionately high poverty rates on reservations.

As Table 4 shows, this pattern continues for Models 3 and 4. Notably, when considering proportionality by income share rather than population share, American Indian contractors based on reservations no longer receive a disproportionately small share of federal contracts: the results for Model 3 suggest that American Indian contractors based on reservations were awarded federal contracts roughly proportionate to the income share in terms of contract value (3Vi), and they were awarded a disproportionately *large* share in terms of the number of contracts (3Ci).

Table 4. Impact of Income Share and Jurisdiction on Contracting Outcomes for Reservation-Based American Indian Contractors

	Number of contracts		*Contract value*	
	3Ci	4Ci	3Vi	4Vi
State on-reservation AI income share	1.875**		1.107	
	(0.346)		(0.236)	
State PL 280 reservation AI income share		3.447*		2.106
		(1.344)		(0.8744)
State non-PL 280 reservation AI income share		1.879**		1.101
		(0.345)		(0.236)
Constant	0.001°°°	0.001°°°	0.001°°°	0.001°°°
	(0.000)	(0.001)	(0.000)	(0.000)
$\bar{R}^2$	0.333	0.331	0.322	0.323

N = 288. The dependent variable is the percentage of the contracts awarded to contractors based in the state that went to American Indian contractors based on a reservation. Population data are from 2010 Census and include American Indian alone or in combination with one or more other races. State and tribal jurisdiction is based on venue for civil contract dispute. Standard errors in parentheses. *s indicate coefficients that are statistically significantly larger than 1; °s indicate coefficients that are statistically significantly smaller than 1. Two sided significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.

The results for Model 4 (specifications 4Ci and 4Vi) follow the same pattern using income share as they did for population share in Table 2 above. The coefficients on PL 280 reservations are larger than those for non-PL 280 reservations, but the difference falls just short of statistical significance at the $\alpha = 0.10$ level for both the number of contracts and contract value.

Overall, we can draw three main conclusions from these simple proportionality models. First, the results from Model 1 (specifications 1a/c and 3a/c) suggest that American Indian contractors are awarded a disproportionately *large* share of federal contracts relative to both their population and income share. There are several possible explanations for this result: goals for federal procurement may incentivize non-minority contractors to partner with minority contractors, thus increasing the observable contracting outcomes; American Indians have lower rates of educational attainment[45] and, thus, may be overrepresented in the construction industry—a field that requires lower levels of formal education—and underrepresented in more technical fields.

Second, American Indian contractors based on reservations appear to receive a disproportionately *small* percentage of federal contracts relative to their population (Specifications 3N and 3V). This is

[45] Jill Fleury DeVoe, Kristen Darling-Churchill, and Thomas Snyder, "Status and Trends in the Education of American Indians and Alaska Natives," *National Center for Education Statistics*. September 2008.

unsurprising, given the barriers described above. When compared to income share, however, American Indian contractors on reservations appear to receive a proportionate amount of contract value (3Ci) and a disproportionately *large* amount of contracts (3Vi).

Finally, the results for Model 4 are inconclusive as to the impact of dispute jurisdiction on contracting outcomes. In all four Model 4 specifications (4C/V and 4Ci/Vi), the coefficients on PL 280 reservations are larger than those on non-PL 280 reservations, but the difference falls short of statistical significance at conventional levels. This may be driven in part by the relatively small number of reservations under concurrent jurisdiction and our relatively small sample size; a larger sample size may ultimately lead to statistical significance. Alternatively, although others have found jurisdiction to have a strong influence,[46] few of our interview participants for this study mentioned jurisdiction as a major barrier.[47] More detailed data may be needed to resolve whether there is a relationship between jurisdiction and contracting success.

It should be noted that while these findings present interesting implications regarding reservation jurisdiction and contracting outcomes, they remain too broad to draw conclusions specifically related to surety bonding. As mentioned throughout the paper, many of the issues affecting bonding decisions also impact the ability of an individual to access capital to start a small business. Furthermore, because of unique requirements regarding bonding as well as hiring goals within federal contracts, any conclusions based on federal procurement data may not be applicable to other contracting such as projects funded by private investors.

Surety Bonding and Public Policy

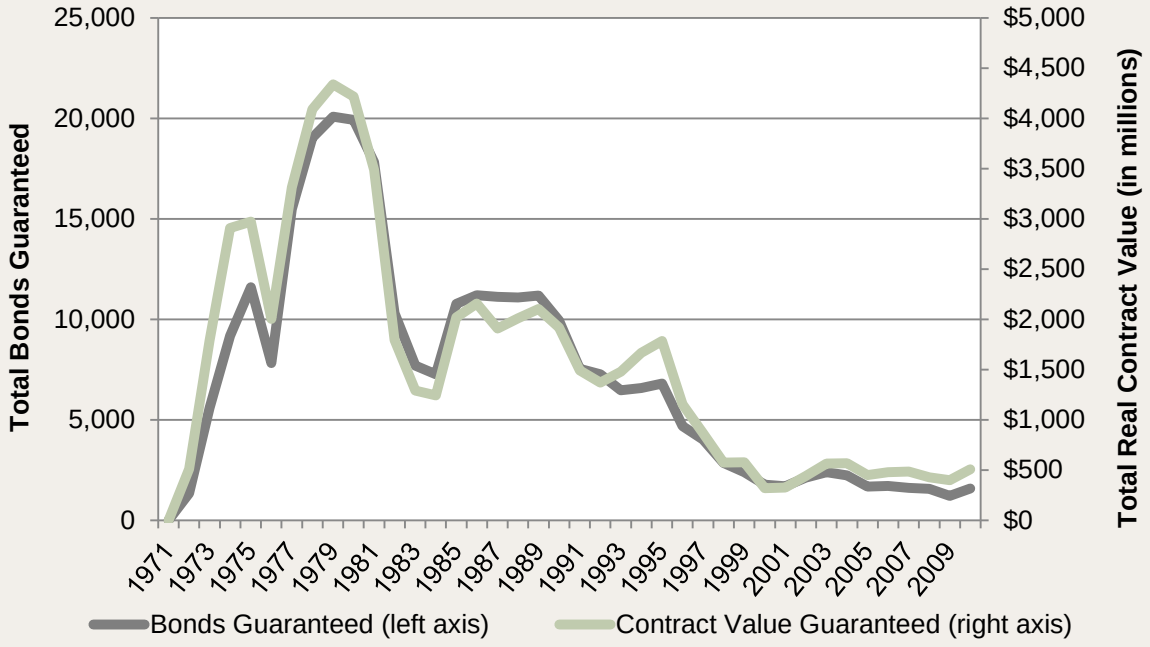
Since 1971, the U.S. Small Business Administration (SBA) has administered the Surety Bond Guarantee Program (SBGP) to increase access to surety bonds for small businesses. Under the program, qualifying contractors work with surety agencies to obtain bonds for projects of up to $10 million in value. Once approved, the SBA guarantees up to 90 percent of the surety's loss in the event of a default. In exchange, the SBA charges the contractor a percentage of the total contract value (currently 0.729 percent) and the surety a percentage of its premium (currently 26 percent).[48] For perspective, Deputy Director Peter Gibbs

[46] See, e.g., Dominic P. Parker.
[47] Angadjivand et al.
[48] Charges only apply to performance and payment bonds; currently, the SBA does not charge a fee to guarantee bid bonds.

of the Office of Surety Guarantees estimates that on average, a contractor will pay $19,000 for a performance bond guaranteed by the SBGP on a $500,000 contract.[49]

Demand for the program initially exceeded expectations. Over its first three years, participation in the program was more than double the SBA's projections.[50] Figure 2 displays the participation trends throughout the program's history.[51] As the figure shows, program participation rose dramatically throughout the 1970s, peaked in fiscal year 1979, and then declined nearly every year from fiscal year 1980 through fiscal year 2010.

Figure 2: Bonds and Real Contract Value (2011 dollars) Guaranteed Through the SBA's Surety Bond Guarantee Program, Fiscal Years 1971–2010



Source: Congressional Research Service (2011) "SBA Surety Bond Guarantee Program"

Previous scholarship identified the burdensome paperwork required of both contractors and surety companies as the primary cause of the decline.[52] The SBA has worked to address this issue—the specific

[49] U.S. Small Business Administration, *Interview with Peter Gibbs*.
[50] Congressional Research Service, *SBA Surety Bond Guarantee Program*, October 6, 2011.
[51] These figures only include performance and payment bonds, not bid bonds.
[52] Angadjivand et al.

changes will be discussed in detail below—but when a reputation becomes ensconced, its stigma can endure long after the initial problem has been resolved.

While our interviews also indicate that the SBGP does indeed have a reputation for onerous paperwork, we believe additional factors contributed to the decline in participation. A second factor is the increase in the program's required fees. At the program's inception, the SBA charged surety companies 10 percent of their premium and charged contractors 0.2 percent of the total contract value. When these rates proved insufficient to cover the program's expenses, Congress increased the fees to 20 percent of the premium and 0.5 percent of the contract value in 1976 and 1977, respectively.[53] The rates have been raised over time to their current levels of 26 percent of bonding companies' premiums and 0.729 percent of the total contract value.[54]

Until recently, contractors and sureties had long lamented that the limit on the size of contracts subject to the SBGP was too low. Indeed, the limit, which was $2 million, had not been permanently increased since the program's inception in 1971. If the limit had been indexed to inflation, it would be roughly $11.5 million in 2013.[55] In February of 2013, the SBA addressed this complaint, increasing the limit to $6.5 million and providing an option to guarantee a bond on a contract of $10 million with a federal contracting officer's approval.[56]

While these three issues likely had the largest impact, there are three other factors that also may have contributed to the decline in participation. First, at the peak of the SBGP's popularity, there were far fewer surety bonding companies than there are today. This left contractors with fewer options; if a few companies denied the contractor a bond, he or she had little choice but to use the SBGP. Today, by contrast, there are many more bonding firms, which increases the likelihood that a contractor will find a willing bonder.[57] Second, as the Congressional Research Service (2011) notes, the smaller "specialty" surety companies that emerged tended to be more willing to write higher-risk bonds and would be willing to accept collateral for especially risky bonds. With sureties more willing to write riskier bonds, there was less of a need for contractors to use the SBGP. Third, some sources suggest that there was a time when

[53] Congressional Research Service.
[54] U.S. Small Business Administration, *Surety Bonds, the Basics*.
[55] Calculated using the Bureau of Labor Statistics CPI Inflation Calculator.
[56] U.S. States Small Business Administration, *SBA Triples Surety Bond Guarantee Ceiling; Helping Small Businesses Secure Larger Contracts and Grow*, February 6, 2013.
[57] Jeremy Crawford, surety company vice president, interviewed on May 8, 2013.

the SBA developed a bad reputation, wherein surety companies questioned whether the SBA would adequately reimburse them in the event of a loss. This perception, however, is not widely held today.[58]

When viewed together, these factors suggest that two broad, complementary forces drove the decline in participation in the SBGP. The expansion of the surety industry provided contractors with more avenues to acquire bonding, making the SBGP more dispensable. At the same time, the costs of using the SBGP (i.e. paperwork, fees, and a declining real contract value limit) grew. Over time, for more and more contractors, the costs of the program outweighed its relative benefits. And as program participation flagged, awareness of the program's existence may have declined within the contracting community.[59]

It is important to note here, however, that the severe decline in program participation over the 1980s and 1990s was not inevitable. Many of the contributing factors were within the SBA's control. Many contractors, especially small and emerging contractors, still struggle to acquire surety bonds, and the SBGP still has the potential to provide a valuable service to these firms. As the Congressional Research Service (2011) noted, "Specialty sureties typically required the contractor to provide collateral for the projects they bonded, and, in most cases, charged higher premiums than standard sureties." In short, an optimally functioning SBGP could still play an important role in the contemporary construction industry.

Surety Bond Guarantee Program Today

In its current form, the SBGP has two programs: Prior Approval and Preferred. As its name suggests, the Prior Approval program, which was originally the only program in the SBGP, requires SBA approval before each bond is written. The program guarantees up to 90% of the losses on individual contracts worth up to $6.5 million. If a federal contracting officer certifies that the guarantee is necessary for the contractor to obtain bonding, up to 90 percent of the losses can be covered for contracts of up to $10 million.[60] American Indian contractors are eligible for the maximum 90 percent guarantees because they qualify as "socially and economically disadvantaged" businesses.[61] Notably, tribally owned contracting firms are also eligible for both programs, provided they agree to a limited sovereign immunity waiver.[62]

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[58] Jeremy Crawford.
[59] Although we suspect awareness of the SBGP's existence is high, we were unable to approximate what percentage of contractors are aware of the program's existence.
[60] U.S. Small Business Administration, *Prior Approval Program.*
[61] U.S. Small Business Administration, *Eligibility Requirements for Small Business Contractors.*
[62] Jeremy Crawford.

In order to encourage larger bonding companies to approve bonds for small businesses, in 1988 the SBA implemented the Preferred surety bond program.[63] Unlike the Prior Approval program, the Preferred program allows certain sureties the authority to issue bonds guaranteed by the program without prior SBA approval. The amount of the bond that can be guaranteed (70 percent), however, is lower under this program.[64]

The SBA has also made a concerted effort to reduce the administrative costs of the SBGP to contractors and sureties. According to the SBA's web site, the Prior Approval program requires the completion of up to five different SBA forms totaling nine pages.[65] However, most of the paperwork can be completed online, to the point where an adept bonding company can reduce the paperwork required of contractors to two signatures.[66] Moreover, for projects valued at $250,000 or less, the SBA offers a streamlined "Quick Bond Guarantee Application and Agreement," which distills the required paperwork to one page each for the contractor and the surety.[67] Further, the ability to submit forms online has also reduced the "turnaround time" between filing of paperwork and the approval. Overall, the paperwork—which used to be "a nightmare"—has been streamlined and the turnaround time has been decreased to the point where administrative costs should no longer be a barrier to participation.[68]

Overall, many of the disincentives to the use of the SBGP have been addressed. The requisite paperwork has been decreased, administrative turnaround has been reduced, and there are no longer widespread concerns about the SBA's willingness to reimburse bonding companies in the event of defaults. In addition, the contract value limit, which had fallen dramatically in real terms over the four decades of the program's history, has been increased.

Policy Options to Increase Program Participation

While many of the SBGP's issues have been addressed, further action will be required to increase participation significantly. One option would be to develop an informational campaign to increase awareness of the program and the improvements that have been made to it. In addition, as we have identified American Indian-specific barriers to acquiring bonding, we also suggest two approaches that

[63] Congressional Research Service.
[64] U.S. Small Business Administration, *Preferred Surety Bond Program*.
[65] U.S. Small Business Administration, *Eligibility Requirements for Small Business Contractors.*
[66] Jeremy Crawford.
[67] U.S. Small Business Administration, *Prior Approval Program.*
[68] Jeremy Crawford.

the U.S. Department of the Interior's Bureau of Indian Affairs (BIA) could employ to increase access to surety bonding for American Indian and tribally owned contracting firms: subsidizing the SBGP for American Indian firms, or introducing its own bond guarantee program developed specifically for American Indians. We will examine each course of action individually.

Informational Campaign. One way to increase program participation is an informational campaign to raise awareness of both the program itself and the changes that have been made to it. Previous scholarship detected a perception among contractors that the paperwork required by the SBGP is onerous, and our interviews reinforce this conclusion. Reducing the amount of paperwork is necessary but not sufficient to increase participation, because this reputation has led contractors (and bonding companies and surety agents) to avoid the program. The stigma against the program could be eliminated through an informational campaign highlighting the many changes to the program. The target of the campaign should be not only contractors, but also surety companies and surety agents.

BIA subsidies for the SBGP. One option to address the American Indian-specific barriers to acquiring surety bonds would be to have the BIA subsidize the SBGP for American Indian contractors and tribally owned firms. These subsidies could increase demand for the program by decreasing the contractors' fee (currently 0.729 percent of the total contract value), the surety company's fee (currently 26 percent of the premium), or both. With effective coordination between the BIA and SBA, the program could be structured in a way to reduce or possibly even obviate any additional administrative costs to the BIA.

Develop a BIA surety bond guarantee program. A more extreme option would be for the BIA to implement its own surety bond program. This could be done by developing an entirely new SBGP or else by extending the BIA's Indian Loan Guarantee program to cover surety bonds, as has been suggested by the Native American Contractors Association.[69] While this would require an initial investment to develop and implement and would increase the BIA's administrative costs, the program itself could be designed to be self-sustaining, and the long track record of the SBA's SBGP would provide ample, tangible data upon which to base the rate structure. Unlike the SBGP, the Indian Loan Guarantee program is thriving, with demand far outweighing funding.[70] A BIA surety bonding program could capitalize on this popularity, and would not carry the same stigma as the SBA's program.

[69] Native American Contractors Association.
[70] Ibid.

Conclusion

Many of the issues American Indian contractors encounter when pursuing surety bonding are common to all contractors, especially small and emerging firms. Unfortunately, both American Indian contractors and tribally owned contracting firms face additional barriers to acquiring bonding. These barriers, however, can be overcome. Our case studies identify techniques that may help emerging American Indian contractors and tribally owned contracting firms in their pursuit of surety bonds. In addition, the Small Business Administration's Surety Bond Guarantee Program provides a viable option for both American Indian and tribally owned contracting firms. While the program had some well-documented issues in the past, many of its deficiencies have been resolved. The policy options provided could further improve bonding prospects for both American Indian contractors and tribally owned contracting firms.

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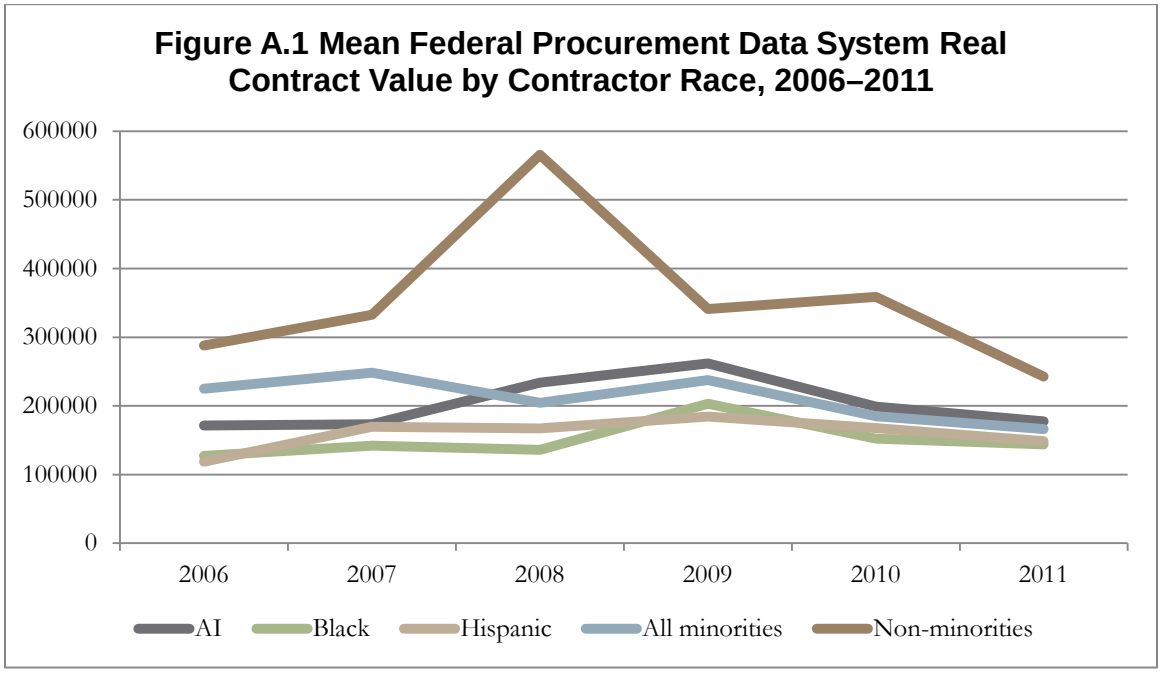
Appendix A. Average (Mean) Contract Value in Federal Procurement Data System by Contractor Race

Table A.1: Real Mean Construction Contract Value by Contractor Race (in 2011 Dollars)					
Year	American Indian	Black	Hispanic	All Minorities	Non-Minority
2006	171,598	127,096	118,791	224,909	287,938
2007	173,335	141,831	169,628	248,242	332,810
2008	233,649	135,927	167,054	204,655	565,570
2009	262,014	203,190	184,591	237,557	340,858
2010	198,772	152,431	167,739	184,972	358,840
2011	177,490	143,812	148,754	166,251	242,800
Source: Compiled by the authors using Federal Procurement Data System data.					



Appendix B. American Indian Population and Income Share

Table B.1: Population and Income Share of American Indians, by State and Place of Residence						
	Percent of State Population That is American Indian and…			Percent of Total State Income Going to American Indians and…		
	Living Outside of Reservation Area	Living on Reservation Under State Jurisdiction	Living on Reservation Under Tribal Jurisdiction	Living Outside of Reservation Area	Living on Reservation Under State Jurisdiction	Living on Reservation Under Tribal Jurisdiction
AL	1.17	0.00	0.00	0.92	0.00	0.00
AR	1.47	0.00	0.00	1.29	0.00	0.00
AZ	1.52	0.00	3.68	1.22	0.00	1.43
CA	1.75	0.05	0.00	1.24	0.02	0.00
CO	2.08	0.07	0.00	1.29	0.03	0.00
CT	0.83	0.00	0.01	0.52	0.00	0.00
DE	0.96	0.00	0.00	0.66	0.00	0.00
FL	0.83	0.01	0.00	0.58	0.00	0.00
GA	0.74	0.00	0.00	0.57	0.00	0.00
IA	0.87	0.00	0.03	0.45	0.00	0.02
ID	1.94	0.00	0.51	1.24	0.00	0.27
IL	0.64	0.00	0.00	0.42	0.00	0.00
IN	0.84	0.00	0.00	0.62	0.00	0.00
KS	2.23	0.00	0.06	1.28	0.00	0.04
KY	0.75	0.00	0.00	0.49	0.00	0.00
LA	1.19	0.00	0.01	0.92	0.00	0.01
MA	0.67	0.00	0.00	0.40	0.00	0.00
MD	0.98	0.00	0.00	0.72	0.00	0.00
ME	1.38	0.00	0.16	0.73	0.00	0.05
MI	1.36	0.00	0.07	0.90	0.00	0.05
MN	1.49	0.29	0.12	0.75	0.13	0.04
MO	1.32	0.00	0.00	0.97	0.00	0.00
MS	0.65	0.00	0.24	0.54	0.00	0.13
MT	2.87	0.00	5.01	1.82	0.00	2.35
NC	1.98	0.00	0.08	1.12	0.00	0.03
ND	5.00	0.00	1.25	2.35	0.00	0.47
NE	1.65	0.10	0.17	0.77	0.04	0.06
NH	0.84	0.00	0.00	0.59	0.00	0.00
NJ	0.73	0.00	0.00	0.41	0.00	0.00
NM	8.43	0.00	2.00	4.87	0.00	1.21
NV	1.58	0.00	0.28	1.29	0.00	0.12
NY	0.87	0.05	0.00	0.52	0.02	0.00
OH	0.75	0.00	0.00	0.54	0.00	0.00
OK	12.56	0.00	0.27	8.45	0.00	0.18
OR	2.67	0.02	0.14	1.80	0.01	0.05
PA	0.60	0.00	0.00	0.38	0.00	0.00
RI	1.21	0.00	0.00	0.73	0.00	0.00
SC	0.83	0.00	0.01	0.62	0.00	0.01
SD	4.16	0.00	6.19	1.55	0.00	2.22
TN	0.87	0.00	0.00	0.69	0.00	0.00
TX	1.10	0.01	0.00	0.93	0.00	0.00
UT	1.67	0.01	0.12	0.95	0.00	0.07
VA	0.87	0.00	0.00	0.66	0.00	0.00
VT	0.86	0.00	0.00	0.80	0.00	0.00
WA	2.45	0.01	0.48	1.53	0.01	0.21
WI	1.36	0.26	0.05	0.71	0.14	0.02
WV	1.19	0.00	0.00	0.71	0.00	0.00
WY	2.73	0.00	1.50	1.68	0.00	0.78

Data from 2010 Census. State and tribal jurisdiction based on venue for civil contract dispute. Based on values for American Indian alone or in combination with one or more other races.

Appendix C. Construction Contracts Awarded to American Indian-Owned Firms

Table C.1: Percent of Construction Contracts Awarded to American Indian-Owned Firms, by State by Year												
	Percent of Federal Contracts Won by American Indian Contractors						Percent of Federal Contracts Won by AmericanIndian Contractors Located on Reservation					
	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
AL	10.54	16.63	23.78	27.82	28.83	31.61	0.00	0.00	0.00	0.00	0.00	0.00
AR	2.57	2.46	3.79	3.80	3.10	6.05	0.00	0.00	0.00	0.00	0.00	0.00
AZ	6.47	3.58	4.13	5.36	7.86	7.12	0.35	0.40	0.02	0.17	0.22	0.61
CA	5.26	8.37	8.27	9.45	8.15	8.03	0.02	0.01	0.00	0.01	0.02	0.01
CO	4.86	4.81	9.06	9.28	12.31	11.96	0.08	0.02	0.04	0.11	0.19	0.04
CT	0.00	0.00	0.00	0.58	0.57	1.17	0.00	0.00	0.00	0.00	0.00	0.00
DE	0.00	0.00	0.00	1.50	3.61	1.61	0.00	0.00	0.00	0.00	0.00	0.00
FL	7.76	5.78	6.78	7.42	7.94	8.85	0.00	0.00	0.00	0.00	0.00	0.00
GA	6.36	13.52	10.06	6.60	7.27	2.62	0.00	0.00	0.00	0.00	0.00	0.00
IA	0.00	0.28	0.40	0.61	0.43	0.81	0.00	0.00	0.00	0.00	0.00	0.00
ID	14.85	23.64	22.35	30.74	30.05	26.50	0.17	0.15	0.13	0.06	0.29	0.65
IL	3.90	6.40	5.69	5.97	3.34	4.57	0.00	0.00	0.00	0.00	0.00	0.00
IN	0.67	0.97	0.11	0.72	0.26	0.67	0.00	0.00	0.00	0.00	0.00	0.00
KS	1.54	3.35	3.64	6.77	7.35	6.50	0.00	0.12	0.00	0.00	0.00	0.00
KY	0.66	0.12	0.00	0.26	0.27	0.85	0.00	0.00	0.00	0.00	0.00	0.00
LA	3.20	1.55	4.28	5.13	4.62	6.11	0.00	0.00	0.00	0.00	0.00	0.00
MA	0.97	0.08	0.00	0.00	0.33	0.05	0.00	0.00	0.00	0.00	0.00	0.00
MD	5.38	7.31	11.08	12.66	12.41	13.33	0.00	0.00	0.00	0.00	0.00	0.00
ME	0.00	8.29	3.19	2.81	2.27	7.24	0.00	0.00	0.00	0.00	0.11	1.09
MI	1.29	2.79	5.64	4.43	4.95	5.18	0.46	0.01	0.01	0.00	0.00	0.00
MN	4.49	4.36	4.93	7.09	3.31	2.35	1.34	1.01	0.79	2.16	0.78	0.49
MO	3.84	5.16	7.74	6.99	6.71	6.18	0.00	0.00	0.00	0.00	0.00	0.00
MS	3.96	4.41	2.51	4.87	4.19	4.23	0.13	0.22	0.11	0.20	0.11	0.12
MT	6.60	7.29	11.56	10.30	7.25	7.85	2.32	3.14	3.06	2.75	2.61	2.68
NC	1.35	1.87	4.62	3.69	3.99	2.99	0.04	0.01	0.02	0.01	0.03	0.01
ND	37.88	36.01	23.82	20.38	17.57	13.02	12.35	4.14	2.05	0.85	0.41	0.24
NE	4.52	2.59	3.14	2.24	2.98	8.37	1.45	0.00	0.00	0.00	0.06	0.00
NH	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NJ	5.94	7.76	8.62	4.01	4.16	5.14	0.00	0.00	0.00	0.00	0.00	0.00
NM	27.95	17.78	13.99	20.65	22.80	20.83	15.16	7.16	3.38	4.18	3.78	3.73
NV	1.48	14.53	8.01	3.55	1.51	1.52	0.00	0.00	0.29	0.00	0.12	0.35
NY	1.13	1.58	1.75	2.76	2.43	2.28	0.00	0.00	0.00	0.00	0.04	0.00
OH	2.62	1.84	1.88	3.36	4.49	5.28	0.00	0.00	0.00	0.00	0.00	0.00
OK	30.50	29.84	31.87	31.91	40.40	39.46	0.00	0.00	0.53	0.59	1.28	1.07
OR	7.10	5.44	4.11	4.09	5.88	5.07	0.00	0.00	0.00	0.00	0.06	0.00
PA	0.28	2.42	3.27	3.79	4.13	4.37	0.00	0.00	0.00	0.00	0.00	0.00
RI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SC	0.00	0.25	1.21	2.32	2.71	3.91	0.00	0.00	0.00	0.00	0.00	0.00
SD	15.36	19.27	16.34	15.57	14.31	16.58	12.45	5.74	0.00	3.89	4.62	5.77
TN	2.28	4.72	5.42	6.46	10.12	11.76	0.00	0.00	0.00	0.00	0.00	0.00
TX	3.24	5.38	4.60	5.23	7.86	6.77	0.00	0.00	0.00	0.00	0.00	0.00
UT	12.30	11.05	11.75	8.93	4.77	3.65	0.40	0.73	0.17	0.13	0.07	0.00
VA	2.65	4.12	4.45	3.81	3.41	3.60	0.00	0.00	0.00	0.00	0.00	0.00
VT	3.09	0.00	0.00	0.66	1.73	1.55	0.00	0.00	0.00	0.00	0.00	0.00
WA	13.55	14.05	21.37	17.22	19.80	21.19	4.60	3.14	3.49	0.88	0.68	0.74
WI	5.11	4.02	5.37	6.27	4.70	3.84	0.36	0.10	0.00	0.06	0.08	0.03
WV	1.45	1.53	1.38	0.59	1.28	0.70	0.00	0.00	0.00	0.00	0.00	0.00
WY	4.07	4.13	1.60	0.93	2.43	3.31	1.23	0.00	0.01	0.05	0.43	0.00

Data from Federal Procurement Data System using system derived identifiers as American Indian or Tribally Owned enterprises. Includes contracting actions coded as NAICS code 23. Reservation level values calculated using ZIP Code weighting by the percent of ZIP Code located in reservation. Tribal statistical areas are not included in reservation calculations.

Appendix D. Construction Contract Value Awarded to American Indian-Owned Firms

Table D.1: Percent of Construction Contract Value Awarded to American Indian-Owned Firms, by State by Year												
	Percent of Federal Contracts Won by American Indian Contractors						Percent of Federal Contracts Won by American Indian Contractors Located on Reservation					
	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
AL	0.09	0.06	0.14	0.21	0.11	0.11	0.000	0.000	0.000	0.000	0.000	0.000
AR	0.00	0.01	0.03	0.01	0.05	0.08	0.000	0.000	0.000	0.000	0.000	0.000
AZ	0.05	0.02	0.09	0.04	0.08	0.07	0.002	0.001	0.000	0.001	0.000	0.010
CA	0.02	0.04	0.04	0.03	0.06	0.06	0.000	0.000	0.000	0.000	0.000	0.000
CO	0.01	0.10	0.17	0.15	0.09	0.07	0.000	0.000	0.004	0.002	0.003	0.000
CT	0.00	0.00	0.00	0.06	0.00	0.06	0.000	0.000	0.000	0.000	0.000	0.000
DE	0.00	0.00	0.00	0.23	0.00	0.01	0.000	0.000	0.000	0.000	0.000	0.000
FL	0.04	0.03	0.04	0.03	0.05	0.05	0.000	0.000	0.000	0.000	0.000	0.000
GA	0.01	0.02	0.03	0.04	0.02	0.02	0.000	0.000	0.000	0.000	0.000	0.000
IA	0.00	0.00	0.00	0.00	0.00	0.03	0.000	0.000	0.000	0.000	0.000	0.000
ID	0.21	0.23	0.20	0.29	0.18	0.35	0.000	0.000	0.001	0.000	0.006	0.002
IL	0.00	0.02	0.02	0.01	0.02	0.01	0.000	0.000	0.000	0.000	0.000	0.000
IN	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000
KS	0.02	0.06	0.03	0.13	0.08	0.08	0.000	0.000	0.000	0.000	0.000	0.000
KY	0.00	0.00	0.00	0.00	0.02	0.01	0.000	0.000	0.000	0.000	0.000	0.000
LA	0.02	0.01	0.01	0.04	0.02	0.02	0.000	0.000	0.000	0.000	0.000	0.000
MA	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000
MD	0.02	0.03	0.04	0.05	0.04	0.09	0.000	0.000	0.000	0.000	0.000	0.000
ME	0.00	0.14	0.30	0.07	0.34	0.44	0.000	0.000	0.000	0.000	0.023	0.069
MI	0.01	0.02	0.02	0.02	0.03	0.00	0.000	0.000	0.000	0.000	0.000	0.000
MN	0.03	0.01	0.02	0.02	0.01	0.01	0.012	0.001	0.008	0.004	0.006	0.002
MO	0.09	0.07	0.11	0.07	0.06	0.09	0.000	0.000	0.000	0.000	0.000	0.000
MS	0.05	0.03	0.09	0.05	0.03	0.03	0.003	0.001	0.004	0.002	0.000	0.001
MT	0.03	0.11	0.08	0.05	0.09	0.14	0.010	0.018	0.008	0.011	0.033	0.035
NC	0.01	0.03	0.03	0.03	0.07	0.04	0.000	0.001	0.000	0.001	0.000	0.000
ND	0.33	0.11	0.41	0.45	0.22	0.03	0.036	0.008	0.010	0.014	0.007	0.000
NE	0.04	0.00	0.01	0.02	0.02	0.03	0.031	0.000	0.000	0.000	0.001	0.000
NH	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000
NJ	0.02	0.04	0.05	0.07	0.11	0.04	0.000	0.000	0.000	0.000	0.000	0.000
NM	0.15	0.10	0.29	0.30	0.19	0.18	0.061	0.031	0.018	0.025	0.042	0.027
NV	0.06	0.17	0.01	0.00	0.01	0.01	0.000	0.000	0.000	0.000	0.000	0.008
NY	0.01	0.02	0.01	0.01	0.03	0.01	0.000	0.000	0.000	0.000	0.000	0.000
OH	0.04	0.01	0.06	0.04	0.08	0.11	0.000	0.000	0.000	0.000	0.000	0.000
OK	0.33	0.22	0.27	0.51	0.55	0.61	0.000	0.000	0.004	0.016	0.016	0.011
OR	0.04	0.03	0.01	0.04	0.05	0.02	0.000	0.000	0.000	0.000	0.000	0.000
PA	0.00	0.01	0.01	0.01	0.04	0.06	0.000	0.000	0.000	0.000	0.000	0.000
RI	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000
SC	0.00	0.00	0.00	0.12	0.05	0.01	0.000	0.000	0.000	0.000	0.000	0.000

Table D.1: Percent of Construction Contract Value Awarded to American Indian-Owned Firms, by State by Year												
	Percent of Federal Contracts Won by American Indian Contractors						Percent of Federal Contracts Won by American Indian Contractors Located on Reservation					
	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
SD	0.05	0.25	0.21	0.08	0.18	0.12	0.031	0.055	0.000	0.025	0.083	0.000
TN	0.01	0.20	0.20	0.24	0.27	0.37	0.000	0.000	0.000	0.000	0.000	0.000
TX	0.01	0.02	0.01	-0.01	0.04	0.06	0.000	0.000	0.000	0.000	0.000	0.000
UT	0.17	0.14	0.10	0.04	0.01	0.02	0.000	0.005	0.001	0.000	0.000	0.000
VA	0.05	0.02	0.02	0.01	0.02	0.06	0.000	0.000	0.000	0.000	0.000	0.000
VT	0.00	0.00	0.00	0.00	0.01	0.00	0.000	0.000	0.000	0.000	0.000	0.000
WA	0.09	0.08	0.08	0.20	0.21	0.21	0.014	0.012	0.010	0.003	0.004	0.005
WI	0.07	0.04	0.09	0.07	0.06	0.13	0.002	0.000	0.000	0.000	0.001	0.006
WV	0.01	0.07	0.11	0.00	0.01	0.00	0.000	0.000	0.000	0.000	0.000	0.000
WY	0.00	0.01	0.00	0.03	0.20	0.00	0.000	0.000	0.000	0.002	0.000	0.000
Data from Federal Procurement Data System using system derived identifiers as American Indian or Tribally Owned enterprises. Includes contracting actions coded as NAICS code 23. Reservation level values calculated using ZIP Code weighting by the percent of ZIP Code located in reservation. Tribal statistical areas are not included in reservation calculations.												

Appendix E. Percentage of Federal Procurement Data System Contracts Awarded to American Indian Contractors by Place of Performance

Table E.1: Percentage of Federal Contracts Awarded to American Indian Contractors by Place of Performance

	ZIP has res as any % of area		At least 10% of ZIP on res (by area)		ZIP has res as any % of area	
Year	On res	On res	On res	Off res	Off res	Off res
2006	17.2	17.2	20.05	6.9	20.47	6.94
2007	17.48	17.48	21.34	7.87	20.26	7.95
2008	18.0	18.0	22.62	8.41	22.13	8.51
2009	19.42	19.42	22.77	9.35	23.15	9.42
2010	21.2	21.2	24.64	9.85	26.07	9.91
2011	20.77	20.77	23.14	9.99	23.21	10.07
Percent change	0.2076	0.2076	0.1541	0.4478	0.1339	0.4510
Percentage point change	3.57	3.57	3.09	3.09	2.74	3.13

Note: "On res" are projects for which the place of performance is located in a ZIP Code that also contains a reservation.

Appendix F. Percentage of Federal Procurement Data System Contract Value Awarded to American Indian Contractors by Place of Performance

Table F.1: Percentage of Federal Contract Value Awarded to American Indian Contractors by Place of Performance

	ZIP has res as any % of area		At least 10% of ZIP on res (by area)		ZIP has res as any % of area	
Year	On res	On res	On res	Off res	Off res	Off res
2006	14.4	0.4	16.42	0.41	16.78	0.41
2007	12.04	0.63	13.74	0.65	13.34	0.65
2008	9.75	0.71	10.29	0.72	8.27	0.74
2009	10.85	0.63	9.07	0.67	8.42	0.66
2010	11.5	1.56	11.12	1.59	10.7	1.61
2011	19.58	1.28	17.72	1.35	15.27	1.38
Percent change	0.3597	2.2000	0.0792	2.2927	-0.0900	2.3659
Percentage point change	5.18	0.88	1.3	0.94	-1.51	0.97

Note: “On res” are projects for which the place of performance is located in a ZIP Code that also contains a reservation.