

Police Presence, Isolation, and Sexual Assault Prosecution

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Abstract

This article considers the effects of geographic isolation and local police presence on the processing of 239 sexual assault cases reported to the Alaska State Troopers. Geographic isolation is hypothesized to hinder case processing due to its impact on the celerity and thoroughness of investigations, whereas the presence of local police is hypothesized to facilitate case processing by legitimizing reported offenses and assisting with evidence collection. Controlling for a host of important legal and “extra legal” case characteristics, the authors find that geographic isolation and local police presence did significantly influence case processing. However, contrary to expectations, geographic isolation facilitates case processing in that sexual assault cases from isolated locations are actually more likely to be referred for prosecution. As expected, local police presence facilitates case processing by enhancing the likelihood that referred cases would be accepted for prosecution. Implications for rural policing are discussed.

Keywords

geographic isolation, police, prosecution, sexual assault

As with other governmental functions, criminal justice is affected by the geographic isolation of a given area. There is, as Kraenzel (1953) put it, a “social cost to space” that makes doing the things that governments are expected to do much more difficult.

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This social cost is manifested in a lack of economies of scale (Walzer, 1972) that precludes provision of some services and delays dispensation of others. In terms of policing, geographic isolation usually results in jurisdictions having meager law enforcement resources spread across wide areas, resulting in response times that would be unacceptable in urban areas (Weisheit, Falcone, & Wells, 2006).

Nowhere in the United States are the effects of geographic isolation on criminal justice more acute than in Alaska. Though the majority of the state's population resides in small towns or small- to medium-size cities, a sizeable proportion of Alaskans live in sparsely populated communities that are inaccessible from the main highway system and are instead reachable only by water or air. It is in these most isolated communities where one finds the greatest challenges to the provision of adequate police services. In this article, we consider the effect of this isolation on the prosecution of sexual assault. Specifically, we examine the extent to which the likelihood of prosecution is influenced by the accessibility of investigators from the Alaska State Troopers (AST) to the community where the offense took place. We also consider how the involvement of public safety paraprofessionals in case processing affects successful prosecution.

Policing the Isolated Portions of Alaska

Being more than twice the size of Texas with menacing terrain and an unforgiving climate, the geography of Alaska provides a tremendous challenge to those responsible for policing and criminal prosecution. The effects of this challenge are largely felt across the roadless reaches of the northern and western portions of Alaska where one finds 146 sparsely populated villages that are home to a predominately Alaska Native population. Given the small populations and limited tax bases of most villages in the region, few have their own certified police departments. In these villages, the only police presence is usually a paraprofessional public safety officer with limited law enforcement authority. These paraprofessional public safety officers include village public safety officers (VPSOs), village police officers (VPOs), and tribal police officers (TPOs). These officers are not certified under the Alaska Police Standards Council (APSC) and, therefore, have limited authority. Investigation of serious offenses is instead the duty of the AST (or Troopers) who have responsibility for providing policing in all areas of Alaska not covered by municipal police. Given weather, distance, and a lack of roads, Troopers' travel to isolated villages is difficult, resulting in police response times that are much slower than is standard in more easily accessible locations. In this section, we consider the issues surrounding the policing of isolated communities in Alaska and, in doing so, develop specific hypotheses to be tested in a model of police and prosecutorial decision making in sexual assault cases.

One way of grasping the degree of isolation faced by the AST is to examine the densities of the populations they serve. With its immense size and relatively small population, Alaska had a rather low population density in 2006 of just more than 1 person per square mile. More than two thirds of Alaskans (67.7%) who are served by an APSC

member agency other than AST reside in jurisdictions with an average population of 3.78 persons per square mile. The locations under AST's primary jurisdiction have much lower population densities. The other third of Alaskans (32.3%) reside in an area covering 543,212 square miles, with a density of 0.4 persons per square mile. Three quarters of the population (76.6%) within AST's primary jurisdiction resides in locations connected to the state's highway system. These locations have a density of 1.19 persons per square miles. The other quarter of the population (23.4%) within AST's primary jurisdiction resides in locations that are not connected to the state's highway system. It is in these disconnected communities where the most isolated populations served by AST reside. More than 50,000 Alaskans live in communities scattered over an area covering more than 400,000 square miles, for a population density of 0.13 persons per square mile. In these most isolated areas served by AST, there is 1 resident for every 8 square miles of primary jurisdiction.

With such a large area to cover and a relatively small number of sworn law enforcement officers, it is an understatement to say that AST is stretched thin as a police agency. The only U.S. police department that even approaches AST in terms of the relative vastness of its jurisdiction is the Navajo Nation Department of Law Enforcement (NNDLE). Long seen as a department that is hindered by the large amount of territory under its jurisdiction (Boorstein, 1997; Federal Lands Highway Program, 2002; Nelson, 2004; Riley, 2007), the NNDLE currently has 319 officers (Navajo Nation Division of Public Safety, 2007) responsible for 22,174 square miles (Hickman, 2003)—or 1 officer for every 70 square miles. By most standards, the NNDLE has a tremendous area to police, but it appears rather urban when compared to area policed by AST. As of November 2007, there were 288 ASTs to cover an area of 543,212 square miles—or 1 officer for every 1,886 square miles.

Given the large geographic area of AST's responsibility, the time to travel to calls for service is usually much longer than would be acceptable for most police agencies. For instance, at one time, national guidelines for response times in urban areas suggested 20 min for nonemergency calls and 3 min for emergency calls (National Advisory Commission on Criminal Justice Standards and Goals, 1973). Due to distance and a lack of roads, the Troopers' response times are usually measured in hours or, due to extreme weather, days (Angell, 1979, 1981).

Travel in the roadless areas of the state from AST posts to outlying villages is also dangerous for responding Troopers. Response to emergencies in isolated Alaska Native villages usually requires air travel, frequently with single-engine aircraft operating under visual flight rules and limited weather information to land on village airfields that "consist of little more than a gravel runway and a windsock" (National Research Council, 1995, p. 96). In Alaska, police officers are more likely to be killed in plane crashes than in automobile accidents. Wilbanks (1999) estimated that the ratio of police officer deaths in aviation accidents to deaths in land vehicle accidents in Alaska was 6 to 1.

In addition to its isolation, AST's policing environment is unique due to the large indigenous populations residing in its area of responsibility. Especially across the

northern and western regions of Alaska, the communities located off of the state highway system are largely inhabited by Alaska Natives. One analysis of 2000 Census results estimated that approximately four fifths of the isolated regions of the state served by the Troopers are populated by Alaska Natives (Goldsmith, Angvik, Howe, Hill, & Leask, 2004).

The challenge of policing isolated Alaska Native villages is exacerbated by their small populations that preclude the posting of fully trained and certified police officers in each community. Since long before statehood, as a response to the lack of economies of scale, officials have instead hired village residents to serve as a local supplement to the recognized police authorities. Today, the only full-time public safety function in many villages is filled by a host of paraprofessionals, including VPSOs, VPOs, and TPOs, none of whom are certified by the state as police officers. Rather than acting in a fully recognized police capacity, these officers serve a “trip-wire” function, alerting AST about local offenses when necessary (Wood & Trostle, 1997).

Arrangements for providing police services in isolated Alaska Native villages vary. In 2006, according to the internal report *Law Enforcement in Rural Alaska by Community* provided by AST, there were 146 nonhub villages with 25 or more persons in each. Nonhub villages are isolated from the main highway system and are not served by jet air service from Anchorage. Twenty three of the 146 nonhub villages were served locally by a municipal police department or an AST post (both members of the APSC); 67 were served by a VPSO, VPO, or TPO; and 56 had no local public safety presence. Overall, there were 44,177 persons living in these nonhub villages, in the most rural and remote regions of Alaska, with about a quarter (25.5%) residing in villages served locally by a municipal police department or an AST post; slightly more than half (57.6%) residing in villages served by a VPSO, VPO, or TPO; and about a sixth (16.9%) residing in villages with no local public safety presence.

The potential ramifications of these variations in public safety presence on the prosecution of sexual assault cases are numerous. The Troopers’ ability to respond to and investigate cases of sexual assault may be affected by the isolation of a community where a sexual assault takes place. Furthermore, the presence of local paraprofessional police in a community might facilitate the investigation and prosecution of sexual assault cases. We consider these possibilities to develop specific hypotheses about the effects that geographic isolation and local police presence have on sexual assault case processing in rural Alaska.

Geographic Isolation and Local Police Presence

Geographic isolation might be expected to affect successful prosecution of sexual assault cases due to its effects on the likelihood of prompt and thorough investigations. However, the mechanism by which lengthy response times hinder prosecution in rural Alaska is different from that of more urbanized areas. Given that very few violent offenses are committed in isolated villages by those that are strangers (Postle, Rosay, Wood, & TePas, 2007; Wood & Magen, 2009), and because suspect flight is atypical,

lengthy response time rarely has as much impact on suspect identification and apprehension as it might in areas that are not as isolated. Instead, isolation may affect Troopers' ability to gather physical evidence and successfully interview victims and witnesses. In particular, time spent in transit from an AST post to a village where a sexual assault occurred may allow physical evidence to be destroyed, crime scenes to be contaminated, and victims and witnesses to be coaxed into not cooperating with authorities.

Isolation also has the potential for hindering sexual assault case investigation and prosecution by making investigations more expensive to conduct. The expense of travel to isolated villages makes it difficult for Troopers to return for follow-up interviews after the initial investigation. Given the sensitive nature of sexual assault victimization, phone interviews are discouraged. Conducting culturally appropriate interviews where victims are respected and supported is more difficult on the phone than is the case with in-person meetings, particularly because nonverbal cues (e.g., expressions of distress) are impossible to observe during telephonic interviews. Victims who believe their cases are being neglected by the Troopers when they don't follow-up face to face may experience a sense of "secondary victimization" that is common among those that have been sexual assaulted (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001), which in turn could discourage cooperation with prosecution.

Finally, isolation has an impact on the provision of medical services. Most isolated Alaska Native villages do not have locally available professional medical care, and residents are required to travel to hub communities for treatment. A lack of immediate access to professional medical care makes it difficult for victims living in isolation to receive treatment, to have their injuries documented, and for forensic evidence to be gathered (Averill, Padilla, & Clements, 2007; Lewis, 2003). This is especially important in cases of sexual assault because successful prosecution often hinges on the availability of evidence of injury (Beichner & Spohn, 2005; Bouffard, 2000; Campbell, Patterson, Bybee, & Dworkin, 2009; Sommers, Fisher, & Karjane, 2005).

Altogether, the difficulties imposed by geographic isolation in rural Alaska should serve to hinder the investigation and prosecution of sexual assault cases. In terms of case processing, there is good reason to expect that cases from isolated villages would be less likely to receive full prosecution when compared to cases from the less isolated areas of the Troopers' jurisdiction. This may occur due to delayed responses that decrease the availability of evidence and increase the difficulty of interviewing victims and witnesses. This may also occur due to the inability to afford the cost of follow-up investigations and to provide timely medical services that would document injuries and gather forensic evidence.

Although geographic isolation could be expected to be a hindrance, the other unique feature of criminal justice in Alaska Native villages—the presence of paraprofessional police—might serve to facilitate the successful prosecution of sexual assault cases. Despite limits on their arrest and investigative powers (under state law, VPSOs can only investigate misdemeanor cases, whereas VPOs and TPOs hold the same police authority as civilian Alaskans), police paraprofessionals can have a positive

impact on investigations conducted by AST. The impact of police paraprofessionals begins with offense reporting. They serve in their villages as an authority to which residents may report offenses. Once offenses are reported to paraprofessional officers, their word can underscore and legitimize reported offenses with AST. Both of these factors can make it more likely that the Troopers will find out about an offense sooner, which in turn should increase the chances of a fruitful investigation and successful prosecution.

Upon notification of a serious offense, a Trooper will then travel to the village where the crime occurred to begin the official investigation. While the responding Trooper is traveling to the village, the local paraprofessional officer can safeguard a crime scene and gather preliminary evidence. Once Troopers arrive, they can rely on paraprofessional officers to identify individuals and locate homes (which can be difficult in Alaska Native villages due to a lack of street signs and house numbers). This allows Troopers to focus on gathering evidence and obtaining statements (Wood, 2000). With an understanding of local culture and personal knowledge of village residents, paraprofessional officers can also help secure the participation of witnesses and victims. Given that a lack of witness and victim cooperation in investigations and prosecutions is a tremendous source of attrition in violent crime cases (Gottfredson & Gottfredson, 1988), the paraprofessional officers' intermediate position between the Troopers and village residents could facilitate successful investigations and prosecutions.

Despite the possible benefits of paraprofessionals assisting in investigations, the arrangement whereby isolated Alaska Native villages are served by AST with Troopers posted in hub communities and VPSOs, VPOs, and TPOs serving in a "trip-wire" capacity in some nonhub villages is seen as insufficient and discriminatory by some. Over the past 5 years alone, the state of Alaska has been criticized on a number of fronts, including a state advisory committee to the U.S. Commission on Civil Rights (Alaska Advisory Committee, 2002), the umbrella organization representing Alaska Native tribes (*Alaska Inter-Tribal Council v. State of Alaska [AITC v. Alaska]*, 2005), and Amnesty International (2007) regarding the provision of policing in the isolated portions of Alaska. For example, in *AITC v. Alaska*, plaintiffs argued (but failed to convince the court) that their equal protection rights were violated by the state's deployment of police resources in a discriminatory fashion that favored communities on the main highway system. In a report on responses to violence against American Indian and Alaska Native women, Amnesty International accused American authorities of "failing to exercise due diligence when it comes to sexual violence against Native American and Alaska Native women" (p. 19), singling out Alaska for what it considered to be a discriminatory, two-tiered deployment of police to the state's isolated villages (p. 44). Amnesty International argued that with this two-tiered deployment of police resources, villages without a Trooper post receive less effective police response than do villages with a Trooper post.

Given this latter perspective, the effect of police paraprofessionals on investigation and prosecution of sexual assault cases becomes uncertain. If, as was argued earlier,

police paraprofessionals truly are able to assist AST with their investigations, then we would expect better prosecutorial outcomes when their assistance is available. On the other hand, if one accepts the argument that VPSOs, VPOs, and TPOs are a poor substitute for fully certified police, then we would expect their presence to have little effect on sexual assault case prosecution.

Processing of Sexual Assault Cases

Though only a few studies have considered the effect of isolation and local police presence on sexual assault case processing, there are many studies that have examined other determinants of prosecutorial decision making in sexual assault cases. Similar to studies of case attrition in general, research on why prosecutors carry sexual assault cases forward has focused on case specifics pertaining to convictability. For prosecutors, the merits of a given case are a function of the certainty of conviction, which in turn is influenced by the available legal evidence as well as suspect and victim characteristics (Albonetti, 1986, 1987).

From a legal standpoint, many characteristics have been considered in studies of prosecutorial decision making in sexual assault cases. Research has consistently shown that specific evidentiary factors that add to the strength of a case serve to reduce the likelihood of case attrition. For example, a number of studies have found that prosecutors are more likely to file charges when there are witnesses to the act (Beichner & Spohn, 2005; Kingsnorth, Lopez, Wentworth, & Cummings, 1998; Kingsnorth, MacIntosh, & Wentworth, 1999; Spohn & Holleran, 2001). Likewise, cases are more likely to be prosecuted when victims are cooperative (Kerstetter, 1990; Kingsnorth et al., 1998, 1999; Spohn, Beichner, & Davis-Frenzel, 2001; Wiley, Sugar, Fine, & Eckert, 2003), when the time between assault and reporting is short (Gray-Eurom, Seabert, & Wears, 2002; Kerstetter, 1990; Kingsnorth et al., 1998; Wiley et al., 2003), and when there is physical evidence that a sexual assault took place (Beichner & Spohn, 2005; Spohn & Holleran, 2001). Prior research has also shown that prosecutions are more difficult in the absence of anogenital injuries (Bouffard, 2000; Gray-Eurom et al., 2002; Kerstetter, 1990; Littel, 2001; McGregor, DuMont, & Myhr, 2002; McGregor, Le, Marion, & Wiebe, 1999; Penttilä & Karhunen, 1990; Rambow, Adkinson, Frost, & Peterson, 1992; Sommers, 2007; Sommers et al., 2005). Prosecutions are also more difficult in the absence of other physical injuries (Beichner & Spohn, 2005; Campbell, Patterson, & Lichty, 2005; Crandall & Helitzer, 2003; Frazier & Haney, 1996; Gray-Eurom et al., 2002; Kingsnorth, et al., 1999; McGregor et al., 2002, 1999; Rambow et al., 1992; Spohn et al., 2001; Spohn & Holleran, 2001).

Whether they are referred to as “victim” characteristics (Spohn & Holleran, 2001) or “extra-legal” characteristics (Hagan, 1974), research on prosecutorial decision making in sexual assault cases has shown that legally irrelevant factors also influence case processing. Many of these factors are markers of blame and believability that are used to distinguish the cases of victims who are seen by prosecutors and jurors as being credible because their victimizations are more reflective of “common cultural

definitions of rape” (White Stewart, Dobbin, & Gatowski, 1996) or what Estrich (1987) referred to as “real rapes.” According to this perspective, actors in the legal system are more likely to deal with sexual assault cases when they involve rapes committed by strangers against apparently virtuous women (Frohmann, 1991) who were behaving in a normative, nonperilous manner (White Stewart et al., 1996).

Multivariate analyses of prosecutorial decision making in sexual assault cases provide some support for the perspective that stereotypical “real rape” cases are more likely to result in charges being filed. Perhaps the strongest support for this perspective is found in the results of analyses conducted in a number of studies by Spohn and associates in which they consider the effects of potentially unsafe victim behavior as well as prosecutorial concerns about the victims’ reputation. In four different studies (Beichner & Spohn, 2005; Spears & Spohn, 1997; Spohn et al., 2001; Spohn & Holleran, 2001), they found that cases involving risk-taking behavior by the victim and cases in which prosecutors questioned the moral character of the victim were less likely to result in charges being filed. Several researchers have also examined whether stranger rapes have less case attrition than nonstranger rape, hypothesizing that stranger rapes provide a better representation of the stereotypical “real rape.” This hypothesis has received less empirical support. With the exception of one study (Kingsnorth et al., 1998), multivariate analyses of charging decisions have either shown that the victim–perpetrator relationship has no effect on prosecution (Frazier & Haney, 1996; Kingsnorth et al., 1999; Spohn & Holleran, 2001) or that sexual assaults committed by strangers are less likely than others to result in prosecution (Gray-Eurom et al., 2002; Scott & Beaman, 2004; Spohn et al., 2001; Wiley et al., 2003). Likewise, only one study has shown that victim’s alcohol use prior to victimization decreased the likelihood of charges being filed (Kerstetter, 1990), whereas other studies found no effect on prosecutorial decision making (Frazier & Haney, 1996; Scott & Beaman, 2004; Wiley et al., 2003).

Data and Method

In this study, we drew upon two data sources to consider the net relative effects of geographic isolation and local police presence on sexual assault case processing. Case characteristics were gathered from AST records, and case outcomes were obtained from the state prosecutors’ office—the Alaska Department of Law (DoL). The combination of these two data sources allowed for cases to be followed from the point at which the police determined a sexual assault took place to the decisions of referring and accepting cases for prosecution.

Data included 239 sexual assault cases reported to the Troopers during 2003 and 2004. Cases were included in the sample if the suspect was 18 years of age or older, the victim was 14 years of age or older, and the sexual assault was founded by the Troopers. Cases that were unfounded were not included in this analysis. Our results are, therefore, not generalizable to all sexual assault cases reported to the Troopers. Rather, our results show the factors that predicted case processing, for those cases that had the possibility of being referred for prosecution. These factors include a broad

Table 1. Descriptive Statistics for Predictors of Referring Cases and Accepting Referred Cases

Variable	Referring cases		Accepting cases	
	M	SD	M	SD
Isolated location	0.54	0.50	0.62	0.49
Paraprofessional responder	0.23	0.42	0.26	0.44
Alaska Native victim	0.67	0.47	0.71	0.46
Witnesses	0.60	0.49	0.63	0.48
Victim injury	0.37	0.48	0.41	0.49
Cooperative victim	0.78	0.41	0.84	0.37
Aggravated offense	0.59	0.49	0.57	0.50
Reported within 24 hr	0.83	0.37	0.84	0.37
Intimate partner relationship	0.11	0.32	0.12	0.33
Victim drug/alcohol use	0.59	0.49	0.58	0.49
Case referred to DoL	0.72	0.45	—	—
Case accepted by DoL	—	—	0.60	0.49

Note: DoL = Alaska Department of Law.

Referring cases, $N = 239$; accepting referred cases, $N = 173$.

assortment of indicators collected from the AST records on suspects, victims, and witnesses, and on case specifics regarding the sexual assault incident. Each AST record was then matched with case-outcome information recorded in the DoL prosecutors' database.

The independent variables chosen for inclusion in the analytical models allowed for a consideration of the effects of specific aspects of policing in rural Alaska on sexual assault case processing when controlling for salient legal and extralegal factors (see Table 1). Eight different dichotomous measures were included in our models as statistical controls. These included a variable indicating whether the victim was Alaska Native, a measure of the presence of a witness or witnesses, a measure of whether the victim was injured, a variable indicating whether the victim was cooperative in the investigation, a measure of whether the case was reported within 24 hr, an indicator of the seriousness of the sexual assault (categorized as aggravated first degree sexual assault or nonaggravated second-, third-, or fourth-degree sexual assault), an indicator of whether the victim had used alcohol and/or other drugs in the time leading up to the offense, and an indicator of the victim–suspect relationship.¹ Given that the densities of acquaintanceship are much higher in rural Alaska than in more urbanized areas, very few of the sexual assaults in our data were committed by strangers. It was, therefore, necessary to use an alternative to the typical stranger versus nonstranger dichotomy. Drawing upon other analyses (e.g., Spohn et al., 2001), we categorized victim–suspect relationships by examining whether the suspect was a current or former intimate partner.

Of particular interest in this study were two independent variables measuring the effects of factors associated with the rural Alaskan setting: local paraprofessional police presence and geographic isolation. To measure the presence of local paraprofessional

police, we simply examined whether the first responder (who the victim reported to) was a local paraprofessional (VPSO, VPO, or TPO) or an Alaska State Trooper.

There are a number of ways that geographic isolation might be measured. For example, some have categorized communities as isolated if they are located in the northern and western portions of the state, away from Alaska's population centers (Alaska Division of Public Health, 2006; Wood & Gruenewald, 2006). Other research has defined the geographic isolation of a community as being away from the state's highway system (Dubin, 2001). However, for the purposes of understanding the effect of isolation on the ability of the police to conduct investigations, neither approach is preferable because both categorizations would capture communities that are isolated but have a local AST post. Instead, an alternative categorization was used in our analyses. Specifically, a sexual assault case was considered as occurring in a geographically isolated place if Troopers were unable to reach the community by automobile. The premise of this measure was that it would be more difficult for Troopers to travel to communities they cannot drive to and, because of that hindrance, conducting investigations would be more difficult.

We believe that our measure of isolation—whether Troopers cannot reach a village by automobile—is much more reflective of the difficulty of travel in rural Alaska than other potential measures. For example, using distance between Trooper post and crime scene would not account for the heterogeneity of terrain and climate that makes some locations much less accessible than others: An island village located 10 miles from a mainland Trooper post may (or may not) be less accessible than an inland village located 50 miles away by gravel road. There are also a few good reasons why we rejected response times as a measure of geographic isolation. In the context of rural Alaska, response times are problematic because they do not account for the costs (both monetary and in the potential for officer mortality) of Trooper travel to off-highway villages that might be expected to limit in-person follow-up investigations. More generally, response times are as much a function of the urgency of a crime report (cases reported immediately after the offense are more urgent than those reported days or weeks later) as they are an indication of the time it takes the police to arrive at the scene (Spelman & Brown, 1981).

Case-processing outcome measures were obtained from the prosecutorial records of the DoL. As with most other studies on the subject, we considered the decision of the prosecutor to accept cases. Our analysis also considered the precursor decision: the police decision to refer cases to the DoL for prosecution. Though the prosecutor is generally seen as having the most power in deciding whether to accept and prosecute cases (Kingsnorth, MacIntosh, & Sutherland, 2002), the police have the discretion not to refer cases for prosecution even when they decide that an offense actually has occurred. An earlier study by Horney and Spohn (1996) considering both the police referral for prosecution decision and the prosecutorial charge decision showed that different case and victim characteristics accounted for case outcomes when separate analytical models were considered. It is important to note that in this sample of cases, all cases resulting in an arrest were referred for prosecution (i.e., the decision to arrest is equivalent to the decision to refer for prosecution).

Table 2. Differences in Referring and Accepting Cases by Type of Community and First Responder

Decision	Type of community		χ^2 (df), <i>p</i> value
	Isolated	Nonisolated	
Percent of cases referred to DoL	81.5	61.5	11.948 (1), <i>p</i> < .001
Percent of cases accepted by DoL	69.8	43.3	11.992 (1), <i>p</i> < .001
Decision	Type of first responder		χ^2 (df), <i>p</i> value
	Paraprofessional	AST	
Percent of cases referred to DoL	81.8	69.6	3.180 (1), <i>p</i> = .075
Percent of cases accepted by DoL	82.2	51.6	12.992 (1), <i>p</i> < .001

Note: AST = Alaska State Troopers; DoL = Alaska Department of Law.
Differences in referring, *N* = 239; accepting, *N* = 173.

Two different types of analyses were conducted. First, basic cross-tabulations with chi-square tests of statistical significance were calculated to consider the bivariate associations between factors related to policing in rural Alaska and decisions to refer and prosecute in sexual assault cases. Logistic regression was then used to determine the relative effects of each aforementioned variable on the likelihood that sexual assault cases would be referred for prosecution and on the likelihood that referred cases would be accepted for prosecution.

Results

Simple cross-tabulations indicated that there were associations between features of policing in rural Alaska and decision making in sexual assault cases. Some of these associations, however, were in a direction opposite to that expected from understandings of rural policing and from the critics of criminal justice policy in Alaska.

As is shown in Table 2, cases from isolated communities were more likely to be referred for prosecution when compared to cases from nonisolated communities (*p* < .001). Prosecutors were also more likely to accept cases that were referred from isolated communities (*p* < .001). When the first responder was a local police paraprofessional, prosecutors were more likely to accept cases that had been referred (*p* < .001). These results suggest that case processing is not hindered by geographic isolation and that case processing is facilitated by the presence of local police paraprofessionals.

The results of the logistic regression model² estimating the effects of case characteristics on the likelihood of referring a sexual assault case for prosecution are shown in Table 3. These results indicated that there was a positive association between a sexual assault case occurring in an isolated community and the likelihood that Troopers would refer the case for prosecution. Even after accounting for a number of relevant legal and extralegal control variables, cases were approximately 2.5 times more likely to be referred for prosecution if they occurred in an isolated village. On the other hand,

Table 3. Factors Associated With Referring Cases

Variable	<i>B</i>	<i>SE</i>	<i>p</i> Value	Odds ratio	95% CI
Isolated location	0.95	0.43	0.027	2.59	1.11–6.02
Paraprofessional responder	-0.09	0.47	0.857	0.92	0.37–2.31
Alaska Native victim	-0.07	0.41	0.893	0.95	0.43–2.10
Witnesses	0.40	0.32	0.207	1.50	0.80–2.79
Victim injury	0.78	0.36	0.030	2.18	1.08–4.42
Cooperative victim	1.03	0.37	0.005	2.79	1.37–5.71
Aggravated offense	-0.43	0.34	0.197	0.65	0.34–1.25
Reported within 24 hours	-0.06	0.42	0.899	0.95	0.42–2.15
Intimate partner relationship	0.75	0.56	0.184	2.12	0.70–6.40
Victim drug/alcohol use	-0.22	0.33	0.512	0.80	0.42–1.55
Constant	-0.36	0.55	0.511	0.70	—

Note: $N = 239$. Model $\chi^2 = 29.579$, $df = 10$, $p = .001$; CI = confidence interval

whether the first responder was a local paraprofessional police no longer significantly affected the likelihood of referral for prosecution, once other variables were entered into the model. In addition to geographic isolation, two control variables—victim injury and victim cooperation—were positively associated with the likelihood of cases being referred for prosecution. Cases with injured victims were twice as likely to be referred for prosecution as cases without injured victims, and cases with cooperative victims were almost 3 times as likely to be referred for prosecution as cases without cooperative victims. It is important to note that victim's race was not associated with the likelihood of referral for prosecution. Other covariates that did not significantly affect the likelihood of referral for prosecution included whether witnesses were present, whether the offense was aggravated, whether the offense was reported within 24 hr, whether the victim and suspect were current or former intimate partners, and whether the victim had used drugs or alcohol.

The relative effects of the variables included in the logistic regression model of prosecutors' decisions to accept cases are shown in Table 4. This model was estimated on the subsample of cases that were referred for prosecution ($N = 173$). Though geographic isolation was a significant predictor of whether cases would be referred for prosecution, it had no impact on whether referred cases would be accepted for prosecution. Conversely, although the type of first responder had no impact on whether cases would be referred for prosecution, the type of first responder was significantly associated with the likelihood that referred cases would be accepted for prosecution. More precisely, cases were more than 3 times as likely to be accepted for prosecution when the first responder was local paraprofessional police. This result supports the hypothesis that the presence of local police paraprofessionals increases the likelihood of sexual assault cases being accepted for prosecution.

As found in the models for referring cases for prosecution, the victim's race had no impact on the decision to accept cases for prosecution. Only two control variables

Table 4. Factors Associated With Accepting Cases

Variable	<i>B</i>	<i>SE</i>	<i>p</i> Value	Odds ratio	95% CI
Isolated location	0.48	0.46	0.304	1.61	0.65-3.98
Paraprofessional responder	1.23	0.50	0.013	3.44	1.30-9.11
Alaska Native victim	0.39	0.48	0.423	1.47	0.57-3.80
Witnesses	0.16	0.37	0.662	1.18	0.57-2.43
Victim injury	0.40	0.42	0.341	1.49	0.66-3.35
Cooperative victim	1.17	0.50	0.019	3.21	1.21-8.51
Aggravated offense	-0.38	0.39	0.334	0.69	0.32-1.48
Reported within 24 hours	1.15	0.52	0.029	3.15	1.13-8.81
Intimate partner relationship	0.69	0.61	0.260	1.99	0.60-6.54
Victim drug/alcohol use	-0.74	0.40	0.065	0.48	0.22-1.05
Constant	-2.06	0.74	0.005	0.13	—

Note: *N* = 173. Model $\chi^2 = 38.734$, *df* = 10, *p* < .001; CI = confidence interval

were significantly associated with accepting cases for prosecution. As with the decision to refer cases for prosecution, there was a positive association between victim cooperativeness and the likelihood of a case being accepted for prosecution. Cases that were reported within 24 hr of occurrence were also much more likely to be accepted for prosecution. Neither of these case characteristics had an effect on the likelihood of prosecution. The presence of witnesses, whether the victim was injured, whether the offense was aggravated, whether the victim and suspect were or had been intimate partners, and whether the victim had used drugs or alcohol had no impact on the likelihood that referred cases would be accepted for prosecution.

Discussion and Conclusion

Results showed that certain factors associated with the provision of policing and criminal prosecution in rural Alaska did have an impact on the processing of sexual assault cases. However, the effects were not necessarily in the direction one would expect, given earlier studies of rural policing or criticisms of the State of Alaska for its administration of justice. The most meaningful finding in this regard was that cases from villages that are isolated from AST posts (i.e., cases that require Troopers to travel by air or water to conduct investigations) were actually more likely to be referred for prosecution than were cases from places that Troopers could drive to for the purpose of conducting investigations. Another important finding was that local paraprofessional police did serve an important role in the prosecution of sexual assaults in rural Alaska. More specifically, cases that had been referred for prosecution were much more likely to be accepted for prosecution when the first responder was a local paraprofessional police officer.

The finding of a negative relationship between geographic isolation and case attrition seems to indicate that isolation need not have an entirely negative impact on the

ability of the police to respond to and investigate serious crimes of violence. This is an encouraging finding both for Alaska and other regions. There are many other jurisdictions located throughout North America—from the frontier of the intermountain Western United States to the roadless reaches of the Canadian north—where police are also hindered by extremes in distance and topography. Across all these areas of high “social cost of space,” it is possible that, after a certain point, the isolation of a location can actually work to the advantage of the police when conducting investigations. Once in an isolated community, investigators would be able to deal with the specific case at hand without being distracted by other calls for service. Furthermore, investigators may be more focused on putting together as complete a case as possible in the initial stages of an investigation while in an isolated community because the time and expense required for travel may preclude any in-person follow-up. Although the exact mechanism between geographic isolation and the increased likelihood of sexual assault cases being referred for prosecution is unclear, the fact that geographic isolation did not have a positive effect on case attrition indicates that rural police administrators would be advised to worry less about response times and instead focus on the factors that facilitated referring and accepting cases for prosecution.

In particular, gaining victim cooperation was important for both referring and accepting cases for prosecution. When victims cooperated, cases were almost 3 times more likely to be referred for prosecution and were more than 3 times more likely to be accepted for prosecution, once referred. This finding (although not new) continues to underscore the importance for police officers to secure victim cooperation. Victim injury also increased the likelihood that cases would be referred for prosecution. Finally, cases reported within 24 hr were more likely to be accepted for prosecution once referred for prosecution. Each of these results reaffirm the findings of earlier studies that considered samples of sexual assault cases from urban areas. They also provide support for programs that improve the plight of victims (such as coordinated and streamlined legal, medical, and mental health services) so that they are more likely to come forward soon after being assaulted and to want to see their attackers prosecuted.

Regarding the charges of differential prosecution of cases dependent on the victim’s race, the results presented in this article provided no evidence that sexual assaults committed against Alaska Native women were any less likely to be prosecuted when compared to those against non-Alaska Native women. At a bivariate level, the sexual assaults of Alaska Native women were actually more likely to result in Troopers referring cases for prosecution and in prosecutors accepting the cases for prosecution (results not shown). In the multivariate models, there was no evidence that race influenced case processing. Instead, there was clear evidence that women from isolated villages, the women who are said to be among the most vulnerable (Amnesty International, 2007, p. 36), were much more likely to see their cases brought to justice.

Only one finding, the finding that the involvement of a local paraprofessional police official increased the likelihood of sexual assault cases being prosecuted, was as expected. However, the point in the process at which having a police paraprofessional

of service proved instrumental was different than first anticipated. Our analyses indicated that VPSOs, VPOs, and TPOs make a difference in the likelihood of cases being carried forward in the justice process at the point of prosecutors deciding to press charges rather than the earlier stage when the police decide to refer charges for prosecution. Local police paraprofessionals could be of benefit to prosecutors in a number of ways. First, local police paraprofessionals would be available to prosecutors to conduct additional follow-up investigations after charges are referred. More likely, prosecutors might value local police paraprofessionals for their assistance with the logistics of coordinating with victims and witnesses.

On a larger level, our finding about the benefits of local police paraprofessionals with the investigation of serious crimes conducted by specialists from outside the community has policy implications for jurisdictions beyond rural Alaska that have comparable “two-tier” law enforcement structure. Our results support an arrangement in which local police emphasize order maintenance and deal with relatively minor offenses and the investigation of serious crimes is the responsibility of specialized agents from higher levels of government. Be it American Indian reservations served by tribal police, with serious felonies investigated by the FBI (Wakeling, Jorgensen, Michaelson, & Begay, 2001), or small towns in Georgia that rely on a statewide bureau of investigation in cases that exceed local capability (Falcone, Wells, & Weisheit, 2002), the lack of economies of scale that preclude investigatory specialization in small police agencies need not limit the expertise available to develop cases that will result in the successful prosecution of those who commit serious crimes.

Although the findings of this study have promising implications for policy and practice, there are several limitations to consider. The sample of cases for this analysis only included cases that had been founded. Therefore, and as previously emphasized, the results are not generalizable to all reported sexual assaults. Geographic isolation and local police presence may also affect whether cases are founded and subsequently have the opportunity to be referred and accepted for prosecution. This is an important empirical question that future research should examine. Future research should also examine the extent to which our results from rural Alaska are generalizable to other rural locations. The problems of geographic isolation and lack of local police presence are certainly not unique to Alaska. At a minimum, our research suggests that some of the previous assumptions about the effects of geographic isolation and local police presence may be untrue.

Another limitation that should be considered is the possibility that our estimates may be biased because of sample selection. Cases eligible for charging decisions were not randomly selected but instead were only selected if they were referred for prosecution. In addition, cases eligible for referral decisions were not randomly selected from but instead were only selected if they were reported to police. Given a lack of theoretically defensible exclusion restrictions, we chose to forgo the estimation of a sample selection model. As Bushway, Johnson, and Slocum (2007) have shown, the problems with inefficient parameter estimates from sample selection models with no defensible exclusion restriction outweigh the problems with bias that may occur from ignoring

sample selection. Future research should identify exclusion restrictions that are both theoretically and empirically defensible.

Our measurement of local police presence also has important limitations. We measured local police presence by examining who the victim had first reported to. This was a proxy indicator for local police presence because the preferred measure was not available. Unfortunately, there are no records on the locations and dates of service of VPOs or TPOs. This makes it impossible to determine whether a sexual assault occurred on a day when a village was served by a local police paraprofessional. Instead, a reasonable alternative measure of local police presence was derived from AST case files. Nonetheless, there may be a difference between the effect of who first responded to the assault and whether local paraprofessional police were available at the location and time of the assault. These differences should be explored further.

Finally, although we uncovered some important relationships and theorized about these relationships, our models did not explain why both geographic isolation and local police presence increased the likelihood of case processing. The intervening mechanisms behind the relationships uncovered here remain theoretical. Nonetheless, we can conclude (at least in this sample) that differences in case processing by geographic isolation and local police presence were not attributable to the five factors that were never significantly associated with referring and accepting cases. These five factors were the victim's race, whether witnesses were present, whether the offense was aggravated, whether the victim and suspect were current/former intimate partners, and whether the victim used drugs or alcohol prior to the assault.

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Notes

1. We dichotomized the measure of time to report (originally a ratio-level variable) and the measure of offense seriousness (originally an ordinal-level variable) to allow for comparisons of our results with those of earlier studies that used a similar approach.
2. Diagnosis of potential excessive intercorrelations took two forms. First, correlation coefficients for each of the independent variables were examined to consider the possibility of

pairwise collinearity. The highest Pearson's correlation was $r = .61$ in the model estimating the referral of cases and $r = .62$ in the model estimating the acceptance of cases. Neither was above the standards of $r = .70$ (Walker & Maddan, 2005) or $r = .80$ (Lewis-Beck, 1980) that are markers for pairwise collinearity. Variance inflation factors (VIF) were then calculated using ordinary least squares regression to consider the possibility of multicollinearity. The highest VIF values were 1.94 in the referral model and 1.89 in the acceptance model. Both were below the standard measure of 2.50, indicating that multicollinearity was not a problem (Allison, 1999). Overall, there was no indication of excessive intercorrelations among independent variables in the two models.

References

- Alaska Advisory Committee. (2002). *Racism's frontier: The untold story of discrimination and division in Alaska*. Washington, DC: US Commission on Civil Rights.
- Alaska Division of Public Health. (2006). *Health risks in Alaska among adults: Alaska behavioral risk factor survey—2004/2005 annual report*. Juneau, AK: Department of Health and Social Services.
- Alaska Inter-Tribal Council v. State of Alaska, 110 P.3d 947, 2005.
- Albonetti, C. A. (1986). Criminality, prosecutorial screening, and uncertainty: Toward a theory of discretionary decision making in felony case processing. *Criminology*, 24, 623-644.
- Albonetti, C. A. (1987). Prosecutorial discretion: The effects of uncertainty. *Law & Society Review*, 21, 291-314.
- Allison, P. D. (1999). *Multiple regression: A primer*. Thousand Oaks, CA: Sage.
- Amnesty International. (2007). *Maze of injustice: The failure to protect Indigenous women from sexual violence in the USA*. London: Amnesty International.
- Angell, J. E. (1979). *Alaska village justice: An exploratory study*. Anchorage: University of Alaska Anchorage.
- Angell, J. E. (1981). *Public safety and the justice system in Alaskan Native villages*. Anchorage: University of Alaska Anchorage.
- Averill, J. B., Padilla, A. O., & Clements, P. T. (2007). Frightened in isolation: Unique considerations for research of sexual assault and interpersonal violence in rural areas. *Journal of Forensic Nursing*, 3, 42-46.
- Beichner, D., & Spohn, C. C. (2005). Prosecutorial charging decisions in sexual assault cases: Examining the impact of a specialized prosecution unit. *Criminal Justice Policy Review*, 16, 461-498.
- Boorstein, M. (1997, February 23). Navajo police endure lonely, risky job. *The Oregonian*, p. A20.
- Bouffard, J. (2000). Predicting type of sexual assault case closure from victim, suspect, and case characteristics. *Journal of Criminal Justice*, 28, 527-542.
- Bushway, S., Johnson, B. D., & Slocum, L. A. (2007). Is the magic still there? The use of the Heckman two-step correction for selection bias in criminology. *Journal of Quantitative Criminology*, 23, 151-178.
- Campbell, R., Patterson, D., Bybee, D., & Dworkin, E. R. (2009). Predicting sexual assault prosecution outcomes: The role of medical forensic evidence collected by sexual assault nurse examiners. *Criminal Justice and Behavior*, 36, 712-727.

- Campbell, R., Patterson, D., & Lichty, L. F. (2005). The effectiveness of sexual assault nurse examiner (SANE) programs: A review of psychological, medical, legal, and community outcomes. *Trauma, Violence, & Abuse, 6*, 313-329.
- Campbell, R., Wasco, S. M., Ahrens, C. E., Sefl, T., & Barnes, H. E. (2001). Preventing the "second rape": Rape survivors' experiences with community service providers. *Journal of Interpersonal Violence, 16*, 1239-1259.
- Crandall, C. S., & Helitzer, D. (2003). *Impact evaluation of a sexual assault nurse examiner (SANE) program. Final Report* (NCJ 203276). Washington, DC: U.S. Department of Justice.
- Dubin, J. A. (2001). The allocation of police services in rural Alaska. In J. A. Dubin (Ed.), *Empirical studies in applied economics* (pp. 167-206). Boston: Kluwer.
- Estrich, S. (1987). *Real rape*. Cambridge, MA: Harvard University Press.
- Falcone, D. N., Wells, L. E., & Weisheit, R. A. (2002). The small-town police department. *Policing: An International Journal of Police Strategies & Management, 25*, 371-384.
- Federal Lands Highway Program. (2002). *Hearing before the Subcommittee on Highways and Transit Committee on House Transportation and Infrastructure, 107th Cong., 2nd session.* (testimony of Andrew Simpson).
- Frazier, P. A., & Haney, B. (1996). Sexual assault cases in the legal system: Police, prosecutor, and victim perspectives. *Law and Human Behavior, 20*, 607-628.
- Frohmann, L. (1991). Discrediting victims' allegations of sexual assault: Prosecutorial accounts of case rejections. *Social Problems, 38*, 213-226.
- Goldsmith, S., Angvik, J., Howe, L., Hill, A., & Leask, L. (2004). *The status of Alaska Natives report 2004* (vol. 1). Anchorage: University of Alaska Anchorage.
- Gottfredson, D. M., & Gottfredson, M. R. (1988). *Decision making in criminal justice: Toward the rational exercise of discretion* (2nd ed.). New York: Plenum.
- Gray-Eurom, K., Seaberg, D. C., & Wears, R. L. (2002). The prosecution of sexual assault cases: Correlation with forensic evidence. *Annals of Emergency Medicine, 39*, 39-46.
- Hagan, J. (1974). Extra-legal attributes and criminal sentencing: An assessment of a sociological viewpoint. *Law & Society Review, 8*, 357-384.
- Hickman, M. J. (2003). *Tribal law enforcement, 2000*. Washington, DC: Bureau of Justice Statistics.
- Horney, J., & Spohn, C. (1996). The influence of blame and believability factors on the processing of simple versus aggravated rape cases. *Criminology, 34*, 135-162.
- Kerstetter, W. A. (1990). Gateway to justice: Police and prosecutorial response to sexual assaults against women. *Journal of Criminal Law and Criminology, 81*, 267-313.
- Kingsnorth, R., Lopez, J., Wentworth, J., & Cummings, D. (1998). Adult sexual assault: The role of racial/ethnic composition in prosecution and sentencing. *Journal of Criminal Justice, 26*, 359-371.
- Kingsnorth, R. F., MacIntosh, R. C., & Sutherland, S. (2002). Criminal charge or probation violation? Prosecutorial discretion and implications for research in criminal court processing. *Criminology, 40*, 553-577.
- Kingsnorth, R. F., MacIntosh, R. C., & Wentworth, J. (1999). Sexual assault: The role of prior relationship and victim characteristics in case processing. *Justice Quarterly, 16*, 275-302.
- Kraenzel, C. F. (1953). Sutland and Yonland setting for community organization in the plains. *Rural Sociology, 18*, 344-358.

- Lewis, S. H. (2003). *Unspoken crimes: Sexual assault in rural America*. Enola, PA: National Sexual Violence Resource Center.
- Lewis-Beck, M. S. (1980). *Applied regression: An introduction*. Thousand Oaks, CA: Sage.
- Littel, K. (2001). *Sexual assault nurse examiner (SANE) programs: Improving the community response to sexual assault victims*. Washington, DC: U.S. Department of Justice.
- McGregor, M. J., Du Mont, J., & Myhr, T. L. (2002). Sexual assault forensic medical examination: Is evidence related to successful prosecution? *Annals of Emergency Medicine*, 39, 639-647.
- McGregor, M. J., Le, G., Marion, S. A., & Wiebe, E. (1999). Examination for sexual assault: Is the documentation of physical injury associated with the laying of charges? A retrospective cohort study. *Canadian Medical Association Journal*, 160, 1565-1569.
- National Advisory Commission on Criminal Justice Standards and Goals. (1973). *Report on the police*. Washington, DC: U.S. Government Printing Office.
- National Research Council. (1995). *Aviation weather services: A call for Federal leadership and action*. Washington, DC: National Academy Press.
- Navajo Nation Division of Public Safety. (2007). *Department of Law Enforcement*. Retrieved December 22, 2007, from <http://www.navajodps.org/>
- Nelson, S. (2004, September 19). Navajo Nation: Regaining lost ground. *Santa Fe New Mexican*, p. 6.
- Penttilä, A., & Karhunen, P. J. (1990). Medicolegal findings among rape victims. *Medicine and Law*, 9, 725-737.
- Postle, G., Rosay, A. B., Wood, D. S., & TePas, K. (2007). *Descriptive analysis of sexual assault incidents reported to Alaska State Troopers: 2003-2004*. Anchorage: University of Alaska Anchorage.
- Rambow, B., Adkinson, C., Frost, T. H., & Peterson, G. F. (1992). Female sexual assault: Medical and legal implications. *Annals of Emergency Medicine*, 21, 727-731.
- Riley, M. (2007, November 12). Lawless lands: Inaction's fatal price. *Denver Post*, p. A-1.
- Scott, H. S., & Beaman, R. (2004). Demographic and situational factors affecting injury, resistance, completion, and charges brought in sexual assault cases: What is best for arrest? *Violence and Victims*, 18, 479-494.
- Sommers, M. S. (2007). Defining patterns of genital injury from sexual assault: A review. *Trauma, Violence, & Abuse*, 8, 270-280.
- Sommers, M. S., Fisher, B. S., & Karjane, H. M. (2005). Using colposcopy in the rape exam: Health care, forensic, and criminal justice issues. *Journal of Forensic Nursing*, 1, 28-34.
- Spears, J. W., & Spohn, C. C. (1997). The effect of evidence factors and victim characteristics on prosecutors' charging decisions in sexual assault cases. *Justice Quarterly*, 14, 501-524.
- Spelman, W., & Brown, D. K. (1981). *Calling the police: Citizen reporting of serious crime*. Washington, DC: Police Executive Research Forum.
- Spohn, C. C., Beichner, D., & Davis-Frenzel, E. (2001). Prosecutorial justifications for sexual assault case rejection: Guarding the "gateway to justice." *Social Problems*, 48, 206-235.
- Spohn, C. C., & Holleran, D. (2001). Prosecuting sexual assault: A comparison of charging decisions in sexual assault cases involving strangers, acquaintances, and intimate partners. *Justice Quarterly*, 18, 651-688.

- Wakeling, S., Jorgensen, M., Michaelson, S., & Begay, M. (2001). *Policing on American Indian reservations*. Washington, DC: National Institute of Justice.
- Walker, J. T., & Maddan, S. (2005). *Statistics in criminal justice: Analysis and interpretation* (2nd ed.). Boston: Jones & Bartlett.
- Walzer, N. (1972). Economies of scale and municipal police services: The Illinois experience. *The Review of Economics and Statistics*, 54, 431-438.
- Weisheit, R. A., Falcone, D. N., & Wells, L. E. (2006). *Crime and policing in rural and small-town America* (3rd ed.). Prospect Heights, IL: Waveland Press.
- White Stewart, M., Dobbin, S. A., & Gatowski, S. I. (1996). "Real rapes" and "real victims": The shared reliance on common cultural definitions of rape. *Feminist Legal Studies*, 4, 159-177.
- Wilbanks, W. (1999). *Forgotten heroes: Police officers killed In Alaska, 1867-1998*. Paducah, KY: Turner.
- Wiley, J., Sugar, N., Fine, D., & Eckert, L. O. (2003). Legal outcomes of sexual assault. *American Journal of Obstetrics and Gynecology*, 188, 1638-1641.
- Wood, D. S. (2000). *Turnover among Alaska Village Public Safety Officers: An examination of the factors associated with attrition*. Anchorage: University of Alaska Anchorage.
- Wood, D. S., & Gruenewald, P. J. (2006). Alcohol availability, police presence, and serious injury in isolated Alaska Native villages. *Addiction*, 101, 393-403.
- Wood, D. S., & Magen, R. H. (2009). Intimate partner violence against Athabaskan women residing in interior Alaska: Results of a victimization survey. *Violence Against Women*, 15, 497-507.
- Wood, D. S., & Trostle, L. C. (1997). The nonenforcement role of police in western Alaska and the eastern Canadian arctic: An analysis of police tasks in remote arctic communities. *Journal of Criminal Justice*, 25, 367-379.

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