

Village Public Safety Officer Turnover and Reported Violent Crime in Alaska Native Villages

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Abstract: Since its inception in the early 1980s as a response to high rates of accidental and intentional injury deaths in isolated Alaska Native villages, the Village Public Safety Officer (VPSO) program has faced tremendously high levels of employment turnover. This attrition often results in villages being without a local police presence for weeks at a time. The impact of this lack of presence upon public safety in these villages was examined using records of offences reported to the Alaska State Troopers over the period 1998–2002. Differences in reported violent crime rates during the periods when a VPSO was present in a community were compared with the reported violent crime rates during periods of officer absence. There were no statistically significant differences in the reported rates of homicide or sexual assault when villages were or were not served by a VPSO. Reported felony assault rates were at least as high, if not higher, in villages without VPSO service as opposed to villages with VPSO service. Rates of reported misdemeanour assaults, contrary to expectations, were actually lower when villages were without VPSO service compared to when they had VPSO service. These results indicate that violent crime rates are partly a function of having someone to whom a crime might be reported rather than a result of any underlying criminal behaviour.

Introduction

The demands of geographic isolation have made the provision of local police and public safety services to many of the 225 Alaska Native villages distributed across the state very difficult. With populations generally under 500 persons, these villages lack the tax bases and the economies of scale required to support fully certified police departments. This problem is further exacerbated for the 165 villages located off of Alaska's road system. The State of Alaska's response to the difficulties of providing a local police presence in

isolated Alaska Native villages is the Village Public Safety Officer (VPSO) program. This program provides a broad range of public safety services including law enforcement, firefighting, water safety, emergency medical assistance, and search and rescue.

One problem that has plagued efforts to provide local police services to Alaska Native villages in both the times before the VPSO program was put in place (Angell, 1979; Moeller, 1978) and since its inception in the early 1980s (Wood, 2000) is employment attrition. For a number of reasons, including a lack of ties to the village being served, being single, and having to work by oneself (Wood, 2002), police and public safety officers working in isolated Alaska Native villages do not last very long on the job. One ramification of the tremendously high levels of employment turnover—specifically, the effect of VPSO attrition upon reported levels of violent crime in the villages served by the VPSO program—will be considered. This article will first provide a general description of the VPSO program and the problem of VPSO attrition.

VPSOs and the Turnover Problem

The Alaska Native village setting provides a unique set of circumstances for the provision of policing and other public safety services. Most villages have small populations. Many villages are geographically isolated, disconnected from road systems, and reachable only by air or water when weather permits. On average, Alaska Native villages have extremely high rates of deaths by accidents, suicide, and violence (Berman & Leask, 1994; Landen, et al., 1997; Lee, 1988).

The customary approach to dealing with this set of circumstances to ensure a local police presence has been to employ local Alaska Native residents as police officers. Since prior to statehood and reaching as far back as the late 1800s, specially appointed Alaska Natives have provided the primary local police presence (Marenin & Copus, 1991) in rural villages. This tradition has continued under the Village Public Safety Officer program. With its formal start in 1981, the program employed fifty-two officers, growing to as many as 125 authorized positions across the state by the early 1990s (Marenin & Copus, 1991). After program budget cuts over the years, there are currently (as of September 2007) forty-two VPSOs serving villages across the state (Alaska State Troopers, 2007).

The VPSO program is designed to deal with the problems that hampered earlier efforts to improve the peace and safety of Alaska Native villages. For instance, the difficulties imposed by a lack of economies of scale in Alaska

Native villages were dealt with by expanding the officers' task bundle from only law enforcement (as was the case in earlier efforts to serve the villages) to also include firefighting, water safety, emergency medical services, and search and rescue. Today's VPSOs act as public safety jacks-of-all-trades, handling a variety of tasks (Wood & Trostle, 1997) and serving an early-warning tripwire function to alert regional authorities to more serious emergencies.

The VPSO program was also designed to allow for increased local control over public safety services. Co-administered by the Alaska State Troopers, by regional non-profit Native corporations, and by Alaska Native villages, the VPSO program is an improvement over earlier village policing efforts in that it allows for an "emphasis upon local decision making and control to assure the program meets village objectives and concerns" (Messick, 1979, p. 8). Local village governments choose to participate in the program and they have authority over officer selection and termination (Marenin & Copus, 1991).

Funding for the VPSO program is provided by the State of Alaska. This funding is split between the Alaska State Troopers (AST) and the regional "non-profits." The state troopers are responsible for equipping and training the officers as well as for providing field supervision. Each VPSO is assigned an "oversight trooper" who acts as a mentor, providing in-service training and technical assistance as needed. When a high risk or extreme emergency arises, and when felonies¹ are committed, the local VPSO takes immediate action as prescribed by the oversight trooper in order to maintain control over the situation until a trooper can arrive—usually by air—at the scene (Marenin, 1990). VPSOs have only limited police authority and are not certified as police officers. The ultimate responsibility for providing police services in most Alaska Native villages falls to the Alaska State Troopers.² The troopers provide primary police services to all areas of the state that are not served by a police department certified by the Alaska Police Standards Council (APSC), or by a federal authority. Formally, under state law, VPSOs are not "the police" in the villages they serve. They should instead be seen as serving in a supplementary capacity in assistance to the state troopers.³

The regional non-profit Native corporations receive funding from the State of Alaska for the day-to-day administrative costs of the program. Each non-profit corporation employs a VPSO coordinator for the purposes of program administration. The coordinators' responsibilities include the management of payroll, personnel files, and the expenditure of grant funds. They also are heavily involved in the recruitment, hiring, and termination of the officers (Marenin, 1994).

That the troopers, the “non-profits,” and the village governments would all be involved in the recruitment and hiring of VPSOs is not surprising given the tremendously high rates of turnover that have plagued the program since its inception (see figure 1). During the period 1983 through 1997 the average annual turnover rate in the VPSO program was 35 percent (Wood, 2000). The annual rates ranged from a low of 24 percent in 1994 to a high of 45 percent two years earlier in 1992.⁴ These high turnover rates translate into relatively short periods of service to the Alaska Native villages by the VPSO program. The typical period of service to a village by a VPSO between the years of 1983 through 1997 was less than a year (median = 357 days). Because of transfers, the typical period of employment tenure for VPSOs was also less than twelve months in the program (median = 363 days) (Wood, 2000).

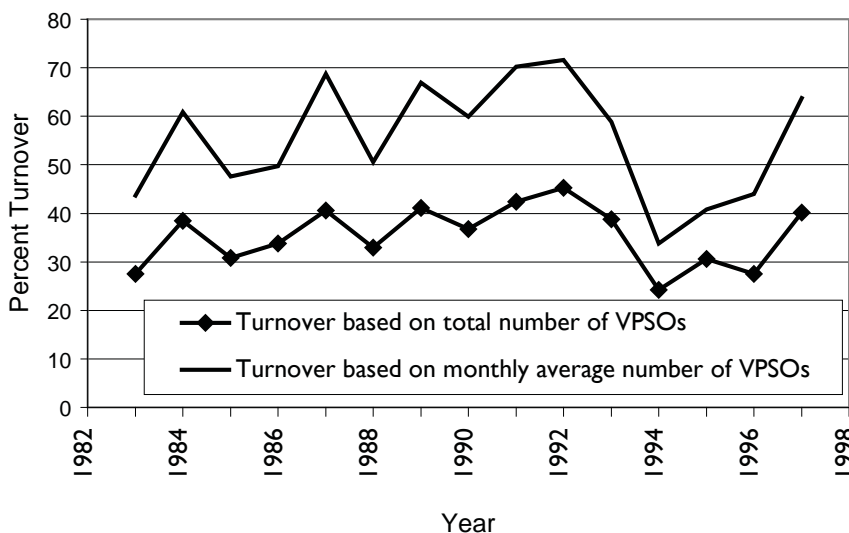


Figure 1. Yearly VPSO turnover rates computed as a percentage of the mean number of positions at mid-month and as a percentage of the total number employed during year, 1983 to 1997 (Source Wood, 2000)

Research considering the reasons for the high rates of VPSO turnover points to a number of factors associated with the likelihood of employment attrition. The results of a survey conducted in 1998 of 113 VPSOs indicated that marriage, satisfaction with training, a lack of absolute poverty, contact with other peace officers, and being of Alaska Native heritage were all associated with a decreased likelihood of officer turnover. Factors such as dissatisfaction with pay or dissatisfaction with not being able to carry a firearm on the job

were quite common and therefore of little use in understanding why some officers were more likely than others to leave VPSO service (Wood, 2002).

Whatever the reasons, the amount of turnover in the VPSO program is very high when compared with rates of employment attrition found in other policing arrangements. The rates of VPSO turnover are more than double those found in small town police departments in South Dakota (Whipple, Oehkerling & Del Grosso, 1991) and Vermont (Vermont Criminal Justice Center, 1989). Turnover rates of the VPSO program are also much higher than those experienced by urban departments or for state police. A Police Foundation national survey conducted in 1986 found average turnover rates of 4.6 percent for male officers and 6.3 percent for female officers serving in 303 urban police departments. For state police in 1986 the turnover rates were 2.9 percent and 8.9 percent for male and female officers, respectively (Martin, 1990). These rates are certainly much less than the 34 percent turnover rate the VPSO program experienced in 1986. Even from an Alaskan perspective the amount of turnover in the VPSO program is astounding. In 1997 the 40 percent VPSO turnover rate was triple that of the Alaska Department of Public Safety (which includes the Alaska State Troopers and the Alaska Division of Fish and Wildlife Protection) and roughly twenty times the rates of police departments in Anchorage and Fairbanks (Wood, 2000).

Aside from the loss of experience and the monetary costs of officer replacement,⁵ VPSO turnover is problematic because officers regularly leave the job without an immediate replacement on hand. In the 1990s, the typical village served by a VPSO waited about four-and-a-half months (mean = 138 days) between the date when one VPSO left the program and the date that a new VPSO serving them was put in place (Wood, 2000). Generally, the smaller the village, the longer it took for an officer to be replaced. In the smallest third of villages (those with populations of less than 188 persons) it took an average 158 days before a departing VPSO was replaced. Even though the largest third of the villages (those with populations of more than 383 persons) were given higher priority when filling positions, it still took on average more than four months (129 days) for the replacement of a departing VPSO (Wood, 2000).

To put VPSO turnover in further perspective, it is possible to compare the rates of attrition in the program with those found in other occupations. One national source for measures of turnover for many occupations is the U.S. Census Bureau's Survey of Income and Program Participation (SIPP). According to the SIPP, the average monthly turnover rate across all occupations in 1991 was 7.1 percent (Ryscavage, 1995). The VPSO average *monthly* turnover rate, at 17.1 percent, was roughly two-and-a-half times the

monthly turnover rate found nationally that same year. The only economic sector with rates of turnover that were higher than those of the VPSO program in 1991 was the entertainment and recreation services industry at a 17.6 average monthly turnover rate. The VPSO rate was higher than the average monthly turnover rates for workers in the agricultural, forestry, and fisheries industry group (at 14.4 percent), or for workers in personal services (at 11.7 percent), in construction (10.6 percent), in retail trade (at 9.8 percent), in manufacturing (at 4.7 percent), or even in public administration (at 4.8 percent) (Ryscavage, 1995).

While it is clear that officer turnover often leaves villages without the services of a VPSO for extended periods of time, the effect of that lack of coverage has yet to be established. It is unclear if residents of Alaska Native villages really are less safe and secure because of the loss of a VPSO. The analysis conducted for this article and the results described within are a first attempt to determine if VPSO turnover has consequences for the public safety of Alaska Native village residents. Specifically, the effect of VPSO turnover upon the incidence of violent crime reported in Alaska Native villages is considered.

There are a few reasons to expect that VPSO turnover might not have a negative impact upon crimes reported in Alaska Native villages. A number of studies have found little support for the idea that crime rates are associated with rates of police coverage (Bayley, 1985; Cameron, 1988; Greenberg, Kessler & Loftin, 1983; Land & Felson, 1976; however, see Kovandzic & Sloan, 2002 for an opposing view). Research on police strikes, which helps us to understand the effects upon crime when police are not present, have failed to show that the absence of the police results in an increase in criminal behaviour (Bopp, Maddox & Chignell, 1977; Pfuhl, 1983).⁶ However, the extent to which these lines of research are applicable to an examination of the effects of VPSO turnover is questionable. The research on the effects of police strikes might not apply because the absence of VPSOs usually lasts much longer than the few days of unrest that was characteristic of most police labour actions. Likewise, the results of studies examining the relationship between crime rates and rates of police coverage might not be relevant when looking at the effect of VPSO turnover because all of the jurisdictions looked at in those studies are not completely without police service.

While there is reason to expect that an *absence* of VPSOs could lead to a heightened incidence of violent crime, it is also possible a VPSO's *presence* could instead lead to increases in the reports of such offences. Putting someone with law enforcement capabilities in a village that lacked such a presence would provide residents with an easily accessible official who could be more

readily available to take reports of violent crime. In this sense, adding a VPSO might have a result that is similar to what has been found in research on the effects of the implementation of community policing. A number of studies (Kessler & Borella, 1997; Office of Community Oriented Policing Services, 2003; Wycoff & Skogan, 1994) have found that calls for service to the police actually increase as officers make themselves available to the community. Filling a VPSO vacancy might have a similar effect, giving village residents someone to report offences to and therefore possibly increasing the rates of violent offences recorded for that community. If the program does meet its intended goals, then one would expect lower rates of reported violent crime when a VPSO is present in a village than when a VPSO is absent from a village. On the other hand, if research from outside the Alaska Native village *milieu* is applicable, then one would expect no difference or even higher rates of reported violent crime when a village is served by a VPSO compared to when such service is not provided.

Methods

The consideration of the incidence of reported violent crimes for time periods with or without VPSO service in a community involved a three step process. First, criminal offence information was collated and coded as to whether the village was or was not served by a VPSO at the time of the offence. Second, the population basis for calculating rates was established. Finally, comparisons of the crude incidence rates of violent crime for times when villages had VPSOs and when they did not have VPSOs were made.

Criminal offence records for the Alaska Native villages served by the VPSO program were provided by the Alaska State Troopers as recorded in their calls for service / incidents database. These records covered the five year period 1998 through 2002 and included information such as offence type as well as where and when the offence occurred. Instances of felony violence (including felony assault, sexual assault, and homicide) and misdemeanour assault were included in the analysis. The offences included in the database include those crimes reported directly to the troopers by victims as well as those crimes that were reported by victims to VPSOs who then reported the crimes to the troopers.

Rosters of current and formerly serving VPSOs were consulted in order to determine if each individual offence occurred in a village that was or was not served by a VPSO when the offence was committed. Both the Department of Public Safety's *VPSO Historical Records – Reason for Termination* report and their *VPSO Seniority List* were consulted to determine when each village was

or was not served by an officer. Each individual offence listed in the Alaska State Troopers' calls for service / incidents data source was then coded "1" if it occurred when a VPSO was present and "0" if it occurred when a VPSO was absent. Subtotals for each violent crime category by the presence or absence of a VPSO were then calculated.

It is important to note that the lack of VPSO coverage does not necessarily mean that the village was entirely without someone who could deal with emergency situations. In many Alaska Native villages, uncertified village and tribal police officers also serve law enforcement and order maintenance roles. Roughly half (49.2 percent) of the VPSOs surveyed in 1998 reported serving in a village where either village police officers or tribal police officers were present (Wood, 2000). These village and tribal police are responsible only to local village or tribal authorities, they typically lack formal training, and they generally serve without any formal recognition by the Alaska Police Standards Council. It is difficult to take into account the effect of their presence upon the amount of reported violence in Alaska Native villages because there are no formal records kept at the state level of the employment or location of these officers. If anything, the presence of village or tribal police during time periods that a village is without a VPSO might be expected to reduce the magnitude of the detrimental effect that VPSO turnover has upon the rates of violent crime.

The rosters of current and formerly serving VPSOs were also used to compute the denominator for calculating offence rates. This involved a process of first counting the number of days each village went without a VPSO over each year, then multiplying that count by the village's year 2000 population, and then summing each year's values for the five-year period to arrive at the number of "person-days" that each village was not served by a VPSO. Villages went without VPSOs for a total of 61,129 person-days between 1998 and 2002. The total of all person-days without a VPSO for all villages included in the analysis was then calculated. The number of person-days that VPSOs were present was computed in the same fashion. VPSOs were in service for a total of 127,973 person-days during the study period.

Only those villages that were served by a VPSO for at least one day over the period 1998–2002 were included in the analysis. Twenty of these villages were served by a VPSO for the entire five-year period. Roughly a third (41 out of 115 villages) were served by a VPSO for less than 913 days (i.e., half of the five-year time frame). For all 115 villages included in the analysis, the average time that a village was without a VPSO was 138 days from the day that one officer left VPSO service to the day that his or her replacement resumed coverage of the village.

The analysis was conducted using the crude-rate comparisons function of the StatsDirect epidemiological statistical program. This function allowed for the use of person-time data in order to compare the rates of two groups having exposures to risk factors that are of different time periods for groups with different population bases. The comparison of the two rates is made in the form of a ratio of the rates of one group (such as villages when there is a VPSO) to the rates of the other group (such as villages when there is not a VPSO) and confidence intervals for the rate ratios are calculated based upon a Poisson distribution (Sahai & Kurshid, 1996).

Results

The results of the rate comparison analysis are presented in table 1. Some of the results support the hypothesis of less violence during periods that villages are served by VPSOs. Other results are in the opposite direction and are indicative of the presence of a VPSO actually increasing the reported rates of violent offences.

There were no statistically significant differences in the rates of reported homicides or the rates of reported sexual assaults when comparing the periods with or without a VPSO present. While the homicide rate during periods of VPSO absence was 1.5 times that of periods of VPSO presence, the rather broad ranging 95 percent confidence interval of the rate ratio (0.8 to 3.0) makes it difficult to be certain that the difference was due to something other than just chance alone. The confidence interval is the range of values within which one can be certain of the true population value as it might be estimated from a much larger study. In the case of making comparisons of rates, the 95 percent confidence interval provides an upper and lower limit on which we could conclude, with 95 percent confidence, what the true rate ratio is. So, for the case of homicide, it is possible to be 95 percent confident that the true ratio of the homicide rate in villages without VPSOs to the homicide rate in villages with VPSOs lies somewhere between 0.8 : 1.0 and 3.0 : 1.0. Or, to put it another way, we are 95 percent confident that the homicide rate of villages without VPSOs was anywhere from 20 percent less to 200 percent more than that of villages with VPSOs. There was no difference in the reported sexual assault rates for villages with or without a VPSO. The hypothesis that villages are safer when a VPSO is present is not supported when rates of homicide and sexual assault are examined.

Table 1. Violent offence rates for residents of Alaska Native villages during time periods with and without VPSO service, 1998 through 2002

Offence and VPSO Service	Number of Offences	Offence Rate (Crimes per 100,000 Person-Years)	Rate Ratio	95 % Confidence Interval
Homicide				
VPSO Absent	17	28	1.5	0.8 to 3.0
VPSO Present	23	18		
Sexual assault				
VPSO Absent	161	263	1.0	0.8 to 1.2
VPSO Present	337	263		
Felony assault				
VPSO Absent	175	286	1.2	1.0 to 1.4
VPSO Present	314	245		
Total violent felonies				
VPSO Absent	353	577	1.1	1.0 to 1.2
VPSO Present	674	526		
Misdemeanour assault				
VPSO Absent	775	1268	0.8	0.7 to 0.9
VPSO Present	1995	1559		

For felony assaults and for the total of all violent felonies we can be reasonably certain that the reported rates for villages without VPSOs were at least as great, if not greater, than those for villages with VPSOs. With a rate ratio of 1.2, we can be 95 percent confident that the rate of felony assault in villages with a VPSO absent was at least the same and could have been as much as 1.4 times higher (i.e., 40 percent higher) than the rate for villages with a VPSO present. The rate ratio for the total of reported violent felonies of 1.1 had a confidence interval that is open to a similar interpretation; we can be 95 percent confident that the rate of reported violent felonies in villages without a VPSO was at least as high and could have been as much as 1.2 times higher (i.e., 20 percent higher) than the rate for villages with a

VPSO. Taken together, these results for felony assault and for the total of all violent felonies seem to indicate that villages are just as safe, if not safer, when VPSOs are present as they are when VPSOs are absent.

The rate ratio for reported misdemeanour assaults is opposite of what would be expected. It was actually 20 percent higher when villages had VPSOs than when villages were without VPSOs. We can be 95 percent confident that the reported misdemeanour assault rates of villages without VPSOs were somewhere between 0.7 to 0.9 times (or 70 to 90 percent) those of villages with VPSOs.

Discussion and Conclusion

There were 115 Alaska Native villages that were served by the VPSO program at one time or another between the years 1998 through 2002. During that period there were no differences in the rates of reported sexual assaults or homicides when comparing villages with VPSOs to villages without VPSOs. The reported rates of felony assault and rates of total reported violent felonies were at least as high, if not higher, in villages without VPSOs as compared to villages with VPSOs. Contrary to expectations, the rates of reported misdemeanour assault were actually lower in villages without VPSOs than in villages with VPSOs. Given these mixed results, it is difficult to state with any certainty that Alaska Native villages are worse off because of VPSO turnover.

The interpretation of the differences in rates is confounded by a couple of factors. First of all, it is possible that the rates of violence recorded in the state troopers' calls for service / incidents database are biased by the effects that VPSO absence has upon the ability of Alaska Native village residents to report crimes of violence. Without a local authority to report offences to, the number of crimes that eventually make it to the troopers' records from villages without VPSO service could be smaller than the number of offences that actually occur. This is one possible reason why the rates of misdemeanour assault were higher during periods of VPSO presence in a village. The other factor complicating any interpretation of the rates presented in this article is the limited responsibilities delegated to VPSOs. With few exceptions, VPSOs are not allowed to investigate felonies and are instead limited to dealing only with misdemeanour cases. It is possible that assault cases with questionable levels of harm (i.e., those assaults that could be categorized as being either misdemeanours or felonies) occurring in villages with VPSOs could be more likely to be classified as misdemeanours because doing so would save the state troopers the time and expense of travelling by air to deal with a case.

Likewise, if a state trooper is required to travel to respond to an assault case with a questionable level of harm in a VPSO-less village, he or she could be more likely to classify the case as felony assault to justify the resources required to deal with the case. Ultimately, the violent offences recorded in the Alaska State Troopers' calls for service / incidents database and used in the analysis presented above should be viewed as a product of both the actual criminal acts and the presence of local village authorities who can receive reports of those acts and respond to those acts with legal authority.

In order to gain a clearer picture of the effect of VPSO turnover upon the safety of Alaska Native village residents, it might be necessary to consider alternative data sources that are not susceptible to reporting and classification biases. One alternative is to consider a much longer time series of homicide cases across many more years than the five considered in this analysis because homicide is an offence that almost always comes to the attention of the police. Another possible alternative data source, the Alaska Trauma Registry, provides statewide measures of accidental and intentional injuries resulting in hospitalization and/or fatality (Kilkenny, Moore, Simonsen & Johnson, 1992). In one sense, it might be preferable to use information from the Alaska Trauma Registry to consider the effects of VPSO turnover because it covers not only injuries and deaths resulting from assault but also those resulting from accidents, drowning, and fires. By considering all sorts of traumatic injury, it will be possible to examine the broader value of the VPSO program in terms of all of the officer's responsibilities instead of only focusing upon one aspect of their duties.

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Notes

1. Under Alaskan criminal law (as well as in most of the other forty-nine states), felonies are the most serious offences that are punishable by a sentence of incarceration of one year or more. All other criminal offences are classified as misdemeanours, which are punishable by a sentence of incarceration of a period of less than one year.
2. A few Alaska Native villages, particularly those located in the North Slope Borough, are policed by APSC certified agencies.
3. The Village Public Safety Officer Program is established under Alaska Statute § 18.65.670. It is a supplement to the police services provided by the Alaska State Troopers (AST) to isolated villages [Alaska Inter-Tribal Council v. State, 110 P.3d 947 (Alaska 2005) at 964]. In their supplementary role, VPSOs are directed by AST to investigate misdemeanours but generally are not allowed to investigate felonies. VPSOs are prohibited from carrying firearms [13 AAC 96.040(8) (2002)] and are instructed by state troopers not to confront armed offenders. Although VPSOs are classified as “peace officers” [Alaska Statute § 01.10.060(a)(7)(c)], they are not recognized as “police officers” under state law because they are not full-time employees of a state or municipal police department [as required by Alaska Statute § 18.65.290(7)] but are instead employed by one of six Alaska Native regional non-profit social service corporations. Furthermore, the training received by VPSOs does not meet the minimum standards for employment as a police officer put forth by the Alaska Police Standards Council under Alaska Statute § 18.65.220(2).
4. These rates were calculated as the proportion of VPSOs leaving the position in a given year to the total number of VPSOs serving in a year. For example, if one hundred VPSOs served at any time during a year and twenty-five VPSOs quit or were fired during that year, the proportion of VPSOs leaving the position in a given year to the total number of VPSOs serving in a year would be 25 to 100 or a turnover rate of 25 percent. This is the more conservative method of calculating turnover rates. The turnover rates are much higher when they are calculated as the proportion of VPSOs leaving the position in a given year to the total number of VPSO positions in a given year. For example, if there are seventy-five VPSO positions around the state in a given year and twenty-five VPSOs quit or were fired during that year, the proportion of VPSOs leaving the position in a given year to the total number of positions would be 25 to 75 or a turnover rate of 33 percent. Use of this latter measure results in an average turnover rate of 55 percent for the years 1983 through 1997 that ranged between a low of 34 percent in 1994 to a high of 72 percent in 1992 (Wood, 2000).
5. In 1997 it was estimated that it cost about \$6,200 to hire, train, and equip each new VPSO (Wood, 2000).
6. Of course, the outcomes of police strikes are not created equal. Riots and general lawlessness did erupt during police strikes in Boston in 1919 and in Montreal in 1969.

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