

Alaska Justice Statistical Analysis Center  
University of Alaska Anchorage Justice Center

# Alaska Justice Statistical Analysis Center Fact Sheet

December 2012, AJSAC #12-01

## Firearm Use in Violent Crime in the U.S. and Alaska, 1980-2011

Brad A. Myrstol, Ph.D., *AJSAC Director*

**Murder rates in the U.S.** Figures 1 through Figure 3 present data extracted from the Federal Bureau of Investigation's *Crime in the United States* reports for the years 1980 through 2011. 2011 marked the sixth consecutive year of decline in the U.S. murder rate. Since 2005 the rate of murders and non-negligent manslaughter reported to law enforcement agencies has dropped 20 percent, from an estimated rate of 5.9 per 100,000 population to an estimated 4.7 per 100,000. For the 32-year period spanning 1980 to 2011, the murder rate has fallen by 55 percent, making the 2011 estimate less than half that in 1980 (see Figure 1).

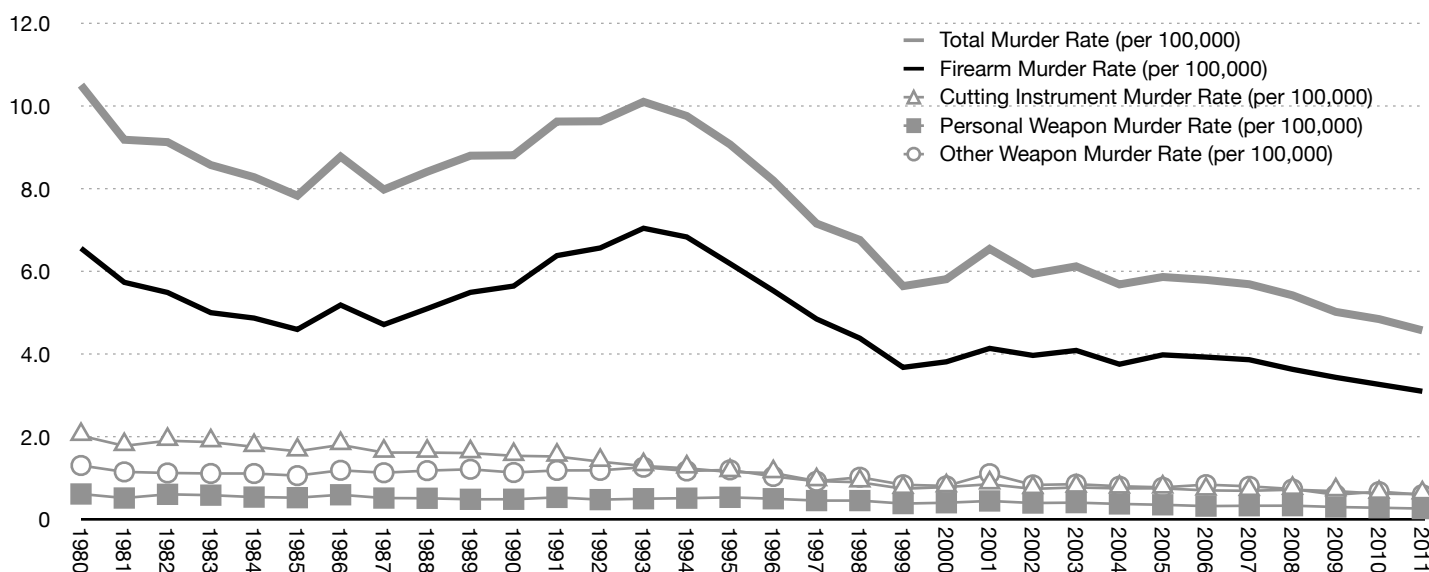
Figure 1 presents trend data on the total murder rate, as well each of the four categories of weapon use recorded by the Federal Bureau of Investigation as part of its *Uniform Crime Reporting* program: murders committed with a firearm, with a knife or other cutting instrument, with hands, fists, feet or other form of physical force ("personal weapons"), and other weapons.

Since 1980, murder rates have declined for all weapon types. The largest drop over this time period was for murders in which a knife or other cutting instrument was used (-70%), followed by other weapons (-54%), firearms (-53%), and finally murders committed with personal weapons (-50%).

**FIGURE 1.**

**Total murder, firearm murder, cutting instrument murder, personal weapon murder, and other weapon murder 1980-2011: United States.**

Rate per 100,000 population



Source: U.S. Department of Justice, Federal Bureau of Investigation (1981-2012). *Crime in the United States*. Washington, D.C.

**Firearm use in U.S. murders.** The majority of all murders reported to U.S. law enforcement officials involved the use of a firearm (see Figure 2). On average, between 1980 and 2011 firearms were implicated in an estimated 64.9 percent of murders in the U.S. The highest proportion of murders committed with a firearm occurred in 1994 (70%).

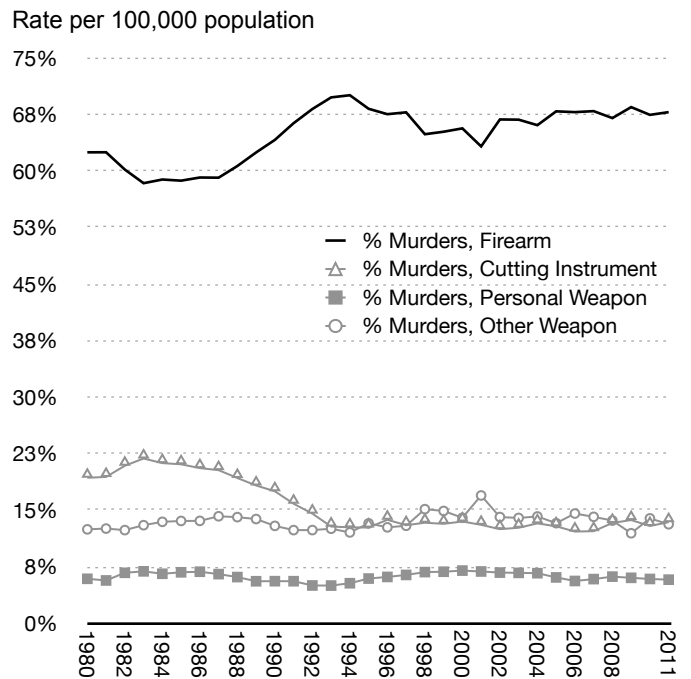
While the firearm murder rate dropped between 1980 and 2011, the probability that a murder was committed using a firearm increased from 62.4 percent in 1980 to 67.8 percent in 2011. The percentage of murders committed with a firearm increased markedly between 1987 and 1994, followed by a downturn in 1995. By 1998, the percentage of murders involving a firearm resumed the historical trend, steadily increasing through 2011.

In contrast, the percentage of murders committed with a knife or other cutting instrument declined between 1980 and 2011. Overall, the percentage of murders attributable to the use of a personal weapon, as well as the percentage of murders in which some other weapon was used, remained stable during this period.

Figure 3 presents both the overall murder rate in the U.S. (grey bars, left scale), as well as the percentage of murders in which a firearm was used (black line, right scale). The dashed line represents the “best fit” regression line depicting the linear increase in the percentage of murders involving a firearm from 1980 to 2011.

**Murder rates in Alaska.** Figures 4 through Figure 9 present data extracted from the Alaska Department of Public Safety’s *Crime in Alaska* reports for the years 1980 through 2011. Figure 4

**FIGURE 2.** Percentage of murders committed with firearm, cutting instrument, personal weapon, or other weapon 1980-2011: United States.

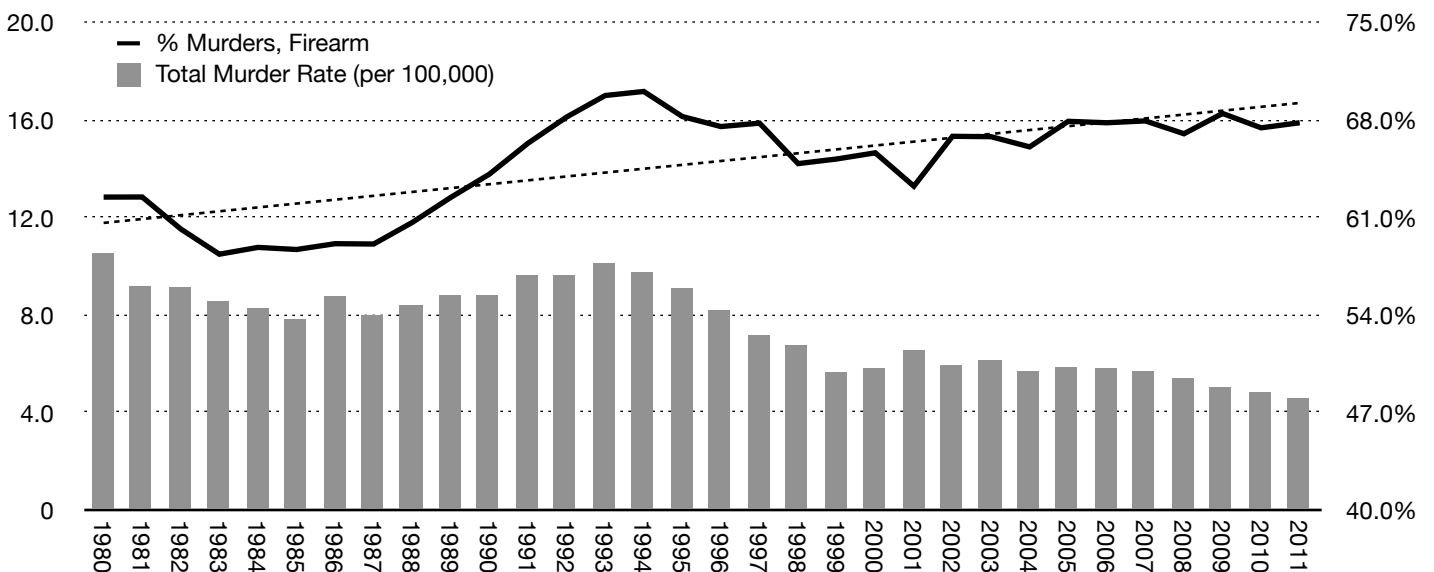


Source: U.S. Department of Justice, Federal Bureau of Investigation (1981-2012). *Crime in the United States*. Washington, D.C.

and Figure 5 present data on murders and non-negligent manslaughter, Figure 6 and Figure 7 present data on aggravated assaults, and Figure 8 and Figure 9 present data on robberies.

Like the murder rate for the nation as a whole, the Alaska murder rate has undergone a dramatic decline since 1980 (see Figure 4). For the period 1980-1988 the murder rate in Alaska was higher

**FIGURE 3.** Total murder rate (per 100,000 population) and percentage of murders committed with a firearm 1980-2011: United States.



Source: U.S. Department of Justice, Federal Bureau of Investigation (1981-2012). *Crime in the United States*. Washington, D.C.

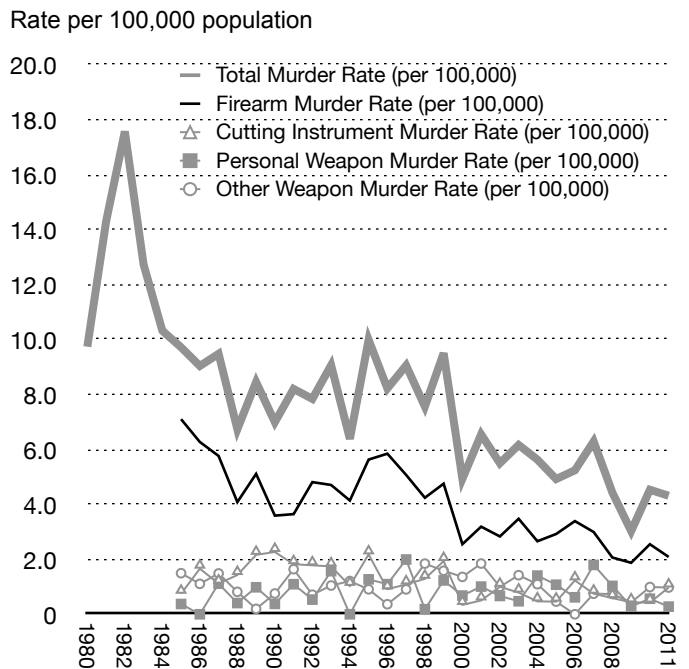
than the national average, peaking at 17.6 per 100,000 in 1982, while the murder rate for the U.S. as a whole was estimated to be 9.1 per 100,000. Beginning in 1989, however, the per-capita volume of murders in Alaska closely approximated the downward national trend.

**Firearm use in Alaska murders.** The rate of murders committed with a firearm have declined as well, paralleling the drop in Alaska's overall murder rate. The state's rate of murder involving the use of personal or other weapons also declined between 1980 and 2011 (35% and 33% reductions, respectively). The rate of murders in which a knife or other cutting instrument was used increased by more than 40 percent, from 0.7 per 100,000 in 1980 to 1.0 per 100,000 in 2011. (Note: Information pertaining to weapon use in murders were not published in *Crime in Alaska* reports prior to 1985.)

Proportionally, murders in Alaska during the 1985-2011 period were less likely to be committed with a firearm (56.6%) than the nation as a whole (65.7%) (see Figure 5). The highest proportion of murders committed with a firearm in the state of Alaska occurred in 1985 (73%). Alaska also differed from the nation as a whole with respect to the overall trend of firearm involvement in murder and non-negligent manslaughter. Whereas the percentage of murders committed with a firearm increased between 1980 and 2011 for the nation as a whole, the probability that a murder resulted from the use of a firearm declined in Alaska over the same period (see Figure 5).

**Firearm use in Alaska aggravated assaults.** Figure 6 and Figure 7 present data on aggravated assaults reported to Alaska law enforcement

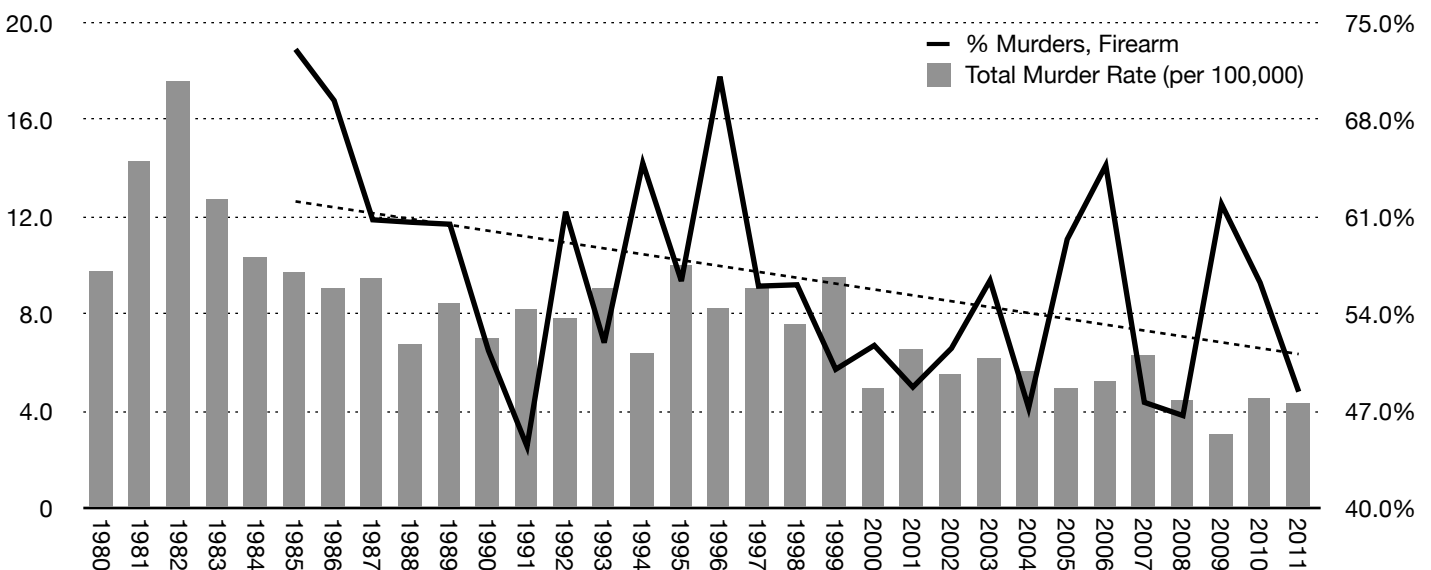
**FIGURE 4.** Total murder, firearm murder, cutting instrument murder, personal weapon murder, and other weapon murder 1980-2011: Alaska.



Source: Alaska Department of Public Safety, Criminal Records & Identification Bureau (1981-2012). *Crime in Alaska*. Juneau, AK.

agencies for the period 1980-2011. Unlike murder and non-negligent manslaughter, the rate of aggravated assaults in Alaska has increased, from 329.5 per 100,000 in 1980 to 466.5 per 100,000 in 2011 (+41%) (see Figure 6). With respect to weapon use, rates of aggravated assault perpetrated with cutting instruments (39%), personal weapons (40%), and other weapons (143%) increased between 1980

**FIGURE 5.** Total murder rate (per 100,000 population) and percentage of murders committed with a firearm 1980-2011: Alaska.



Source: Alaska Department of Public Safety, Criminal Records & Identification Bureau (1981-2012). *Crime in Alaska*. Juneau, AK.

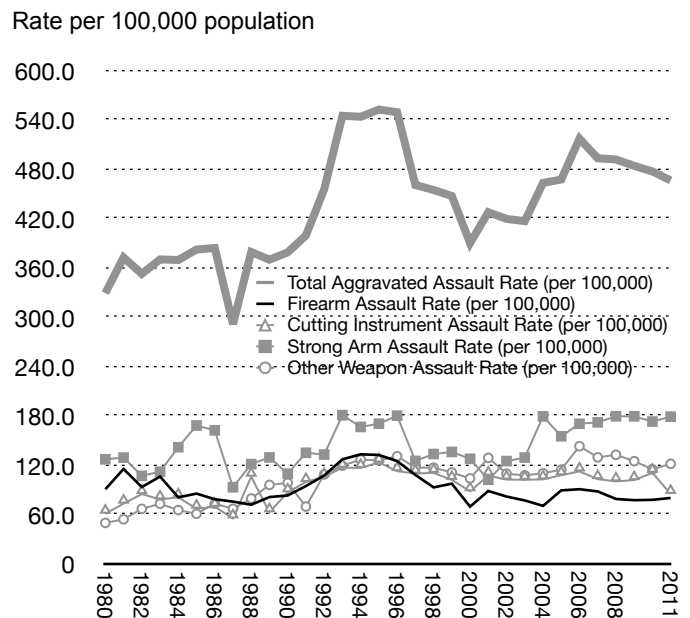
and 2011. However, the use of firearms in aggravated assaults declined during the period, from 90.9 per 100,000 in 1980 to 80.3 per 100,000 in 2011. Since peaking in 1994 at 133.4 per 100,000, the rate of aggravated assaults involving firearms has declined by nearly 40 percent.

In addition to a decline in the total volume of aggravated assaults involving firearms, Alaska has also experienced a decline in the percentage of aggravated assaults committed with firearms. Between 1980 and 2011, the percentage of aggravated assaults committed with a firearm decreased from 27 percent to 17.2 percent (see Figure 7). Thus, while the population risk for aggravated assault increased from 1980 to 2011, the probability that an aggravated assault would be perpetrated with a firearm decreased.

**Firearm use in Alaska robberies.** Figure 8 and Figure 9 present data on robberies known to Alaska law enforcement agencies for the period 1980-2011. Alaska experienced a 10 percent decline in its robbery rate since 1980, from an estimated 89.9 per 100,000 to 80.2 per 100,000 (see Figure 8). The highest robbery rate during the 1980-2011 period was observed in 1995 (166.8 per 100,000). Since then, the robbery rate in Alaska has been halved.

Robbery rates declined for three of the four weapon categories as well. Robberies using a firearm dropped from 36.2 per 100,000 in 1980 to 18.1 per 100,000 in 2011, robberies committed with a knife or other cutting instrument fell from 9.0 per 100,000 to 6.4 per 100,000, and robberies with other weapons declined from 7.5 per 100,000 to 6.1 per 100,000. Strong-arm robbery rates (robberies in which the perpetrator(s) used hand, fist, feet, or

**FIGURE 6.** Total aggravated assault, firearm aggravated assault, cutting instrument aggravated assault, personal weapon aggravated assault, and other weapon aggravated assault 1980-2011: Alaska.

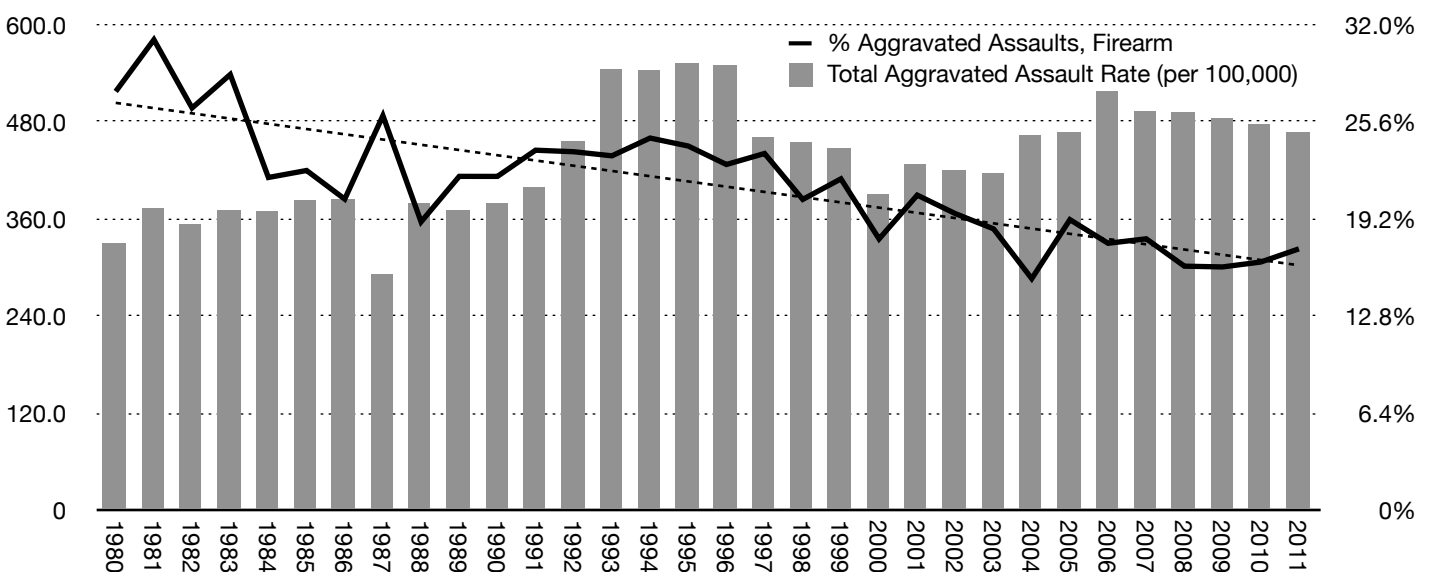


Source: Alaska Department of Public Safety, Criminal Records & Identification Bureau (1981-2012). *Crime in Alaska*. Juneau, AK.

other physical force) increased between 1980 and 2011, however. In 1980, the rate of strong-arm robberies was an estimated 37.2 per 100,000; by 2011, the strong-arm robbery rate increased to 49.6 per 100,000.

As with murders and aggravated assaults, not only did the prevalence of robberies decline between 1980 and 2011, so too did the probability that the

**FIGURE 7.** Total aggravated assault rate (per 100,000 population) and percentage of aggravated assaults committed with a firearm 1980-2011: Alaska.



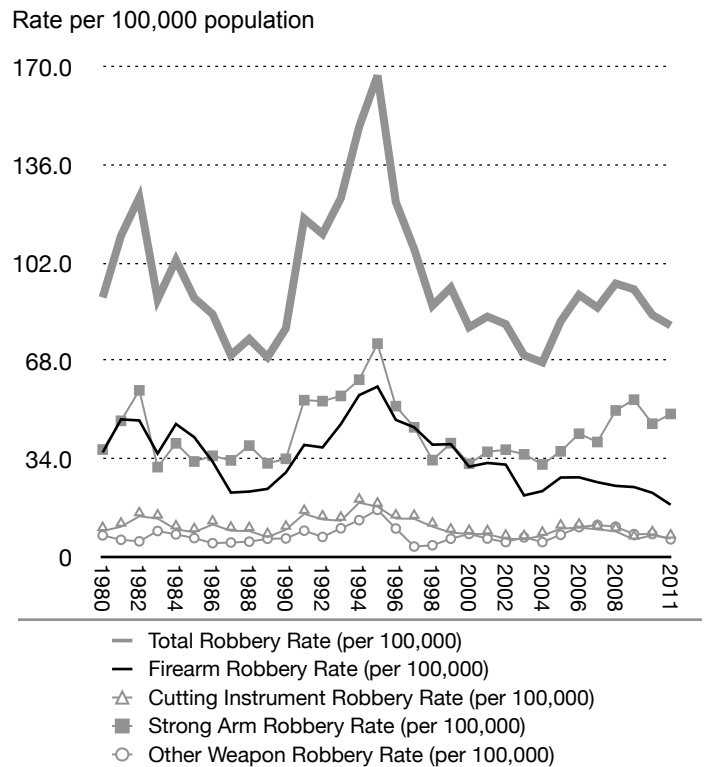
Source: Alaska Department of Public Safety, Criminal Records & Identification Bureau (1981-2012). *Crime in Alaska*. Juneau, AK.

weapon used in a robbery was a firearm (see Figure 9). Overall, the percentage of robberies committed with a firearm dropped by nearly 44 percent, from 40.3 per 100,000 in 1980 to 22.6 in 2011. Reductions also occurred for robberies involving cutting instruments (-20%) and other weapons (-8%). The proportion of robberies in which strong arm methods were used increased during the 1980-2011 period (+49%).

**Summary.** This Fact Sheet presented UCR data for the period 1980-2011 for the U.S. and the State of Alaska. Since 1980, the U.S. murder rate has declined markedly. In 2011, the national murder rate was less than half the 1980 estimate. Furthermore, the per-capita volume of murders committed with a firearm also declined in the U.S. between 1980 and 2011. Despite the decline in the firearm murder rate, a majority of the murders reported to American law enforcement officials continue to be committed with firearms. Furthermore, on a national basis the likelihood that a firearm is used in the commission of a murder has steadily increased.

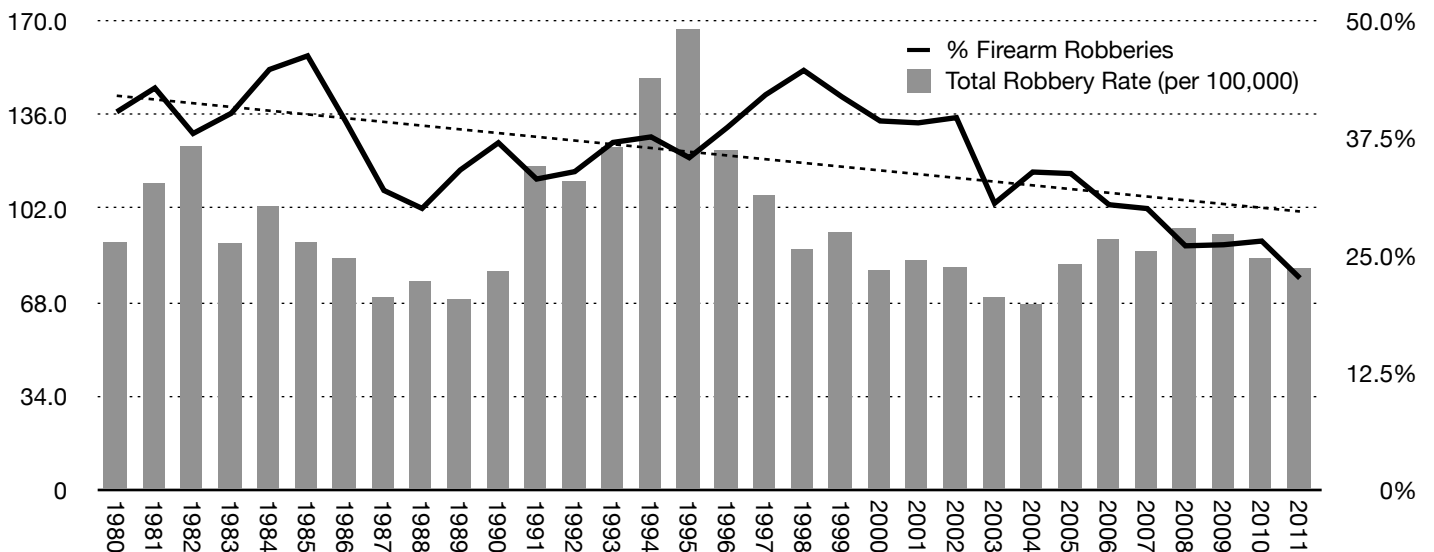
Like the nation as a whole, Alaska also experienced a sizable reduction in the prevalence of murder and non-negligent manslaughter, as well as murders in which a firearm was used during the 1980-2011 period. Alaska differed from the national data, however, with respect to the percentage of homicides committed with firearms. While the probability that a firearm was used in the commission of a murder in the nation as a whole increased, in Alaska the likelihood that a firearm was the weapon used in a murder declined significantly. This declining trend in firearm use also held for other forms of violent crime - namely aggravated assault and robbery.

**FIGURE 8.** Total robbery, firearm robbery, cutting instrument robbery, personal weapon robbery, and other weapon robbery 1980-2011: Alaska.



Source: Alaska Department of Public Safety, Criminal Records & Identification Bureau (1981-2012). *Crime in Alaska*. Juneau, AK.

**FIGURE 9.** Total robbery rate (per 100,000 population) and percentage of robberies committed with a firearm 1980-2011: Alaska.



Source: Alaska Department of Public Safety, Criminal Records & Identification Bureau (1981-2012). *Crime in Alaska*. Juneau, AK.

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## Notes

### Crime Definitions

**Murder/Non-negligent manslaughter.** The willful (non-negligent) killing of one human by another. Classification of this offense is made by police and is not the result of a court, coroner, medical examiner, jury or other judicial body.

**Aggravated assault.** An unlawful attack by one person upon another for the purposes of inflicting severe or aggravated bodily injury. This offense typically involves the use of a weapon likely to produce death or serious physical injury. Attempts involving the use of a gun, knife, or other weapon are included in this classification.

**Robbery.** The taking, or attempted taking, of anything of value from the care, custody, or control of a person or persons by force, or threat of force, or violence and/or by putting the victim in fear.

### Weapon Classifications

**Firearm.** A firearm is used as a weapon or employed as a means of force to threaten the victim or put the victim in fear.

**Knife or cutting instrument.** A knife, broken bottle, razor, ice pick, or other cutting or stabbing instrument is used or threatened.

**Personal weapons/strong-arm.** Only personal weapons such as hands, arms, feet, fists, and teeth are used or threatened.

**Other dangerous weapon.** A club, acid, explosive, brass knuckles, Mace, pepper spray, or other dangerous weapon is employed or its use is threatened.

### Uniform Crime Reports

First initiated by the Federal Bureau of Investigation in 1930 to measure the volume of crime in the United States, the Uniform Crime Reporting (UCR) program collects monthly information from nearly 18,000 law enforcement agencies on eight serious crimes (called Part I offenses) and more than twenty less serious offenses (called Part II offenses). Part I offenses include four violent crimes (murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault) and four property crimes (burglary, larceny-theft, motor vehicle theft, and arson). These eight offenses are the most frequently cited crimes statistics in the United States.

The primary objective of the UCR program is to produce reliable data on crime for use in law enforcement administration, operation, and management. UCR data are not intended to be used to rank agencies or the jurisdictions in which they are located, and thus UCR data should not be used to designate American cities, counties, or other jurisdictions as “safe” or “dangerous” in the absence of careful consideration of the limitations of these data.

### UCR in Alaska

Since 1982 the Alaska Department of Public Safety (DPS), Division of Administrative Services, has administered the UCR program for the State of Alaska. The Division of Administrative Services collects, tabulates, reports, and publishes UCR data voluntarily submitted by Alaska law enforcement agencies. As is the case nationally, submitting agencies retain responsibility for the accuracy of the data. Because the UCR is a voluntary program, the number of agencies reporting data to DPS varies from year to year. As of 2011, 34 agencies provided crime data to DPS. An estimated 99.4 percent of the state’s total population fell within the jurisdiction of the submitting agencies.

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# The Alaska Justice Statistical Analysis Center

## About

The Alaska Justice Statistical Analysis Center (AJSAC) was established by Administrative Order No. 89, signed by Governor Sheffield on July 2, 1986. Since then the AJSAC has been housed within the University of Alaska Anchorage Justice Center. The AJSAC assists Alaska criminal justice agencies, as well as state and local governments and officials, with the development, implementation, and evaluation of criminal justice programs and policies through the collection, analysis, and reporting of crime and justice statistics.

Since 1972, the Bureau of Justice Statistics (BJS) and its predecessor agency, the National Criminal Justice Information and Statistics Service, has provided support to state and territorial governments to establish and operate Statistical Analysis Centers (SACs) to collect, analyze, and report statistics on crime and justice to federal, state, and local levels of government, and to share state-level information nationally. There are currently 53 SACs located in the United States and its Territories. The AJSAC is a member of the Justice Research and Statistics Association (JRSA), a national nonprofit organization comprised of SAC directors, researchers, and practitioners dedicated to policy-oriented research and analysis.

## Contact Information

### Location

The Alaska Justice Statistical Analysis Center (AJSAC) is housed in the University of Alaska Anchorage Justice Center, which is located on the second floor of the UAA/APU Consortium Library, Suite 213.

### Mailing Address

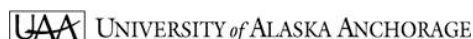
Alaska Justice Statistical Analysis Center  
University of Alaska Anchorage  
3211 Providence Drive, LIB 213  
Anchorage, Alaska 99508

### Phone/Email

Brad A. Myrstol, Ph.D.  
AJSAC Director  
(907) 786-1837  
bmyrstol@uaa.alaska.edu

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To learn more about the AJSAC research, please visit our website at: <http://www.uaa.alaska.edu/ajsac/>



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