

## Center for the Analysis of Crime Statistics

# State Data Brief

July 2009. CACS 2009-01-01EN

# Arson Trends in Nevada, 1997-2006

By Courtney B. LaHaie,  
Terance D. Miethe, Ph.D.,  
and Timothy C. Hart, Ph.D.

Arson is defined under Nevada law (NRS 205.005), as setting fire to a building, structure or property when any part is scorched, charred, or burned. These deliberate acts of setting fires have become a serious social problem in the United States. Nationally, nearly 66,000 arsons were reported to law enforcement agencies in 2006 (UCR, 2006).

Arson results in significant property loss and damage, but it can also lead to physical injuries and death. The investigation and prevention of arson involves the cooperation of various agencies in the criminal justice system, including the federal government and the fire service. Although the national rates of arson have generally declined over the last decade (Figure 1), arson is the leading cause of fires and is a cause of death for many people in this country (U.S. Fire Administration, 2001).

This state data brief describes patterns of arson in Nevada and compares them with national trends. It examines questions about the prevalence of arson, the type of property and estimated value of losses in these offenses, and arrest characteristics for this crime. The limitations of the data and this study are also discussed.

## The Prevalence of Arson

The FBI's *Uniform Crime Reports* (UCR) are the most comprehensive source for national and state-level data on arson. Based on UCR data for 1997 through 2006, there were 724,000 arsons known to the police nationally, and a total of 8,000 reported arsons in Nevada over this same time period. Figure 1 displays the arson rate per 100,000 population in Nevada and nationwide.

## Highlights

- Nearly 724,000 arson offenses were reported to the police in the U.S. between 1997 and 2006. An estimated 8,000 of these arsons occurred in Nevada in this time period.
- Nevada's arson rate in 2006 was 31 per 100,000 population, and slightly above the national average for this time period. Nevada's arson rate has been relatively stable over the last decade.
- The most common type of arson in Nevada involves damage to mobile property (46%) and structural property (35%).
- In Nevada, the total estimated dollar value loss from arson in 2006 was nearly \$13 million. The average dollar loss for each incident of non-residential arson was \$36,000.
- Males and juveniles represent the demographic groups that are most often arrested for arson.

National and Nevada Arson Rates, 1997-2006.

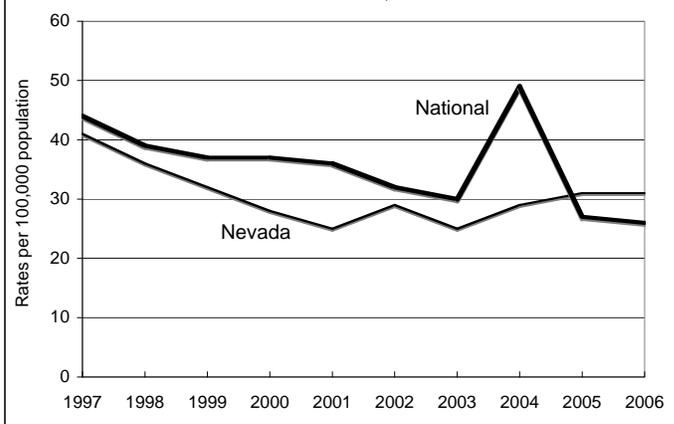


Figure 1

The arson rate in Nevada has remained relatively stable over the last decade. It decreased somewhat from 1997 to 2001, but has hovered around 30 offenses per 100,000 population from 2002 to 2006. The national trend is similar, with the major exception of a dramatic rise in the arson rate in 2004.

### Characteristics of Arson Offenses

The *Uniform Crime Report* classifies arson into three property categories: structural, mobile, and other. The structural property type includes all structures, both residential and non-residential. The mobile property category includes cars, trailers, boats and other methods of transportation. All other forms of property (e.g., crops, fields, signs) are included in the “other” category.

National data (UCR, 2006) indicate that the highest proportion of arson offenses involve structural damage (42%), with a lower rate for mobile property (28%) and “other” property (30%) (Table 1). The proportion of arsons within these categories has not changed over the last decade.

	National		Nevada	
	Proportion of Offenses	Value of Loss	Proportion of Offenses	Value of Loss
Structural	42%	\$656 million	35%	\$9.4 million
Mobile	28%	\$124 million	46%	\$2.9 million
Other	30%	\$36 million	19%	\$460,000

Source: *Uniform Crime Reports* (UCR), 2006.

Nationally, arsons known to the police resulted in value loss of slightly more than \$816 million in 2006. Arsons of non-residential structures resulted in an average \$67,000 value loss, the highest average dollar loss among the categories for arson offenses.

Based on state-level data for this same time period, Nevada’s distribution of arsons across categories is different than national trends. In particular, the most common type of arson in Nevada involves mobile property (46%), followed by structural property (35%). Similar to the national patterns, the prevalence of arson offenses within these categories has not changed within Nevada over the last 10 years. Nearly \$13 million is the estimated dollar value loss from Nevada’s arsons in 2006. The greatest dollar value

loss in Nevada involves arsons that result in structural damage to non-residential buildings (e.g., businesses, hotels, casinos). The average dollar loss for non-residential structures was estimated at \$36,000.

### Arson Arrest Patterns

A total of 157 arson-related arrests occurred in Nevada in 2006. The majority of these arrests took place in Clark County (55%) and the next most prevalent location was Washoe County (16%). When the number of arson arrests for Nevada counties are compared over time, we find that arson-related arrest rates in Clark County have generally increased since 1997, but these arrest trends have been more stable over time in the other Nevada counties (Figure 2).

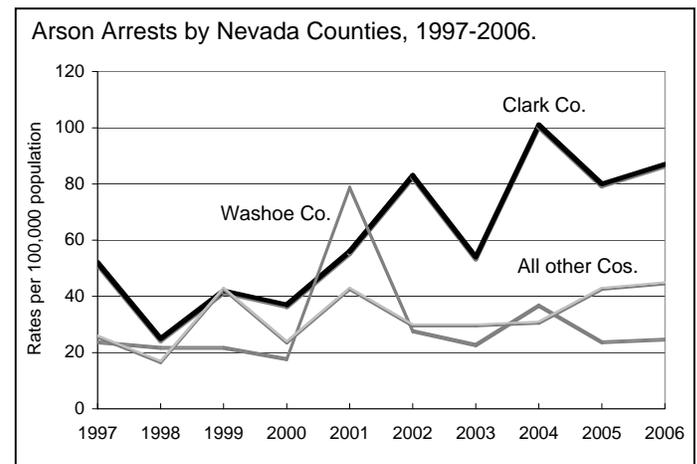


Figure 2

Several additional patterns are revealed from the examination of arson arrests. First, only about 20% of all arsons in Nevada known to the police in 2006 were cleared by an arrest (i.e., suspect(s) were identified and taken into custody). The clearance rate for arsons across the U.S. in 2006 was similar (18%). Second, the vast majority of arrested arsonists are males. Males represented about 80% of these arrestees in Nevada in 2006. Third, about two-thirds of Nevada’s arrestees for arson were juveniles, aged 17 or younger. Both the gender and typical age of persons arrested for arson in Nevada are similar to national trends (see UCR, 2007; U.S. Fire Administration, 2001).

---

## Data Sources and Limitations

The primary source of data for this brief was the Federal Bureau of Investigation's *Uniform Crime Reports* (UCR). These data represent only crimes that are known to law enforcement and reported from state agencies to the federal government. Additional data was utilized from the U.S. Fire Administration report of *Arson in the United States* (2001).

UCR data are limited in several ways as a source for estimating the prevalence of arson and its characteristics. For example, these data include only "known" offenses that have been designated as arsons by criminal justice officials. If different agencies use slightly different procedures for classifying these crimes, the estimates of arson and its characteristics will be distorted. UCR protocol also dictates the use of the hierarchical rule for counting only the most serious offense in a multi-offense incident. Under this rule, arsons that result in serious injury or death would be counted only as aggravated assaults or homicides—they would not be counted as arson offenses. Furthermore, because only about one-fifth of arsons are cleared by an arrest, it is important to exercise some caution in terms of interpreting the demographic profile of arsonists that derive solely from arrest reports. Thus, while UCR data are the most comprehensive data available on arson, these data should be considered at best as only estimates of the prevalence and nature of arsons that are known to the police.

## State Data Brief Project

As independent research projects, faculty and graduate students in UNLV's Department of Criminal Justice write research reports on major issues in criminal justice in Nevada. These "State Data Briefs" are statistical summaries of various criminal justice system practices in Nevada over time and highlight differences between Nevada and other states. These reports cover all aspects of the criminal justice system, including trends in crime and arrests, police practices, prosecution and pretrial activities, adjudication and sentencing, and corrections.

The data briefs are short in length (2-4 pages), provide several graphs and charts of statewide and national patterns, and are written in an easily readable, non-technical style. They are designed to provide members of the general public, local officials,

community organizations, and media outlets a concise and objective statistical profile of current criminal justice practices in Nevada that may serve as a foundation for informed discussions of future crime control policies and practices.

## References

Nevada Department of Public Safety. *Crime and Justice in Nevada, 1996-2006*. Retrieved (February 6, 2009), from <http://www.nvrepository.state.nv.us/crimejustice.shtml>

United States Department of Justice, Federal Bureau of Investigation. *Crime in the United States, 1996-2007*. Retrieved (February 6, 2009), from <http://www.fbi.gov/ucr/>

U.S. Fire Administration (2001). *Arson in the United States. Topical Fire Research Series, 1(8)*. Retrieved (February 7, 2009), from <http://www.usfa.dhs.gov/downloads/pdf/tfrs/v1i8-508.pdf>

## Contact Information

Questions or comments about the information contained in this report, data used to generate this report, or about other resources available related to this topic should be address to:

Terance D. Miethe, Ph.D.  
State Data Brief Project Coordinator  
Center for the Analysis of Crime Statistics  
University of Nevada Las Vegas  
4505 Maryland Parkway - Box 5009  
Las Vegas, NV 89154-5009

(B)702-895-0236  
(F)702-895-0252