Semiautomatic Assault Weapons Ban

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Summary

The 10-year ban on the manufacture, transfer or possession of “semiautomatic assault weapons” (SAWs) and “large capacity ammunition feeding devices” (LCAFDs) expired on September 13, 2004. In statute, “SAWs” were defined in two ways. First, certain firearms were defined as SAWs by make and model. Second, other firearms were defined as SAWs, if they included specified features. For example, a rifle was defined as a SAW if it was able to accept a detachable magazine and included at least two of the following features: (1) a folding/telescoping stock; (2) a protruding pistol grip; (3) a bayonet mount; (4) a muzzle flash suppressor or threaded barrel capable of accepting such a device; or (5) a grenade launcher. There were similar definitions for pistols and shotguns. Bills were introduced to extend the ban (S. 2190, S. 2498), make it permanent (S. 1034), or expand it to include other “military style” firearms (H.R. 2038/S. 1431).

A key consideration for Congress is whether violent gun crimes, particularly crimes involving multiple gunshot victims and gunshot wounds per victim, were reduced by the ban. Proponents of the ban maintain that firearm trace data strongly suggest that the use of SAWs in crime had declined since the ban took effect. Opponents of the ban contend that firearm trace data are unreliable indicators of criminal gun use based on statements by federal agencies and leading researchers. Proponents also cite data on law enforcement officers killed with firearms, which suggest that SAWs and other similar firearms have been used to kill a significant number of law enforcement officers. Opponents of the ban note that it is not possible to determine precisely whether these firearms were SAWs, nor is it known to what extent these firearms contributed to the ability of the criminals to outgun the police.

Proponents of the ban argue that assault weapons should be prohibited, because they were designed for military purposes; are firearms of choice for criminals; and are not suitable for hunting, competitive shooting, or self-defense. They assert that these weapons include all the “military features” that increase capacity and ease of firing. They underscore that the impetus for the ban was several mass murders committed with SAWs, and that these firearms are disproportionately—given their small numbers—used in crimes involving multiple shots fired, multiple victims, multiple gunshot wounds per victim, and police officers as victims. They note that, despite several legal challenges, the ban was upheld as constitutional by federal courts.

Opponents of the ban argue that SAWs were not designed for or used by military forces and that large numbers of law abiding gun owners use SAWs for self-defense, marksmanship, and hunting. They contend that SAWs are functionally no different from other semiautomatic firearms in that they fire only one round per pull of the trigger and that the statutorily defined features of a SAW were largely cosmetic. They also cite federal, state, and local data sources that suggest that SAWs have been used in a small fraction of violent crimes before and after the ban. They view the ban as part of a progressive intrusion on the right of citizens to own firearms. As noted above, the ban expired on September 13, 2004. This report will not be updated.
Contents

Introduction ..................................................................................................................................... 1
  1994 SAW-LCAFD Ban............................................................................................................ 1
  Data on SAWs and LCAFDs ................................................................................................. 1
    ATF Firearm Trace Data .................................................................................................. 2
    Firearm Recoveries in Selected Cities ........................................................................... 2
    Law Enforcement Officers Killed in the Line of Duty .................................................. 3
  Arguments For and Against the Ban ..................................................................................... 3

Background ..................................................................................................................................... 4
  What Is an Assault Weapon? ............................................................................................... 4
  Military Assault Rifles ......................................................................................................... 4
  Civilian Semiautomatic Assault Weapons ......................................................................... 5

1994 Semiautomatic Assault Weapons Ban ......................................................................... 6
  Previous Legislative Action ................................................................................................. 6
  Semiautomatic Assault Weapons (SAWs)........................................................................... 7
  Large Capacity Ammunition Feeding Devices (LCAFDs) ................................................ 8
  Exemptions to the SAW-LCAFD Ban ................................................................................ 8
  Firearm Design Modifications and Import Bans .............................................................. 8
  1997 SAW Ban Impact Study ............................................................................................. 9

Firearm Trace Data and Semiautomatic Assault Weapons .................................................. 10
  Data Sources and Limitations ........................................................................................... 10
  ATF Trace Data ................................................................................................................ 12
  Feinstein/Schumer Press Release and ATF White Paper .................................................... 13
  Brady Center Report and Violence Policy Center Reports ............................................. 14
    Total Firearm and SAW Traces ..................................................................................... 14
    VPC Commentary ......................................................................................................... 15
    SAW and Copycat Firearm Traces ............................................................................... 17
    SAW, Copycat, and Selected Other Firearm Trace Data ................................................ 17
  2004 Updated SAW Ban Impact Study ............................................................................. 18
    Firearm Trace Data ....................................................................................................... 20
    Firearm Recovery Data .................................................................................................. 20
    Conclusions .................................................................................................................... 21
  2004 Updated Impact Study and Violent Crime Data ....................................................... 21

Law Enforcement Officers Killed with Firearms ................................................................. 23
Legislation in the 108th Congress .......................................................................................... 25

Conclusion ..................................................................................................................................... 25

Figures

Figure 1. Comparison of ATF Total Firearm and Violent Crime Traces .................................. 22
Figure 2. Total ATF SAW and Violent Crime SAW Traces ..................................................... 22
Figure 3. Firearm-Related Homicides ................................................................................... 23
Figure 4. Firearm-Related Robberies and Aggravated Assaults ........................................... 23
Tables

Table 1. Estimated Total Firearm and Semiautomatic Assault Weapon (SAW) Trace Data from ATF White Paper, FY1995-FY2002 .......................................................... 13

Table 2. Estimated Total Firearm and Semiautomatic Assault Weapon (SAW) Traces from Brady Center and VPC Reports, FY1990-FY2001 ......................................................... 15

Table 3. Estimated Total Firearm, Semiautomatic Assault Weapon (SAW), and Copycat (CC) Traces, FY1990-FY2001 .......................................................................................... 16

Table 4. Estimated Total Firearm, Semiautomatic Assault Weapon (SAW), Copycat (CC) and Selected Other Firearm Traces, FY1995-FY2000 .......................................................... 18

Table 5. Total Firearm, Violent Crime, and Semiautomatic Assault Weapons Traces, CYs 1991-2002.................................................................................................................. 19

Contacts

Author Contact Information ............................................................................................................... 26
Introduction

The 10-year statutory ban on the manufacture, transfer or possession of “semiautomatic assault weapons” (SAWs) and “large capacity ammunition feeding devices” (LCAFDs) that are capable of holding more than 10 rounds expired on September 13, 2004.\(^1\) The expiration of the SAW-LCAFD ban has been, and will likely remain, controversial. Bills were introduced that would have extended the ban (S. 2190, S. 2498), made it permanent (S. 1034), or expanded it to include other “military style” firearms (H.R. 2038/S. 1431). On March 2, 2004, the Senate passed an amendment to S. 1805, that would have extended the ban for 10 years, but the bill was not passed.

A key consideration for Congress is whether violent gun crimes, particularly crimes involving multiple gunshot victims and gunshot wounds per victim, were reduced by the ban. As in 1994, an underlying question for Congress is whether SAWs are more dangerous than other semiautomatic firearms and, if so, should the ban be extended or made permanent, and possibly expanded to include other “military style” firearms.

This report focuses on the use and interpretation of firearms trace data produced by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). Ban supporters have presented trace data to support extending the ban, making it permanent, and perhaps strengthening it. Ban opponents counter that there are serious limitations regarding these trace data. Meanwhile, researchers continue to debate the proper use and interpretation of these data. Please note that this report provides no coverage of legal challenges to the SAW-LCAFD ban.\(^2\)

1994 SAW-LCAFD Ban

In statute, “SAWs” were defined in two ways. First, certain firearms, or copies or duplicates of those firearms in any caliber, were defined as SAWs by make (in most cases) and model (such as the Colt AR-15, INTRATEC TEC-9, or revolving cylinder shotguns similar to the Street Sweeper). Second, other firearms were defined as SAWs if they included specified features. A rifle met the SAW definition if it was able to accept a detachable magazine and included two or more of the following five features: (1) a folding or telescoping stock; (2) a pistol grip that protruded conspicuously below the action of the firearm; (3) a bayonet mount; (4) a muzzle flash suppressor or threaded barrel capable of accepting such a suppressor; or (5) a grenade launcher. There were similar definitions for pistols and shotguns that were classified as SAWs. SAWs and LCAFDs that were legally possessed prior to the date of enactment were exempted from the ban and remained legally transferrable under applicable federal and state laws.\(^3\)

Data on SAWs and LCAFDs

Notwithstanding statutory definitions, there remains a lack of definitive data on SAWs. For example, the precise number of SAWs in civilian circulation is unknown, as is the number of

\(^2\) For related analysis, see CRS Report RL32077, The Assault Weapons Ban: Legal Challenges and Legislative Issues, by T. J. Halstead.
\(^3\) 18 U.S.C. §921(a)(30).
SAWs used in crime. Nonetheless, there are three sources of limited data on SAWs and their possible use by criminals. Those sources include (1) ATF firearm trace data, (2) crime gun recoveries in certain cities, and (3) data on law enforcement officers killed feloniously in the line of duty.

**ATF Firearm Trace Data**

There are limited data about SAWs from firearm traces conducted by the ATF, but the proper use and interpretation of the related data remain a matter of debate. Today, as before the 1994 SAW-LCAFD ban, there are significant questions about the consistent and unbiased collection of ATF firearm trace data. Consequently, at a national level, firearm trace data may not be representative of the types of firearms recovered by police and, hence, may not be representative of guns used in crime.

Some researchers, however, find firearm trace data to be a useful measurement of crime gun trends—particularly when such data are limited to localities in which the issue of consistent and unbiased data collection have been at least partially addressed through comprehensive crime gun tracing. Other researchers have long stressed that firearm trace data are not representative samples of crime guns. Neither the Federal Bureau of Investigation (FBI)—the principal federal agency charged with the collection of national crime statistics, nor the ATF have endorsed the use of firearm trace data for purposes other than assisting in ongoing criminal investigations.

**Firearm Recoveries in Selected Cities**

In August 2004, an assessment on the effectiveness of the ban—commissioned by the National Institute of Justice—was released. Based on firearm recoveries in six cities, this report found that firearms with LCAFDs were used in between 14% and 26% of crimes, leading the study's researchers to conclude that in those cities there were indications that any effects that the ban might have had on reducing firearms-related violent crime might have been offset by an increase in use of firearms equipped with LCAFDs.

As with firearm trace data, however, there are significant limitations regarding firearm recovery data for these cities. First, while all of these cities made efforts to include all firearm recoveries associated with murders or other serious crimes in their databases, a relatively small percentage of crime guns were recovered by law enforcement. Second, firearm recoveries may be affected by local and regional enforcement strategies that result in significant variation in recoveries from one locality to another. Third, these cities provided the study’s researchers with “convenience samples.” Fourth, the cities were not selected randomly. These limitations precluded the study’s

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researchers from testing for statistical significance between the SAWs, other semiautomatic firearms equipped with LCAFDs, and all firearms recovered.

**Law Enforcement Officers Killed in the Line of Duty**

Data are also available on law enforcement officers killed feloniously with firearms in the line of duty. SAWs and other rifles that use the same calibers of ammunition were used in over half of these cases (65 of 112) in the decade, CYs 1993-2002. Proponents of the ban have recompiled FBI data to show that the SAWs and other firearms, which they describe as “military-style” based on their make and model, were used in one-fifth (41 of 211) of such cases from calendar years (CYs) 1998-2001. It should be noted that it is not possible to determine precisely whether all these firearms were SAWs, nor is it known to what extent these firearms contributed to the ability of the criminals to outgun the police by firing multiple shots without reloading.

**Arguments For and Against the Ban**

Ban supporters argue that assault weapons should be prohibited, because they were designed for military purposes, are firearms of choice for criminals, and are not suitable for hunting, competitive shooting, or self-defense. They claim that these weapons include the “military features” that increase capacity of fire (detachable magazines) and ease of fire (pistol grips, barrel shrouds, and other features). Thus, they conclude that SAWs are more lethal than other semiautomatic firearms. Furthermore, proponents of the ban underscore that the impetus for the ban was several mass murders committed with SAWs, and that these firearms are disproportionately—given their relatively small numbers compared to other firearms—used in crimes involving multiple shots fired, multiple victims, multiple gunshot wounds per victim, and police officers as victims. They note that, despite several legal challenges, the ban has been upheld as constitutional by federal courts.

Opponents of the ban argue that SAWs are not designed for, or used by, military forces, and that large numbers of law-abiding gun owners use SAWs for self-defense, marksmanship, and hunting. They contend that SAWs are functionally no different from other semiautomatic firearms in that they fire only one round per pull of the trigger, and that the statutorily defined SAW features are largely cosmetic and that these banned firearms are no more lethal than other commonly available semiautomatic firearms. They also cite federal, state, and local data sources.

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that suggest that SAWs were used in a fraction (2%) of violent crimes before the ban, and have been used in about the same percentages since the ban. They view the ban as part of a progressive intrusion on the right of citizens to own firearms.

**Background**

**What Is an Assault Weapon?**

Arriving at a definition of an “assault weapon” that is acceptable to all parties has proved difficult. While some would define an “assault weapon” to include any military-style firearm, others maintain that all semiautomatic weapons are equally lethal. They argue that the lethality of the firearms is constant no matter what largely aesthetic features are incorporated into their design. It is noteworthy that, for many years, the term “assault weapon” was a term of art, marketing attraction, and journalistic device. The 1994 legislation created a statutory definition for the term “semiautomatic assault weapon,” but the statutory definition expired with the ban. Moreover, firearm designs come in a very wide variety, and it is often difficult to categorize certain types of firearms according to traditional notions as to what constitutes a “machine pistol,” “Carbine,” “battle rifle,” or an “assault weapon.” As a result, some still debate the correct use of the term “assault weapon.”

**Military Assault Rifles**

According to many firearms experts, “assault rifles” were developed during World War II to provide a lighter infantry weapon that could fire more rounds, more rapidly, and more easily. In other words, the design of these firearms included features that allowed for increased capacity and rate of fire, less weight, and less recoil. To increase capacity of fire, detachable, self-feeding magazines (introduced in the late 1880s) were incorporated into these rifles. To increase the rate of fire, assault rifles were designed to be fired in fully automatic mode (firing repeatedly), or with a “select fire” feature that allowed them to be fired in fully automatic mode, in short bursts (such as, three rounds per pull of the trigger), or in semiautomatic mode (one round per pull of the trigger). Mid-size rounds were developed, so infantrymen could carry more ammunition, and their rifles would be lighter when fully loaded. Also, mid-size rounds reduced the recoil or “kick,” making the rifles easier to handle and keep on target.

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15 The term “assault weapon” was used by some firearm dealers as a selling point in marketing certain semiautomatic firearms. Journalists adopted this term. In 1989, the state of California adopted an assault weapons ban, which included a definition that was nearly identical to the definition included in the 1994 federal ban. Also, in 1989, the ATF issued a report outlining the rationale for an importation ban that defined “assault-type rifles” by certain characteristics and features. See U.S. Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, Report and Recommendation of the ATF Working Group on the Importability of Certain Semiautomatic Rifles, (Washington, DC, 1989), pp. 1, 6-8.
The prototype assault rifle was developed by the Germans during World War II based on a Swiss design. This rifle—the Maschinenkarabiner 42 (Mkb 42)—was chambered to fire the 7.92x33 millimeter (mm) cartridge (a mid-size rifle cartridge). The Germans improved upon the Mkb 42’s design and produced the first assault rifle, literally, dubbing it the Sturmgewehr (StG 43), towards the end of the war. After the war, the StG 43 was the model for later generations of assault rifle designs, including the Spanish CETME, Belgique FN/FAL, and West German G-3. The Soviet Union, meanwhile, developed the Avtomat Kalashnikov of 1947 (AK-47), which was chambered to fire 7.62x39 mm cartridges.

The United States was relatively late in developing a similar assault rifle. Between 1956 and 1959, Eugene Stoner designed an assault rifle later adopted by the U.S. Armed Forces as the M-16. It was chambered to fire Remington .223 cartridges (5.56x45 mm). The M-16 became the standard infantry rifle issued during the Southeast Asian conflict and remains the most widely issued firearm in the U.S. Armed Forces.

Most military assault rifles were designed to be fully automatic, meaning they fire and reload continuously with a single pull of the trigger until all the rounds in the magazine are expended, or the trigger is released. Later generations of these weapons were outfitted with select fire features that allow them to be fired in multi-round bursts or in semiautomatic mode, in addition to fully automatic mode. Many assault rifle designs included features that were previously incorporated into submachine gun designs and handguns, such as pistol grips and barrel shrouds. Some ban supporters maintain that these features allow shooters to more easily stabilize and effectively fire these rifles in a low slung position in close quarters combat. Ban opponents maintain that the grips are shaped to conform with the relative position of the rifle’s barrel and stock. These rifles also include detachable magazines with greater capacity than used in early generations of World War II battle rifles like the American M-1 Garand or the German Model 98 Mauser.

Civilian Semiautomatic Assault Weapons

Semiautomatic firearms are self- or re-loading, meaning that when one round is fired, the firearm automatically ejects the old cartridge casing and loads a fresh cartridge by partially utilizing the energy expended by the fired cartridge. Semiautomatic firearms, including SAWs, fire one round per pull of the trigger like all other firearms other than fully automatically. The rate of fire of semiautomatics is equivalent to that of revolvers, in that both depend on how quickly a person can pull the trigger. Other commonplace firearms, such as bolt-action, lever-action, and pump-action firearms require a manual operation of the firearm’s bolt to reload between shots.

Many models of firearms that were originally designed for military purposes, most of which were originally designed to be fired in fully automatic mode or select fire, were later produced for civilian markets by modifying their design so that they could only be fired in semiautomatic mode. To convert one of these firearms to fully automatic is illegal.19 These weapons are also capable of accepting magazines of greater capacity than ten rounds, prompting some to argue that

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19 Under current law, firearms that can be fired in fully automatic or in multi-round bursts are classified as “machine guns,” and must be registered with the federal government under the National Firearms Act of 1934. It is illegal to assemble a machine gun with legally or illegally obtained parts. The population of machine guns legally owned by civilians (non-military and non-law enforcement persons) has been frozen since 1986.
the large-capacity magazine (or LCAFD) is perhaps the most functionally important distinguishing feature of assault weapons.20

1994 Semiautomatic Assault Weapons Ban

In 1994, Congress imposed a 10-year ban on the possession, transfer, or manufacture of SAWs and LCAFDs (capable of holding more than 10 rounds) that were not legally produced or possessed prior to September 13, 1994—the date of enactment.21

Previous Legislative Action

The 1994 Act was the culmination of several years of congressional hearings and debate that followed the January 1989 shootings in Stockton, California, when Patrick Purdy killed five children and wounded 30 others with a semiautomatic version of an AK-47. Legislation to restrict the manufacture and transfer of “assault weapons” received significant action in the 101st and 102nd Congress, but this legislation was not enacted.

In the 103rd Congress, with strong support from the Clinton Administration, Senator Dianne Feinstein successfully amended the omnibus crime control act of 1993 (S. 1607) with language banning the manufacture of specified new assault weapons (for transfer to private citizens) on November 17, 1993. The Senate passed this bill on November 19, 1993.

On May 2, 1994, the House Judiciary Committee reported H.R. 4296 (H.Rept. 103-489), a measure that was similar to the Feinstein assault weapons amendment to S. 1607. During conference negotiations on H.R. 3355, similar assault weapons ban language was included in this omnibus crime bill. The House approved the conference report on August 21, 1994. The Senate approved this measure on August 25. President William J. Clinton signed the Violent Crime Control and Law Enforcement Act of 1994 (H.R. 3355) into law on September 13, 1994 (P.L. 103-322).

In the 104th Congress, the House passed a bill (H.R. 125) that would have repealed the 1994 SAW ban. President Clinton announced that he would veto such legislation if it reached his desk. Senate Majority Leader Robert Dole announced that legislation to repeal the ban was not a priority for the Senate.22 No further action was taken—either to terminate or extend the SAW-LCAFD ban. As a result, the ban expired on September 13, 2004.

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22 For a more detailed chronology of significant policy actions at the time, see CRS Report 96-367, Assault Weapons and Congressional Action, by Keith Bea, p. 9 (available on request from author).
Semiautomatic Assault Weapons (SAWs)

The 1994 Act prohibited the manufacture, transfer or possession of SAWs for 10 years, with certain exceptions discussed below. In statute, “SAWs” were defined in two ways. First, certain firearms, or copies or duplicates of those firearms in any caliber, were defined as SAWs by make (in most cases) and model. Second, other firearms were defined as SAWs, if they included specified features. SAWs defined by make and model included:

1. Norinco, Mitchell, and Poly Technologies Avtomat Kalashnikovs (all models);
2. Action Arms Israeli Military Industries Uzi and Galil;
3. Beretta Ar70 (SC-70);
4. Colt AR-15;
5. Fabrique National FN/FAL, FN/LAR, and FNC;
6. SWD M-10, M-11, M-11/9, and M-12;
7. Steyr AUG;
8. INTRATEC TEC-9, TEC-DC9, and TEC-22; and
9. Revolving cylinder shotguns like or similar to the Street Sweeper and Striker 12.

SAWs defined by certain features included:

- **Semiautomatic rifles** capable of accepting a detachable magazine with at least two of five other features (folding or telescoping stock, conspicuously protruding pistol grip beneath the action of the weapon, bayonet mount; flash suppressor or threaded barrel capable of accommodating such a device, or grenade launcher).
- **Semiautomatic pistols** capable of accepting a detachable magazine and with at least two of five other features (the ability to accept a magazine in a position other than the pistol grip; threaded barrel capable of accepting a barrel extender, flash suppressor, forward handgrip, or silencer; barrel shroud; manufactured weight of 50 ounces or more when unloaded; or semiautomatic version of an automatic firearm).
- **Semiautomatic shotguns** with two of four other features (folding or telescoping stock, conspicuously protruding pistol grip beneath the action of the weapon, fixed magazine capacity in excess of five rounds, and an ability to accept a detachable magazine).

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Large Capacity Ammunition Feeding Devices (LCAFDs)

The 1994 Act also prohibited the transfer or possession of LCAFDs that were not legally possessed prior to enactment. The act defined such a device to include any magazine, belt, drum, feed strip, or similar device that has a capacity of, or that could be readily restored or converted to accept, more than 10 rounds of ammunition. This did not include any attached tubular devices designed to accept, and capable of being used only with, .22 caliber rimfire ammunition.

Exemptions to the SAW-LCAFD Ban

Exemptions to the ban were also provided by the 1994 Act for SAWs otherwise lawfully possessed, and LCAFDs manufactured, prior to or on the date of enactment. Also, 661 types of long guns were exempted; as were manually operated, permanently inoperable, or antique firearms; semiautomatic rifles that could not accept a detachable feeding device that held greater than five rounds; or semiautomatic shotguns that could not hold greater than five rounds in a fixed or detachable magazine. Unlike SAWs and similar semiautomatic firearms that were banned administratively from importation, it remained legal to import LCAFDs that were produced prior to the ban’s enactment.

In addition, public agencies or individuals that met at least one of four specified conditions were exempted from the ban. They included law enforcement officers for the purpose of law enforcement; licensees charged with protecting nuclear facilities or transporting nuclear materials, their employees and contractors; retirees from law enforcement agencies who were presented a SAW upon retirement, as long as they were not otherwise prohibited; and licensees for the purpose of authorized testing and experimentation.

Firearm Design Modifications and Import Bans

Following the ban’s enactment, many firearm manufacturers in the United States and abroad modified the design of firearms to, depending upon one’s point of view, either to evade the ban or to comply with the ban’s requirements. It was not uncommon following the ban to hear references to “pre-ban” “post-ban” assault weapons, meaning firearms produced after the ban, which were similar to banned firearms, but modified and, hence, not subject to the ban. “Post-ban assault weapons” were also referred to as “sporterized,” “legal substitutes,” or “copycats.”

Even before the 1994 ban, in 1989, the Administration of George H.W. Bush had halted the importation of some semiautomatic firearms that could be considered “assault weapons” under existing legal authority provided by the 1968 Gun Control Act, under the determination that they

30 18 U.S.C. §922(v)(2) and (w)(2).
32 18 U.S.C. §922(v)(3)(B), (C), and (D).
33 18 U.S.C. §922(v)(4) and (w)(4).
were not “particularly suitable for or readily adaptable to sporting purposes.”  

In 1998, the Clinton Administration halted the importation of firearms modified to comply with the 1989 importation ban. While in part the Clinton importation ban was prompted by a trade dispute with China, others have noted that companies closely tied with the Chinese Army were providing large numbers of surplus military firearms to U.S. importers at very low costs.  

*Domestic* firearm manufacturers continued to produce firearms—at times with mostly imported parts, which ban supporters argued were either in violation of the ban, since they were copies or duplicates of banned firearms, or firearms that should have been banned under an expanded SAW definition. In addition, to some observers the importation ban on these firearms, but no similar ban on their domestic manufacture, appeared to be an incongruity in the law.

**1997 SAW Ban Impact Study**

The 1994 Act also required the Attorney General to study and measure (if possible) the impact of the SAW ban, with a focus on drug trafficking and violent crime. It stipulated that the study would be conducted for 18 months, beginning 12 months after the date of enactment. It required the Attorney General to report back to Congress within 30 months of enactment as to the findings and determinations of the study. The Attorney General delegated the responsibility for this study to the National Institute of Justice (NIJ). In turn, NIJ contracted with the Urban Institute to conduct this study, which resulted in an initial report in 1997.

The initial SAW ban impact study was released on March 13, 1997. NIJ also published a policy brief based on this report. In conducting this study, the Urban Institute researchers set up an economic hypothesis to measure the impact of the SAW ban. They started from the premise that to reduce levels of SAW-related crime. The law must increase the scarcity of the banned weapons. Scarcity would be reflected in higher prices for pre-ban SAWs, which would have been available legally for transfer and possession. And, higher prices would discourage criminal use of SAWs, leading to a reduction in SAW-related crime.

The researchers noted that the statutory schedule for the study constrained their findings to the short-term effects of the SAW ban. They concluded that because “the banned weapons and magazines were never used in more than a modest fraction of all gun murders,” that the

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“maximum theoretically achievable preventive effect of the ban on gun murders is almost certainly too small to detect statistically with only one year of post-ban crime data.”

The researchers found that the price of SAWs nearly doubled in the year preceding the ban, but then dropped to nearly the 1992 prices immediately following the ban. Nevertheless, researchers estimated that the ban possibly contributed to a 6.7% decrease in total gun murders, or a 27% decrease in assault weapon/large capacity feeding device-related crime, between 1994 and 1995. In addition, while they detected no decrease in multiple victim/multiple gunshot wound crimes, they did see a slight reduction in killings of police officers with SAWs.

In addition, the researchers analyzed firearm trace data collected by the ATF. They found that ATF firearms trace data were an imperfect measure, because they reflect only a small percentage of guns used in crimes. While imperfect, the Urban Institute researchers noted that the trace data reflected similar trends in data on all guns recovered in two cities. They noted that a decrease in SAW traces in 1995 as compared to 1994 warranted further study.

The Urban Institute researchers included several recommendations in their study. They included the need to:

- develop new gun market data sources and improve existing ones;
- examine the effects of legal substitute or copycat firearms;
- study criminal use of LCAFDs;
- improve the recording of LCAFDs recovered in crime guns;
- conduct in-depth, incident-based research on fatal and nonfatal gun assaults; and
- update the impact analysis initiated in fulfilment of the 1994 Act.

In July 2004, an updated impact study was completed for NIJ. This study, along with others, is discussed later in this report.

Firearm Trace Data and Semiautomatic Assault Weapons

Data Sources and Limitations

There is a general lack of definitive data on “assault weapons” and the wider population of firearms that constitute the civilian gun stock. Consequently, the number of SAWs available to

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41 Ibid., p. 9.
42 Ibid., p. 3.
43 According to CRS extrapolations of ATF firearm production, import, and export reports, the estimated civilian gun stock in the year 2000 included nearly 259 million firearms (92 million handguns, 92 million rifles, and 75 million shotguns).
civilians for possession or transfer is only estimated, as is the frequency with which SAWs are used in crimes.\footnote{In its annual publication—\textit{Crime in the United States}—the FBI includes data on homicides committed with handguns, rifles, shotguns, other guns, and firearms-not stated. The FBI does not report, however, which of these firearms were assault weapons, as the data needed to make such determinations are not reported.} It is generally accepted, however, that the population of “assault weapons”—particularly those subject to the 1994 ban—increased significantly during the 1980s and early 1990s.\footnote{Tom Diaz, \textit{Making a Killing: The Business of Guns in America}, (New York, 1999), pp. 120-134.} The intent of the ban was to gradually reduce the number of legally available SAWs.

At the time of the ban, it was estimated that there were upwards of 1.5 million privately owned assault weapons in the United States.\footnote{Christopher S. Koper, \textit{Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence}, 1994-2003, p. 1.} According to CRS extrapolations, 231 million firearms made up the civilian gun stock in 1994, including 81 million handguns, 82 million rifles, and 68 million shotguns. Consequently, SAWs constituted less than 1% of the civilian gun stock. At the same time, according to one recent study, there were 25 million firearms capable of accepting large capacity ammunition feeders, or roughly 11% of the civilian gun stock.\footnote{Ibid., p. 1.}

Opponents of the ban argue that SAWs are rarely used in crime—no more than 2%.\footnote{On its website, the NRA asks “How often are ‘assault weapons’ used in crime?” The reply provided by the NRA cites a study conducted by the Urban Institute in fulfillment of a requirement in the 1994 Act. In that study, it was reported that “SAWs were never used in more than a modest fraction of all gun murders.” The Urban Institute study is discussed in greater detail below. They cite other studies as well conducted by the Department of Justice’s Bureau of Justice Statistics that purport (based on surveys of incarcerated felons) that “assault weapons” are only used in 1% to 2% of violent crimes. Available online at http://www.clintongunban.com/FAQ.aspx.} Compared to the relatively small SAW percentage of the total gun stock, however, proponents of the ban have countered that SAWs are disproportionately used in crime—particularly in murders involving multiple shots fired, multiple victims, multiple wounds per victim, and police officers as victims.\footnote{On its website, the Brady Campaign to Prevent Gun Violence asserts that “assault weapons” are used disproportionately in firearms-related crime, among other things. Go to http://www.bradycampaign.org/facts/issues/?page=10ramyths.}

Some supporters of the ban have cited ATF firearm trace data as evidence that the ban ought to be extended or made permanent, or perhaps expanded to include additional firearms. However, there are several limitations for the firearm trace data that have been noted by researchers.\footnote{For the most recent discussion of firearm trace data limitations, see Christopher S. Koper, \textit{Updated Assessment of Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence}, 1994-2003, (Washington, July 2004), p. 40. See also Philip J. Cook and Anthony A. Braga, “Comprehensive Firearms Tracing: Strategic and Investigative Uses of New Data on Firearms Markets,” \textit{Arizona Law Review}, vol. 43:2, 2001, pp. 286-291.}

While the number of traces have nearly tripled from CYs 1995-2002, questions remain about the consistent and unbiased collection of more recent firearm trace data, despite ATF efforts to promote comprehensive crime gun tracing in several localities. Consequently, firearm trace data in the aggregate may still not be representative of the types of firearms nationally recovered by police and, hence, may not be representative of guns used in crime. Different SAW ban supporters have examined and interpreted SAW-related firearm trace data differently, while ban opponents underscore the limitations of firearm trace data.\footnote{CRS Report 92-434, “Assault Weapons”: \textit{Military-Style Semiautomatic Firearms Facts and Issues}, by Keith Bea, (continued...)}
ATF Trace Data

The ATF National Tracing Center (NTC) supports federal, state, and local law enforcement agencies by tracing the chain of commerce for selected firearms (by make and model) recovered by law enforcement agencies that are often, but not always, crime guns. The ATF defines “crime guns” as firearms seized from ineligible persons, used in crimes, or suspected to have been used in crimes. The NTC has been described as an operational system designed to aid in ongoing investigations, rather than a system designed to capture comprehensive “crime gun” statistics.52

The ATF has promoted and expanded crime gun tracing as part of a wider strategy to stem illegal firearms trafficking—particularly in localities that participate in the Youth Crime Gun Interdiction Initiative (YCGII). As reported by CRS in 1992, however, “most firearms that are traced have not been used to commit violent crimes, and most firearms used to commit violent crimes are not traced.”53

Due to several factors, moreover, including policy changes at the state and local level, there may be significant variation over time and from jurisdiction-to-jurisdiction as to the “when, why, and how” a firearm is recovered and selected to be traced.54 In addition, law enforcement officers may be reluctant to request traces for firearms that would be difficult to trace because of missing identifying information, such as, the firearm’s manufacturer and serial number.55 Therefore, newer guns for which such information may be more readily available are more likely to be traced than older guns. In addition, law enforcement agencies often conduct studies focused on specific categories of offenders and/or types of firearms in certain geographical areas. Consequently, the data may be biased, as (1) older firearms may be under-represented in the trace data, because of missing information; and (2) firearms of special interest to law enforcement may be over-represented.56

For these reasons, it is not possible to test for statistical significance of possible relationships between firearm traces in general (and SAW traces in particular), and the wider population of firearms available to civilians. As a result, firearm trace data do not provide grounds for a clear statistical conclusion about the effectiveness or ineffectiveness of the SAW ban, and making inferences about certain types of firearms at a national level (by make and model) may not be statistically valid. Nevertheless, firearm trace data illustrate trends of interest, which in some cases are parallel to trends found in crime gun recoveries for certain cities.

(...continued)


53 Ibid., p. 65.


55 At a minimum, to successfully trace a firearm, the firearm’s manufacturer and serial number are needed. In addition, the longer the firearm has been in circulation from its first retail transfer, the more difficult it will be to trace that firearm.

Feinstein/Schumer Press Release and ATF White Paper

Firearm trace data for FY1995-2002, as presented in Table 1, were acquired from the Department of Justice and released by Senators Dianne Feinstein and Charles Schumer. In their press release, the Senators called for a renewal of the ban and offered up the declining shares of firearm traces due to SAWs as evidence of the ban’s effectiveness.\textsuperscript{57} Table 1 shows that the ATF traced over 26,000 SAWs for FY1995-2002. While SAWs as a percent of total firearm traces decreased by about two-thirds (66\%) over these years, SAW traces for these years averaged 3,278, and ranged between a low of 2,845 and a high of 3,985. With some fluctuation, total firearm traces nearly tripled over the same years from nearly 80,000 to almost 240,000 traces.

Table 1. Estimated Total Firearm and Semiautomatic Assault Weapon (SAW) Trace Data from ATF White Paper, FY1995-FY2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated total firearm traces</th>
<th>Percent change in firearm traces over the previous year</th>
<th>SAW traces</th>
<th>SAW traces as a percent of total firearm traces</th>
<th>Percent change in number SAW traces over the previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY1995</td>
<td>79,692</td>
<td>N/A</td>
<td>2,845</td>
<td>3.57%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY1996</td>
<td>114,387</td>
<td>43.54</td>
<td>2,894</td>
<td>2.53%</td>
<td>1.72%</td>
</tr>
<tr>
<td>FY1997</td>
<td>189,158</td>
<td>65.37</td>
<td>3,821</td>
<td>2.02%</td>
<td>32.03%</td>
</tr>
<tr>
<td>FY1998</td>
<td>188,778</td>
<td>-0.20</td>
<td>3,398</td>
<td>1.80%</td>
<td>-1.07%</td>
</tr>
<tr>
<td>FY1999</td>
<td>208,639</td>
<td>10.52</td>
<td>3,985</td>
<td>1.91%</td>
<td>17.27%</td>
</tr>
<tr>
<td>FY2000</td>
<td>209,182</td>
<td>0.26</td>
<td>3,326</td>
<td>1.59%</td>
<td>-16.34%</td>
</tr>
<tr>
<td>FY2001</td>
<td>232,846</td>
<td>11.31</td>
<td>3,027</td>
<td>1.30%</td>
<td>-8.99%</td>
</tr>
<tr>
<td>FY2002</td>
<td>239,836</td>
<td>3.00</td>
<td>2,926</td>
<td>1.22%</td>
<td>-3.34%</td>
</tr>
<tr>
<td>Total</td>
<td>1,462,519</td>
<td>N/A</td>
<td>26,222</td>
<td>1.79%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Table prepared by the Congressional Research Service (CRS) using ATF data released by Senator Dianne Feinstein and Senator Charles Schumer.

Note: The number of total firearm traces was not in the ATF data. The estimated number of total firearm traces was extrapolated from the SAW traces and percent of total firearm traces that are SAW traces in the ATF data.

Identical data were included in an ATF white paper.\textsuperscript{58} In the paper, ATF underscored that traced assault weapons were precisely identified by make and model as specified in the SAW ban, and as traced since enactment of the ban. However, no attempt was made to determine when the firearm was manufactured or imported. In some cases, SAW traces may have involved firearms that were illegally manufactured, configured, or imported following the ban. In addition, according to the ATF white paper, the NTC does not include fields to identify the various characteristics (barrel shroud, bayonet lug, pistol grip, etc.) that comprise a SAW, as defined in the law.


Brady Center Report and Violence Policy Center Reports

Both the Brady Center to Prevent Gun Violence (Brady Center) and the Violence Policy Center (VPC) have released separate studies of total firearm and SAW traces for FY1990-2001. The underlying firearm trace data used by both organizations were prepared for the Brady Center by a private consulting company, Crime Gun Solutions LLC.59 The Brady Center found that the steady decrease in the SAW percentage of total firearm traces suggested that the ban had made these firearms less available for criminal use.60 The Brady Center concluded further that the 1994 Act “has contributed to a substantial reduction in the use of assault weapons (SAWs) in crime, despite the [firearms] industry’s efforts to evade the ban.”61

The VPC expanded upon the Brady’s Center’s data presentation and provided an alternative interpretation of these data in a follow-up report.62 The VPC noted that, since the ban’s enactment, ATF firearm traces had tripled, and the SAW percentage of total firearm traces had correspondingly decreased.63 The VPC concluded that firearms targeted by the 1994 Act continued to be manufactured, are readily available, and are being used in crime.64

Total Firearm and SAW Traces

The data first published by the Brady Center are presented in Table 2, which shows that for FY1990-1994, assault weapons made up 4.88% of total traced firearms. While the Brady Center reported this percentage to be 4.82%, this difference may be the result of rounding. Table 2 also shows that for FY1995-2001, banned assault weapons comprised 1.61% of traced firearms. The Brady Center calculated the percent change in the SAW firearm trace share by subtracting 1.61% from 4.82% and dividing by 4.82%, which yields a 66.7 (or two-thirds) decrease in the SAW share of the total traced firearms for FY1990-1994, as compared to FY1995-2001.65

Depending upon how the data are presented, different interpretations may be made as to the extent to which the number of SAW traces is decreasing. For example, based on the firearm trace data presented in Table 2 above, the Brady Center “concluded that the SAW ban has contributed to a substantial reduction in the use of assault weapons in crime...”66 For FY1990-1994, the annual average number of SAW traces was 2,842 (or 14,209/5), and for FY1995-2001, the annual average was 2,811 (or 19,679/7), only 31 fewer traces on average annually for the five years before the ban compared to the seven years after the ban. While SAW traces as a share of total firearms decreased from FY1995 through FY2001, the annual average number of SAW traces

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60 Ibid., p. 2.
61 Ibid., p. 12.
63 Ibid., p. 7.
64 Ibid., p. 1.
66 Ibid., p.12.
declined by less than 10% after the ban. This may indicate that the decline in the SAW share of total traces is due to a significant increase in total traces, rather than a decrease in SAW traces.

Table 2. Estimated Total Firearm and Semiautomatic Assault Weapon (SAW) Traces from Brady Center and VPC Reports, FY1990-FY2001

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Estimated Total Firearm Traces</th>
<th>Percent Change in Firearm Traces Over the Previous Year</th>
<th>Estimated SAW Traces</th>
<th>SAW Traces as a Percent of Total Traces</th>
<th>Percent Change in Number of SAW Traces Over the Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY1990</td>
<td>47,770</td>
<td>N/A</td>
<td>2,732</td>
<td>5.72%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY1991</td>
<td>53,924</td>
<td>12.88</td>
<td>2,917</td>
<td>5.41%</td>
<td>6.77%</td>
</tr>
<tr>
<td>FY1992</td>
<td>50,553</td>
<td>-6.25</td>
<td>2,603</td>
<td>5.15%</td>
<td>-10.76%</td>
</tr>
<tr>
<td>FY1993</td>
<td>55,665</td>
<td>10.11</td>
<td>2,911</td>
<td>5.23%</td>
<td>11.83%</td>
</tr>
<tr>
<td>FY1994</td>
<td>83,000</td>
<td>49.11</td>
<td>3,046</td>
<td>3.67%</td>
<td>4.64%</td>
</tr>
<tr>
<td>FY90-94 Subtotal</td>
<td>290,912</td>
<td>N/A</td>
<td>14,209</td>
<td>4.88%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY90-94 Average</td>
<td>58,182</td>
<td>N/A</td>
<td>2,842</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FY1995</td>
<td>79,777</td>
<td>-3.88</td>
<td>2,417</td>
<td>3.03%</td>
<td>-20.65%</td>
</tr>
<tr>
<td>FY1996</td>
<td>116,674</td>
<td>46.25</td>
<td>2,287</td>
<td>1.96%</td>
<td>-5.38%</td>
</tr>
<tr>
<td>FY1997</td>
<td>191,378</td>
<td>64.03</td>
<td>3,253</td>
<td>1.70%</td>
<td>42.24%</td>
</tr>
<tr>
<td>FY1998</td>
<td>188,299</td>
<td>-1.61</td>
<td>3,276</td>
<td>1.74%</td>
<td>0.71%</td>
</tr>
<tr>
<td>FY1999</td>
<td>209,000</td>
<td>10.99</td>
<td>3,219</td>
<td>1.54%</td>
<td>-1.74%</td>
</tr>
<tr>
<td>FY2000</td>
<td>209,000</td>
<td>0.00</td>
<td>2,675</td>
<td>1.28%</td>
<td>-16.90%</td>
</tr>
<tr>
<td>FY2001</td>
<td>232,000</td>
<td>11.00</td>
<td>2,552</td>
<td>1.10%</td>
<td>-4.60%</td>
</tr>
<tr>
<td>FY95-01 Subtotal</td>
<td>1,226,128</td>
<td>N/A</td>
<td>19,679</td>
<td>1.60%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY95-01 Average</td>
<td>175,161</td>
<td>N/A</td>
<td>2,811</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FY90-01 Total</td>
<td>1,517,040</td>
<td>N/A</td>
<td>33,888</td>
<td>2.23%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Table prepared by the Congressional Research Service (CRS) using ATF firearm trace data presented by both the Brady Center and the VPC, as provided by Crime Gun Solutions LLC.

Note: The number of total firearm traces is from the data tables prepared in the VPC report. The annual percentage share of SAW traces is from the Brady Center report. The estimated SAW traces were extrapolated from these data.

VPC Commentary

The VPC maintains that the firearm trace data, for a variety of reasons, are not an adequate measure of a reduction in SAW-related crime. To reinforce this point, the VPC has pointed to the “time-to-crime” phenomenon. Time-to-crime is the amount of time from the date of the firearm’s first retail purchase to the date it was recovered by law enforcement. Analysis of ATF trace data for CY2000, as part of the Youth Crime Gun Interdiction Initiative (YCGII), showed that about a
third of traced firearms for that year were traced within three years of their retail purchase.\(^{67}\) Nearly three-quarters of traced firearms were traced within 10 years of their first retail purchase. Hence, the likelihood that a firearm will be traced may diminish over time. As the SAW ban was expected to decrease, or at least hold constant, the population of legally available SAWs for FY1995-2004, the VPC contends that the annual number of SAW traces would have decreased over the decade, if they followed the general “time-to-crime” trend of other traced crime guns and there was a reduction in the criminal use of these firearms.

\[\text{Table 3. Estimated Total Firearm, Semiautomatic Assault Weapon (SAW), and Copycat (CC) Traces, FY1990-FY2001}\]

<table>
<thead>
<tr>
<th></th>
<th>Estimated total firearm traces</th>
<th>Estimated SAW traces</th>
<th>CC traces</th>
<th>SAW &amp; CC traces</th>
<th>SAW &amp; CC traces as a percent of total</th>
<th>Percent change in number of SAW &amp; CC traces over the previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY1990</td>
<td>47,770</td>
<td>2,732</td>
<td>96</td>
<td>2,828</td>
<td>5.92%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY1991</td>
<td>53,924</td>
<td>2,917</td>
<td>264</td>
<td>3,181</td>
<td>5.90%</td>
<td>12.48%</td>
</tr>
<tr>
<td>FY1992</td>
<td>50,553</td>
<td>2,603</td>
<td>243</td>
<td>2,846</td>
<td>5.63%</td>
<td>-10.53%</td>
</tr>
<tr>
<td>FY1993</td>
<td>55,665</td>
<td>2,911</td>
<td>512</td>
<td>3,423</td>
<td>6.15%</td>
<td>20.27%</td>
</tr>
<tr>
<td>FY1994</td>
<td>83,000</td>
<td>3,046</td>
<td>1,303</td>
<td>4,349</td>
<td>5.24%</td>
<td>27.05%</td>
</tr>
<tr>
<td>FY90-94</td>
<td>290,912</td>
<td>14,209</td>
<td>2,419</td>
<td>16,628</td>
<td>5.72%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY90-94</td>
<td>58,182</td>
<td>2,842</td>
<td>484</td>
<td>3,326</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FY1995</td>
<td>79,777</td>
<td>2,417</td>
<td>1,261</td>
<td>3,678</td>
<td>4.61%</td>
<td>-15.43%</td>
</tr>
<tr>
<td>FY1996</td>
<td>116,674</td>
<td>2,287</td>
<td>1,587</td>
<td>3,874</td>
<td>3.32%</td>
<td>5.33%</td>
</tr>
<tr>
<td>FY1997</td>
<td>191,378</td>
<td>3,253</td>
<td>2,431</td>
<td>5,684</td>
<td>2.97%</td>
<td>-46.72%</td>
</tr>
<tr>
<td>FY1998</td>
<td>188,299</td>
<td>3,276</td>
<td>3,183</td>
<td>6,459</td>
<td>3.43%</td>
<td>13.63%</td>
</tr>
<tr>
<td>FY1999</td>
<td>209,000</td>
<td>3,219</td>
<td>3,218</td>
<td>6,437</td>
<td>3.08%</td>
<td>-0.34%</td>
</tr>
<tr>
<td>FY2000</td>
<td>209,000</td>
<td>2,675</td>
<td>3,323</td>
<td>5,998</td>
<td>2.87%</td>
<td>-6.82%</td>
</tr>
<tr>
<td>FY2001</td>
<td>232,000</td>
<td>2,552</td>
<td>3,410</td>
<td>5,962</td>
<td>2.57%</td>
<td>-0.60%</td>
</tr>
<tr>
<td>FY95-01</td>
<td>1,226,128</td>
<td>19,679</td>
<td>18,413</td>
<td>38,092</td>
<td>3.11%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY95-01</td>
<td>175,161</td>
<td>2,811</td>
<td>2,630</td>
<td>5,442</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FY90-01</td>
<td>1,517,040</td>
<td>33,888</td>
<td>20,832</td>
<td>54,720</td>
<td>3.61%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Table prepared by the Congressional Research Service (CRS) using ATF firearm trace data presented by both the Brady Center and the VPC, as provided by Crime Gun Solutions LLC.

\(^{67}\) As part of the YCGII, the ATF traced 88,570 firearms. For about half of these firearms, there was sufficient data to calculate the “time-to-crime.” For further information, see Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms, Crime Gun Trace Reports (2000) National Report, (Washington, July 2002), pp. 32-40.
Note: The number of total firearm traces is from the data tables prepared in the VPC report. The annual percentage share of SAW and CC traces is from the Brady Center report. The estimated SAW and CC traces were extrapolated from these data.

SAW and Copycat Firearm Traces

As noted earlier, since the ban went into effect, many firearm manufacturers have modified the design of firearms to either evade or comply with the ban, depending upon one’s point of view. It is not uncommon today to hear references to pre-ban and post-ban assault weapons (the latter having been modified). Post-ban modified firearms that are similar to SAWs are often referred to as “copycats” (“ccs”) by organizations seeking greater regulation of firearms like the VPC and Brady Center. Firearm manufacturers often refer to such firearms as having been “sporterized.” In their reports, both the Brady Center and the VPC included data on traces of certain CC firearms. Some of these CC firearms include the AB-10 Pistols, Bushmaster Rifles, and DPMS Rifles.68

The Brady Center study included estimates of the number of traced CC firearms. Table 3 shows that the number of traced CC firearms increased with little fluctuation from 96 in FY1990 to about 3,400 in FY2001. The annual average number of SAW and CC traces prior to the ban is 3,326, and the annual average after the ban is 5,442, or an increase of 63.67%. However, this increase in the share of SAW/CC traces is significantly less than the 200% increase in total firearm traces.

Table 3 also shows that SAWs and CCS combined accounted for 5.72% of traced firearms from FY1990-FY1994, and accounted for 3.11% of traced firearms from FY1995-FY2001. The percent change the SAW/CC share of total firearm traces for FY1990-FY1994 compared to FY1995-FY2001 reflects a 45.63% decrease in the SAW/CC share of total firearm traces. While lower than the 66% decrease observed for SAWs alone, the Brady Center concluded that the 45.63% decrease in the SAW/CC share of total firearm traces for the years before and after the ban was evidence that criminals had substituted CCS for SAWs, but this substitution effect was far from complete.69

SAW, Copycat, and Selected Other Firearm Trace Data

In addition to copycat/sporterized firearms, the Brady Center, the VPC, and other ban supporters have advocated that other “military-style” firearms be banned. Other selected firearms include the SKS, M-1 Carbine, the Roger Mini-14, and the Hi-Point Carbine. The VPC included trace data in their report on these firearms for CYS 1995-2000 in their report as well. The data on selected other firearms, along with data on other categories of firearm traces, are presented in Table 4.

Table 4 shows that from FY1995-1999, firearm traces for selected other firearms increased from nearly 1,800 to over 3,400, and then decreased in FY2000 to about 3,200. From FY1995-FY2000, total firearm traces increased by 162%. For the same years, the number of SAW traces increased by 11%, CC traces increased by 164%, and selected other firearms traces increased by 80%. The subtotal of SAW, CC, and selected other firearm traces combined increased from about 5,500 to

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68 The AB-10 is very similar to the INTRATEC TEC-DC9, and the Bushmaster and DPMS are similar to the Beretta AR-70 and Colt AR-15, which were banned under the 1994 Act.

9,202—an increase of 68%. Hence, the subtotal of SAW, CC, and selected other firearm traces combined increased at about two-fifths the rate of total firearms traces resulting in a decline in the share of traces attributed to these types of firearms.

Table 4. Estimated Total Firearm, Semiautomatic Assault Weapon (SAW), Copycat (CC) and Selected Other Firearm Traces, FY1995-FY2000

<table>
<thead>
<tr>
<th></th>
<th>Estimated total firewall traces</th>
<th>Estimated SAW traces</th>
<th>CC traces</th>
<th>Selected other firearm traces</th>
<th>Subtotal</th>
<th>SAW, CC, and selected other firearms as a percent of total traces</th>
<th>Percent change in number of SAW, CC, and selected other firearms traces over previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY1995</td>
<td>79,777</td>
<td>2,417</td>
<td>1,261</td>
<td>1,790</td>
<td>5,468</td>
<td>6.85%</td>
<td>N/A</td>
</tr>
<tr>
<td>FY1996</td>
<td>116,674</td>
<td>2,287</td>
<td>1,587</td>
<td>2,319</td>
<td>6,193</td>
<td>5.31%</td>
<td>13.26%</td>
</tr>
<tr>
<td>FY1997</td>
<td>191,378</td>
<td>3,253</td>
<td>2,431</td>
<td>3,131</td>
<td>8,815</td>
<td>4.61%</td>
<td>42.34%</td>
</tr>
<tr>
<td>FY1998</td>
<td>188,299</td>
<td>3,276</td>
<td>3,183</td>
<td>3,184</td>
<td>9,643</td>
<td>5.12%</td>
<td>9.39%</td>
</tr>
<tr>
<td>FY1999</td>
<td>209,000</td>
<td>3,219</td>
<td>3,218</td>
<td>3,452</td>
<td>9,889</td>
<td>4.73%</td>
<td>2.55%</td>
</tr>
<tr>
<td>FY2000</td>
<td>209,000</td>
<td>2,675</td>
<td>3,323</td>
<td>3,204</td>
<td>9,202</td>
<td>4.40%</td>
<td>-6.95%</td>
</tr>
<tr>
<td>Total</td>
<td>994,128</td>
<td>17,127</td>
<td>15,003</td>
<td>17,080</td>
<td>49,210</td>
<td>4.95%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Table prepared by the Congressional Research Service (CRS) using ATF firearm trace data presented the VPC.

Note: The number of total firearm traces is from the data tables prepared in the VPC report. The annual percentage share of SAW and CC traces is from the Brady Center report. The estimated SAW and CC traces were extrapolated from these data. The selected other firearm traces data were taken from the VPC report.

While the Brady Center did not present other firearms data for any of the years FY1990-FY2001, the Center asserted that the percent decrease for SAW/CC/other firearm percentages of total firearm traces for FY1990-FY1994 (7.2%) compared to FY1995-FY2001(4.5%) was 37.5%.

The Brady Center did not examine or make conclusions about the possible substitution effects of selected other firearms.

2004 Updated SAW Ban Impact Study

In July 2004, an updated impact study was completed for the NIJ. Among other things, the study stated that arguably the intent of the 1994 Act was “to reduce gunshot victimizations by limiting the national stock of semiautomatic firearms with large ammunition capacities—which enable shooters to discharge many shots rapidly—and other features conducive to criminal uses.”

While this report was commissioned by NIJ, it has not been published by the Department of

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70 Ibid., p. 12.


72 Ibid., p. 1.
Justice, and does not reflect the position or policies of the department. Nonetheless, this study remains the most detailed assessment to date of the 1994 Act, and the effects it might have had on firearms-related crime.

**Table 5. Total Firearm, Violent Crime, and Semiautomatic Assault Weapons Traces, CYs 1991-2002**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Firearm Traces</th>
<th>Violent Crime Firearm Traces</th>
<th>Violent Crime Firearm Traces as Percent of Total Firearm Traces</th>
<th>SAW Traces</th>
<th>SAWs as Percent of Total Firearm Traces</th>
<th>SAW Violent Crime Traces</th>
<th>SAW Violent Crime Traces as Percent of Total Firearm Traces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>42,281</td>
<td>6,394</td>
<td>15.12%</td>
<td>2,378</td>
<td>5.62%</td>
<td>344</td>
<td>0.81%</td>
</tr>
<tr>
<td>1992</td>
<td>44,992</td>
<td>6,558</td>
<td>14.58%</td>
<td>2,398</td>
<td>5.33%</td>
<td>367</td>
<td>0.82%</td>
</tr>
<tr>
<td>1993</td>
<td>54,189</td>
<td>8,248</td>
<td>15.22%</td>
<td>2,994</td>
<td>5.53%</td>
<td>516</td>
<td>0.95%</td>
</tr>
<tr>
<td>1994</td>
<td>82,791</td>
<td>10,083</td>
<td>12.18%</td>
<td>3,337</td>
<td>4.03%</td>
<td>424</td>
<td>0.51%</td>
</tr>
<tr>
<td>CY91-94 Subtotal</td>
<td>224,253</td>
<td>31,283</td>
<td>13.95%</td>
<td>11,107</td>
<td>4.95%</td>
<td>1,651</td>
<td>0.74%</td>
</tr>
<tr>
<td>CY91-94 Average</td>
<td>56,063</td>
<td>7,821</td>
<td>N/A</td>
<td>2,777</td>
<td>N/A</td>
<td>413</td>
<td>N/A</td>
</tr>
<tr>
<td>1995</td>
<td>77,503</td>
<td>12,439</td>
<td>16.05%</td>
<td>2,730</td>
<td>3.52%</td>
<td>362</td>
<td>0.47%</td>
</tr>
<tr>
<td>1996</td>
<td>128,653</td>
<td>20,816</td>
<td>16.18%</td>
<td>3,059</td>
<td>2.38%</td>
<td>459</td>
<td>0.36%</td>
</tr>
<tr>
<td>1997</td>
<td>183,225</td>
<td>23,147</td>
<td>12.63%</td>
<td>4,019</td>
<td>2.19%</td>
<td>519</td>
<td>0.28%</td>
</tr>
<tr>
<td>1998</td>
<td>192,115</td>
<td>23,844</td>
<td>12.41%</td>
<td>4,014</td>
<td>2.09%</td>
<td>404</td>
<td>0.21%</td>
</tr>
<tr>
<td>1999</td>
<td>188,296</td>
<td>24,663</td>
<td>13.10%</td>
<td>3,581</td>
<td>1.90%</td>
<td>404</td>
<td>0.21%</td>
</tr>
<tr>
<td>2000</td>
<td>182,961</td>
<td>21,465</td>
<td>11.73%</td>
<td>3,196</td>
<td>1.75%</td>
<td>305</td>
<td>0.17%</td>
</tr>
<tr>
<td>2001</td>
<td>215,282</td>
<td>25,822</td>
<td>11.99%</td>
<td>3,238</td>
<td>1.50%</td>
<td>322</td>
<td>0.15%</td>
</tr>
<tr>
<td>2002</td>
<td>229,525</td>
<td>30,985</td>
<td>13.50%</td>
<td>3,839</td>
<td>1.67%</td>
<td>531</td>
<td>0.23%</td>
</tr>
<tr>
<td>CY95-02 Subtotal</td>
<td>1,397,560</td>
<td>183,181</td>
<td>13.11%</td>
<td>27,676</td>
<td>1.98%</td>
<td>3,306</td>
<td>0.24%</td>
</tr>
<tr>
<td>CY95-02 Average</td>
<td>174,695</td>
<td>22,898</td>
<td>N/A</td>
<td>3,460</td>
<td>N/A</td>
<td>413</td>
<td>N/A</td>
</tr>
<tr>
<td>CY91-02 Total</td>
<td>1,621,813</td>
<td>214,464</td>
<td>13.22%</td>
<td>38,783</td>
<td>2.39%</td>
<td>4,957</td>
<td>0.31%</td>
</tr>
</tbody>
</table>

**Source:** Table prepared by the Congressional Research Service (CRS) using ATF firearm trace data presented in the July 2002 Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994-2003, on p. 43.

73 The report includes the following disclaimer: "This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice."
Note: The SAW traces in the updated impact study include traces for the INTRATEC group, SWD group, and AR-15 group of banned firearms, but did not include any traces for banned variants of the AK-47. For reasons that are not entirely clear, the study’s researchers also included traces of Calico and Feather models of firearms that were not banned, but according to the researchers were relatively common among crime guns reported by law enforcement agencies to the ATF prior to the ban.

Based on previous research by others, the study reported that SAWs accounted for between 2% and 8% of firearms recovered by police, and accounted for no greater than 13% of crime guns used in the much rarer incidents of police murders and mass shootings. The study attributed the relative rarity of SAW use in crime to several factors: (1) many SAWs are rifles, and rifles are used less often than handguns in crime; (2) SAWs, whether handguns or long guns, tend to be more difficult to conceal than other firearms; (3) foreign SAWs were banned from importation in 1989; and (4) SAWs are more expensive than other firearms.

Firearm Trace Data

The study’s researchers found that “due to instrumentation problems inherent in tracing data, statistical tests are [were] not presented.” In other words, data limitations precluded testing for statistical significance of possible relationships between firearm traces in general, and SAW traces in particular, and the wider population of firearms that are available to civilians. See Table 5 for ATF firearm trace data presented in the study.

Nevertheless, the study found that the firearm trace data suggested that the use of SAWs in crime had declined since the ban’s enactment. The study found that SAWs accounted for 5.4% of ATF firearm traces in 1992-1993 as compared to 1.6% in 2001-2002, a decline of 70%. If the Brady Center’s methodology is adopted, and the percent change in the SAW share of total firearm traces for 1991-1994 (4.95%) and 1995-2002 (1.98%) is calculated, the result is a 60% decrease in the SAW share of total firearms traced, which is close to the Brady Center’s finding of 66%.

Firearm Recovery Data

The study’s researchers examined several databases of guns recovered by police in six localities. The study’s researchers found that such firearm recoveries—despite limitations that also precluded testing for statistical significance—provided “the best available indicator of changes over time in the types (and especially the specific makes and models) of guns used in violent crime and possessed and/or carried by criminal and otherwise deviant or high-risk persons.”

They found reductions in two cities of 17% to 72% in SAW recoveries as a percentage of total firearm recoveries, but other reductions ranged more generally in the other four cities between 32% and 40%. Based on these findings, the study concluded that ATF firearms trace data and local databases on guns recovered by police showed that in various places and times from the late

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74 Ibid., pp. 15-16.
75 Ibid., p. 16.
77 Those localities included Baltimore, Miami-Dade County, St. Louis, Boston, Milwaukee, and Anchorage.
78 Ibid., p. 39.
79 Ibid., p. 48.
1990s through 2002, SAWs typically fell by one-third or more as a share of firearms used in crime.\textsuperscript{80} Such conclusions, however, were drawn without the use of statistical tests, due to "instrumentation problems inherent in tracing data."\textsuperscript{81} Despite the limitations inherent in firearm trace and recovery data, the updated impact study also found that in several locations LCAFDs were used in between 14\% and 26\% of crimes, and there were indications that any effects that the 1994 ban might have had on reducing firearms-related violent crime were partially offset by an increase in criminal use of semiautomatic firearms equipped with LCAFDs.\textsuperscript{82}

The study noted that while the act’s LCAFD provisions limited the number of these devices that were legally available, there were 25 million of these devices within the United States before the 1994 Act; and, between 1994 and 2000, another 4.8 million LCAFDs were imported for commercial sale, and permits were issued to import an additional 47.2 million.\textsuperscript{83} It was also noted that while semiautomatic firearms equipped with LCAFDs accounted for about a quarter of gun crimes (based on crime gun recoveries), it was not clear how frequently shootings that resulted in death or injury were a consequence of the shooter’s ability to fire more than ten rounds without reloading.\textsuperscript{84}

Conclusions

The study concluded that it would be premature to make definitive assessments of the ban’s impact on gun crime, as any effect was likely to be small at best—perhaps too small for reliable measurement.\textsuperscript{85} Moreover, any reduction in crime was likely offset by an increase in the use of non-banned semiautomatic firearms equipped with LCAFDs. As a consequence, the study’s researcher(s) could not "clearly credit the ban with any of the nation’s recent drop in gun violence."\textsuperscript{86} The study’s researcher(s) recommended additional studies to develop better data on SAWs and LCAFDs using a variety of research methods that would include, among other things, more incident-based studies that contrast the dynamics and outcomes of attacks with different types of guns and magazines.\textsuperscript{87}

2004 Updated Impact Study and Violent Crime Data

Further examination of the data in Table 5 reveals additional trends regarding SAW and total firearm traces related to violent crime.\textsuperscript{88} First, violent crime firearm traces did not increase nearly as steeply as total firearm traces did for either the pre- or post-ban periods (see Figure 1 below). A similar trend could be seen for SAW violent crime traces as compared to SAW traces in general (see Figure 2 below). SAW violent crime traces, as presented in Table 5, had an annual average number for the pre-ban period of 413, the same as for the post-ban period. If total firearm traces

\textsuperscript{80} Ibid., p. 51.
\textsuperscript{81} Ibid., p. 42.
\textsuperscript{82} Ibid., p. 51.
\textsuperscript{83} Ibid., p. 65.
\textsuperscript{84} Ibid., p. 97.
\textsuperscript{85} Ibid., pp. 96-97.
\textsuperscript{86} Ibid., p. 96.
\textsuperscript{87} Ibid., p. 99.
\textsuperscript{88} Violent crime includes murder and non-negligent homicide, kidnapping, rape, robbery, and aggravated assault.
were a good indicator of violent crime trends, it could be expected that both would rise or fall at similar rates.

**Figure 1. Comparison of ATF Total Firearm and Violent Crime Traces**

![Graph showing comparison of ATF total firearm and violent crime traces from 1991 to 2002.](image)


Firearm trace data may not be a good indicator of firearms-related violent crime trends, because the slightly increasing rate of violent crime traces does not correspond to the decreases in violent crime that have occurred in the past decade. For example as shown in **Figure 3**, firearm-related homicides decreased by 41% from 1993 (17,062) through 1999 (10,135), and leveled out in 2000 (10,182) and 2001 (10,132), before ticking up slightly in 2002 (10,802).
As shown in Figure 4, similar trends are reflected in firearm-related robberies and aggravated assaults. Consequently, when actual violent crime trends (in Figures 3 and 4) are compared with violent crime firearm tracing trends for both total firearms and SAWs (in Figures 1 and 2), it shows that the trends are divergent. It could be argued that these divergent trends are evidence that firearm traces for violent crimes (for either total firearms or SAWs) do not reflect actual criminal use of firearms, but rather they reflect increased reporting of recovered crime guns and ATF firearm tracing.

Law Enforcement Officers Killed with Firearms

The Federal Bureau of Investigation (FBI) reports annually on the number of law enforcement officers killed and assaulted in the line of duty. From CY1993 through CY2002, 708 law enforcement officers were feloniously killed, including 72 in the 9/11 terrorist attacks, 591 with
firearms, and 45 by other means. While most SAWs are rifles, handguns were used in 75% of the firearm-related officer killings. While the FBI does not determine whether the firearms used in the officer killings were SAWs, of the 591 firearm-related killings, 65 (11%) involved rifles chambered to use one of the two most common SAW rifle calibers of ammunition, 7.62x39 mm and .223 Remington, though it should be noted that both calibers are used in rifles that are not semiautomatic, as well as in SAWs and other semiautomatics.

The VPC has reviewed unpublished FBI data and conducted additional research into the circumstances surrounding firearms-related officer killings for CY1998 through CY2001. While unverified by the FBI, their research indicates:

that at least 41 of the 211 law enforcement officers slain in the line of duty between January 1, 1998, and December 31, 2001, were killed with assault weapons. Using these figures, one in five law enforcement officers slain in the line of duty was killed with an assault weapon.

There are two things about the VPC’s interpretation of these data that should be noted. First, excluding the 72 officers killed in the 9/11 terrorist attacks, there were 224 officers feloniously killed in the 1998-2001 period, of which 211 officers were killed with firearms. Second, 20 of the 41 firearms that the VPC counted as “assault weapons” may not meet the statutory SAW definition. For example, the VPC counted the M-1 Carbine, the Mini-14, the SKS, and the MAK90 as assault weapons, but none of these rifles was banned by the 1994 Act. When such weapons are discounted, it lowers the number to 20 out of 211 (or 224) officers killed with weapons that may be SAWs, or one in 11. In addition, FBI incident summaries on the officer killings suggest that only in a handful of the killings did the criminals fire more than 10 rounds of ammunition, the number of rounds to which the ban limits magazines made since the ban took effect.

Furthermore, several other firearms the VPC counted as SAWs, may or may not have been SAWS, as it is unclear whether these weapons were actually pre-ban SAWs, or versions of these weapons that were manufactured and transferred legally after the ban (copycats/legal substitutes). Nevertheless, Some would likely argue that even if these firearms were not strictly SAWs by

91 The M-1 Carbine was developed in the early1940s as an alternative to the Model 1911 .45 caliber pistol. The M-1 Carbine was chambered for intermediate-power .30 caliber cartridges. While it accepts a detachable magazine, it is not outfitted with a protruding pistol grip, nor is it routinely outfitted with either a flash suppressor, barrel shroud, or bayonet lug.
92 The Mini-14 series of rifles are chambered to accept .223 Remington and 7.62x39mm cartridges. While it accepts a detachable magazine, its configuration does not include a protruding pistol grip, nor is it routinely outfitted with either a flash suppressor, barrel shroud, or bayonet lug.
93 The Samozaryadnyi Karabin Simonova (SKS) semiautomatic rifle was produced by the Soviet Union in 1945. Since then, they have been produced in large numbers by Eastern Bloc countries and China. It was not originally designed to accept a detachable magazine, but there are after market parts on the civilian market that can be easily acquired to allow these firearms to accept a detachable magazine. The SKS is chambered for 7.63x39 mm cartridges. They are generally quite inexpensive as compared with semiautomatic assault weapon variants of the AK-47, M-16, G-3, or FN/FAL.
94 The MAK90 is a semiautomatic version of the Chinese made AK-47 (Model 56) that is usually chambered for 7.62x39 mm cartridges. ATF banned their importation in 1998.
definition, they ought to be banned. Opponents of the ban have questioned the reliability of such data.  

Legislation in the 108th Congress

Bills have been introduced in the 108th Congress to extend or make permanent the ban on SAWs and large capacity ammunition feeders. Other bills would modify the definition of “semiautomatic assault weapon” to cover a greater number of firearms by reducing the number of features that would constitute such firearms, and expand the list of certain makes and models of firearms that are statutorily enumerated as banned.

S. 1034, as introduced by Senator Dianne Feinstein, would make the ban permanent, as would H.R. 2038 and S. 1431, as introduced by Representative Carolyn McCarthy and Senator Frank Lautenberg, respectively. The latter two bills would modify the definition and expand the list of banned weapons.

Senator Feinstein has also introduced S. 2190 and S. 2498 that would extend the ban for 10 years. On March 2, 2004, the Senate passed an amendment to S. 1805, the gun industry liability bill, that would have extended the ban for 10 years, but did not pass the bill.

Conclusion

The expiration of the SAW-LCAFD ban has been, and is likely to remain, controversial. A key consideration for Congress is whether violent gun crimes, particularly crimes involving multiple gunshot victims and gunshot wounds per victim, were reduced by the ban. As in 1994, an underlying question for Congress is whether SAWs are more dangerous than other semiautomatic firearms and, if so, should the ban be extended or made permanent, and possibly expanded to include other “military style” firearms. As noted in the report, however, there is a lack of definitive data on SAWs and LCAFDs. There are steps that could be taken to improve such data.

For example, report forms issued to state and local law enforcement by the FBI for purposes of compiling the annual report on Law Enforcement Officers Killed and Assaulted could be modified to capture additional information about incidents in which firearms are used. In addition, as part of the National Incident Based Reporting System (NIBRS), which is the basis for uniform national crime reporting, the FBI could modify its data collection and submission requirements for firearm-related homicides—particularly in regard to those incidents that involve multiple shots, multiple victims, and multiple gunshot wounds per victim.

In regard to firearm traces, it may be possible to revamp the ATF’s firearm tracing system to improve the quality of data. For example, besides modifying data submission procedures, controlled firearm trace surveys could be conducted in certain geographic areas to determine whether SAWs, or other firearms, are the guns-of-choice for youth gangs and drug traffickers. Similar surveys are already underway as part of the Youth Crime Gun Interdiction Initiative and

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have yielded useful data on crime guns to assist local law enforcement agencies in formulating city-wide or regional firearms-related violence reduction strategies.

In conclusion, improved incident-based reporting and firearm trace data could provide useful insights into the lethality and criminal use of SAWs and other military-style firearms, as well as other crime guns. In the interim, until more definitive data are available, Congress faces exercise of its collective value judgement on the lethality and relative dangers posed to society by these firearms versus the diminution of the freedom to bear arms as set out in the Constitution.

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