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AUTOMATED RECORD CHECKS OF FIREARM PURCHASERS: ISSUES AND OPTIONS

CONGRESS OF THE UNITED STATES
OFFICE OF TECHNOLOGY ASSESSMENT

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Foreword

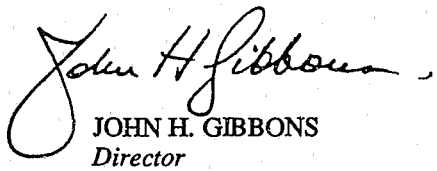
About 70 million Americans own an estimated 200 million firearms. All but a few are law-abiding citizens who use firearms for hunting, sports shooting, gun collections, and self protection. This report focuses on automated checks of criminal records to identify the small percentage of persons who are prohibited from purchasing firearms under Federal law because they have been charged or convicted of a disqualifying offense or are fugitives from justice.

Perhaps one-third of the most violent crimes involve the use of firearms. Most of these crimes are committed by repeat offenders who are legally prohibited from purchasing or possessing firearms. The firearm purchaser record check will not necessarily keep firearms from the hands of determined criminals, but it can make it tougher for criminals to obtain firearms from licensed gun dealers.

Our report assesses the proposals and prospects for automated checks, ranging from the point-of-sale "instant" check now used by the State of Virginia, to the establishment of a computerized national felons file, to live scanning of fingerprints, or the issuance of "smart" cards to identify firearm purchasers. It considers the benefits, costs, and risks of automated checks. The report examines the relationship between automated record checks and waiting periods, the wide variability in State criminal record systems, and the challenges of improving the automation and quality of record systems.

This study was requested by Sen. Howard Metzenbaum, Chairman, Subcommittee on Antitrust, Monopolies, and Business Rights, Senate Committee on the Judiciary.

OTA benefited from discussion at an April 1991 OTA workshop, comments on earlier drafts by many firearm and criminal record experts, and prior reports on this topic prepared by or for the U.S. Department of Justice. OTA appreciates the assistance of the Federal Bureau of Investigation; Bureau of Justice Statistics; Bureau of Alcohol, Tobacco, and Firearms; State and local law enforcement and criminal justice agencies; and groups representing gun owners, dealers, manufacturers, and others concerned with the use, regulation, and distribution of firearms in the United States. The report is, however, solely the responsibility of OTA and not of those who assisted us.



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Automated Record Checks of Firearm Purchasers: Issues and Options

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Overview

Record checks of firearm purchasers are intended to make it tougher for criminals and certain other individuals to obtain guns from licensed firearm dealers. Federal law prohibits the sale of firearms to persons convicted of a felony offense (see box A for other prohibitions), but does not require a criminal records check.

Proposals for criminal record checks—manual or automated—must be considered in light of the realities of firearms ownership: 1) the vast majority of persons purchasing firearms from gun dealers are law-abiding citizens who use firearms for sport, collection, or protection; 2) the estimated 200 million firearms already in circulation would not be affected by record checks unless resold through licensed dealers; and 3) criminals also get guns from other sources, e.g., thefts, sales by individuals, and the black market. Thus criminal record checks—by themselves—will not prevent criminals from getting firearms. Checks can, however, reduce dealer sales to disqualified persons and complement other crime controls (e.g., stiffer, mandatory sentences for firearms offenses; clampdown on illegal gun trafficking; tighter security by gun dealers and owners).

Automated checks of up-to-date criminal records, if available, can quickly and accurately determine if purchasers have a disqualifying criminal record. Automated checks could be made at the point-of-sale, during waiting periods, or while processing applications for permit-to-purchase cards. Automated checks could reduce the purchase delay caused by the need to conduct manual record checks of purchasers. Record checks, automated or manual, are quicker when record quality is high and when prospective firearms purchasers can be accurately identified.

The capability to conduct automated checks of criminal records varies widely among States. State or national point-of-sale "instant" checks would require substantially automated, complete, and up-to-date files of persons convicted of felony offenses. But State and FBI criminal history files have major gaps in automation and record completeness.

A felony arrest is not, of itself, disqualifying under Federal firearms law. The prospective firearms purchaser must be convicted of the offense, or formally charged (i.e., by a prosecutor or grand jury), to be disqualified. A felony arrest is not disqualifying if: 1) the police subsequently drop charges; 2) the prosecutor declines to bring charges; or 3) the court dismisses the charges or finds the defendant not guilty.

Nationwide, one-third of the final outcomes ("dispositions") of arrest cases are estimated to be missing from criminal history records. Some States do much better than average; others much worse. Given time, missing dispositions usually can be located by checking with police, prosecutors, or courts. But firearm purchaser decisions made at the point-of-sale do not allow time to locate missing information.

Because of these missing dispositions, firearm purchasers with felony arrest records alone (i.e., not convicted or formally charged) could be initially disapproved, but would eventually be found qualified after verification. This would inconvenience those whose purchases were thus delayed. If, on the other hand, disapprovals were based on listed felony convictions only, many purchasers who should be disqualified would be approved. This poses a

Box A—Federal Firearms Purchaser Prohibitions

The following are prohibited from purchasing or receiving firearms (or ammunition):

1. persons under indictment for a crime punishable by imprisonment for a term exceeding 1 year (defined as a felony in most States; under Federal law, a misdemeanor punishable by more than 2 years imprisonment also is disqualifying);
2. persons convicted of such a crime;
3. fugitives from justice (persons who have fled from any State to avoid prosecution for any crime);
4. unlawful users of any controlled substance;
5. persons adjudicated as mentally defective or committed to any mental institution;
6. illegal aliens;
7. persons dishonorably discharged from military service; and
8. renunciates of U.S. citizenship.

SOURCE: 18 U.S.C. 44, secs. 921 and 922.

particular dilemma for States with low levels of disposition reporting.

The FBI's computerized Interstate Identification Index (III) could be used as a national felon file by "flagging" (with a special indicator) the index entries of all persons with disqualifying convictions. State or local law enforcement agencies could then run national criminal history record checks on firearms purchasers by querying the III. But the quality of III information is only as good as the quality of State criminal history records. States would first need to ensure that their own criminal history records are complete and up-to-date. This is not generally the case today. And neither the III or most State files distinguish between persons arrested and those formally charged.

Point-of-sale checks are presently based on the purchaser's name and personal identifiers (e.g., date of birth, sex, height) but not on fingerprint identification—considered by many criminal justice officials to be the only reliable positive identification. But the few States with instant checks have not reported problems with phony identification.

The time and resources that would be needed to perform automated checks depends on the level of record quality desired and whether and how fingerprint checks are included. Building the systems to support reasonably complete and accurate "instant" name checks of State and Federal criminal history records probably would take several years and $200 to $300 million. Other options would take longer and cost more—up to several billion dollars over a decade for point-of-sale electronic fingerprint checks.

The time needed for thorough criminal record checks should decline in the future, if Federal and State resources continue to be applied. In a few States, "instant" checks seem practical today; in many, waiting periods of several days (and sometimes weeks) are needed to check a combination of manual and automated records. Over time, more States can be expected to develop the capabilities needed for instant checks. The average waiting time could correspondingly shorten, assuming States did not retain gun purchase waiting periods for other reasons (e.g., cooling off, checks of noncriminal justice records).

Several related automated record check issues warrant congressional consideration:

- All record check systems need to ensure privacy, security, and protect constitutional rights. Many gun owners consider the right to keep and bear arms a fundamental freedom. Record check systems can be designed to prevent the listing of law-abiding gun owners and guns and to prohibit or severely limit access by gun dealers to the actual criminal record information of would-be purchasers. Good record quality, quick response, and fast verification of initial disapprovals can be required to protect the rights of firearm purchasers. Periodic audits, simple and speedy appeal procedures, and appropriate sanctions may be needed to help ensure compliance and public confidence.
- Knowledge of how and where criminals obtain firearms is limited. The National Institute of Justice (NIJ), Bureau of Justice Statistics (BJS), FBI, and Bureau of Alcohol, Tobacco, and Firearms (BATF) could sponsor research on firearms purchases in States and at gun shows (or other outlets) that do not use record checks, and on the use of phony identification in firearm purchases. BATF could conduct more frequent criminal record checks of licensed firearms dealers, possibly including fingerprint checks.
- Difficult as criminal record checks may be, the challenges posed by checking other types of records are even greater. NIJ and BJS could sponsor research on how to check for other types of persons disqualified from purchasing firearms (e.g., illegal drug users, illegal aliens, persons committed to mental hospitals).
- The U.S. Department of Justice does not have a detailed, coordinated plan for implementing automated firearm purchaser record checks. The Bureau of Justice Assistance (BJA) and BJS could conduct a State-by-State examination of: needed improvements in criminal record systems; the cost of needed improvements; how quickly (and by how much) these improvements might reduce record check response time, and improve completeness and accuracy; and State actions necessary to fully implement the FBI's III and related National Fingerprint File (NFF). The results could form the basis for a phased implementation of automated record checks.

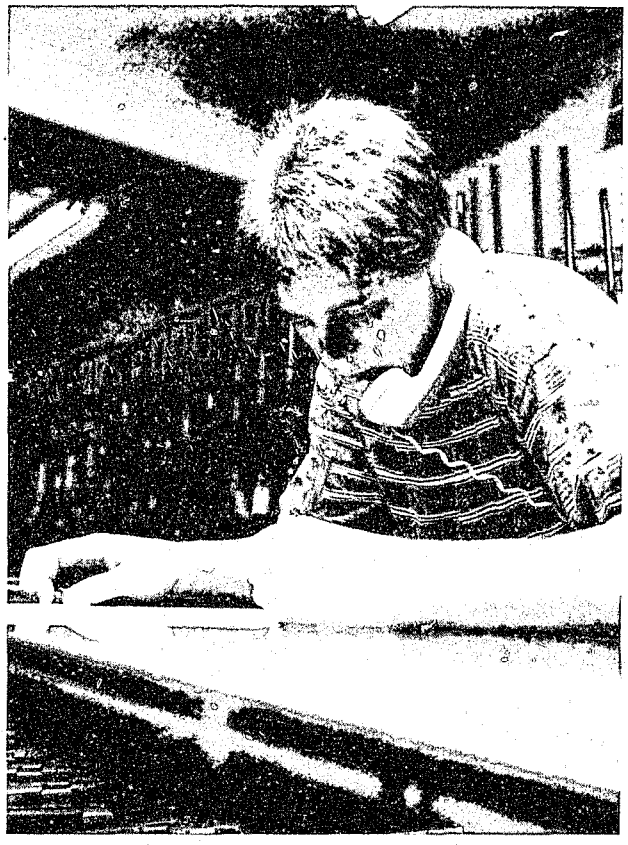
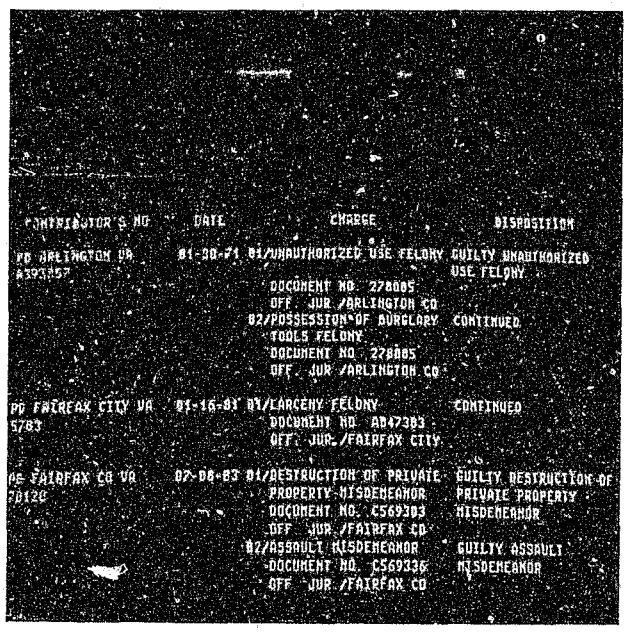


Photo credits: Virginia State Police



CONTRIBUTOR'S NO	DATE	CHARGE	DISPOSITION
PD ARLINGTON VA A393857	01-30-71	01/UNAUTHORIZED USE FELONY	GUILTY UNAUTHORIZED USE FELONY
		DOCUMENT NO. 278005	
		OFF. JUR./ARLINGTON CO	
		02/POSSESSION OF BURGLARY TOOLS FELONY	CONTINUED
		DOCUMENT NO. 278005	
		OFF. JUR./ARLINGTON CO	
PD FAIRFAX CITY VA 5783	01-16-81	01/LARCENY FELONY	CONTINUED
		DOCUMENT NO. AB47383	
		OFF. JUR./FAIRFAX CITY	
PD FAIRFAX CO VA 78120	07-08-83	01/DESTRUCTION OF PRIVATE PROPERTY MISDEMEANOR	GUILTY DESTRUCTION OF PRIVATE PROPERTY MISDEMEANOR
		DOCUMENT NO. CS69303	
		OFF. JUR./FAIRFAX CO	
		02/ASSAULT MISDEMEANOR	GUILTY ASSAULT MISDEMEANOR
		DOCUMENT NO. CS69336	
		OFF. JUR./FAIRFAX CO	

Top left
A licensed firearms dealer calls the Virginia State Police toll-free 800 number to obtain a criminal records check on a prospective firearms purchaser. Dealers typically receive an initial approval or disapproval from the State Police in less than 2 minutes.

Top right
A Virginia State Police operator conducts an immediate check of State and Federal computerized criminal records while the firearms dealer waits on the phone line. Operators are on duty 8 a.m. to 10 p.m., 7 days a week.

Bottom left
Computerized criminal history records checked by the Virginia State Police include information on the arresting agency, date, charge, and, when available, disposition for each arrest.

Summary

Every day at least 20,000 new or used firearms are sold by federally licensed firearm dealers in the United States.[1] The vast majority are sold to law-abiding citizens.[2] Federal law prohibits persons convicted of a felony offense from purchasing firearms.[3] Despite this prohibition, a small percentage of purchasers—in the range of 1 to 2 percent—may be convicted felons. This could add up to tens of thousands of firearms per year going from dealers unknowingly to criminals. Anyone purchasing firearms from federally licensed gun dealers must complete a Federal form[4] and state whether he or she has been convicted of a felony. But Federal law does not require a criminal records check to verify if the information provided is true and accurate. Checks of criminal records are intended to help prevent illegal firearm purchases. Some States require record checks; others do not.

Record checks using manual, labor-intensive systems take days to weeks.[5] Automated systems can cut the time to hours, minutes, or even seconds. The State of Virginia has an operational point-of-sale (POS) system that checks computerized State criminal history (and State and Federal wanted person)[6] records for every firearm purchase called in on an 800 telephone number by licensed dealers. The Virginia State Police conducts the record checks and provides a response to dealers within about 90 seconds that the sale is either approved or disapproved (subject to verification).

Can what appears to work for Virginia work for other States and the entire Nation? Virginia is one of only a few States that have all the necessary components of an automated POS record check system: a fully computerized name index of criminal offenders; a substantially computerized criminal history (CCH) file; a high level of disposition[7] reporting (in Virginia, 95 percent for recent arrests); and flagging (in the computer file) of offenders with felony convictions. Many States lack one or more of these components and will need significant time and resources to build the infrastructure to support POS record checks. The challenge will be greatest for roughly half the States that still have a very incomplete CCH file or a very low percentage of final dispositions (e.g., less than 50 percent automated records [21 States], less than 50 percent disposition reporting [13 States]).[8]

Record Quality

High criminal record quality is the key to success of POS systems. Even the Virginia system is not perfect. For every 100 firearm purchasers in Virginia, 94 are approved within seconds, based on record checks that show no criminal activity. The other 6 are initially disapproved. Only one or two of the six initial disapprovals are confirmed, on the average. The other four or five are "false positives,"[9] meaning the initial disapproval was based

[1]Assumes 7.5 million annual sales of new and used firearms, as estimated by the Bureau of Alcohol, Tobacco, and Firearms (BATF). Some gun owner groups believe the BATF estimate is low; the uncertainty lies in estimating used gun sales.

[2]Most use firearms for hunting, sports shooting, gun collecting, gunsmithing, or personal protection. For an overview, see W.S. Jarrett (ed.), *Shooter's Bible 1991*, No. 82 (South Hackensack, NJ: Stoeger Publishing Co., 1990); K. Warner (ed.), *Gun Digest 1991*, 45th annual ed. (Northbrook, IL: DBI Books, Inc., 1990); and the numerous books, periodicals, associations, and directories cited therein.

[3]18 U.S.C. 44, sec. 922(g) and sec. 921(a)(20) state that a disqualifying conviction shall be for a crime punishable by imprisonment for a term exceeding 1 year, or a misdemeanor punishable by imprisonment for a term exceeding 2 years. 18 U.S.C. 44, sec. 922(d) and (g) prohibit firearm purchases by: persons formally charged (under indictment or information) as well as convicted of a felony offense (as defined above), fugitives from justice, users of illegal drugs, persons adjudicated as mental defectives or committed to mental institutions, illegal aliens, dishonorably discharged military service personnel, and those who have renounced U.S. citizenship.

[4]Known as BATF Form 4473.

[5]"Record checks" refer to checks of criminal records based on the purchaser's name and identifiers (e.g., sex, date of birth) but not on the purchaser's fingerprints. The time required for manual name checks typically ranges from hours to days but can take up to 2 weeks or longer in States with limited staffing, high volume, or both.

[6]The Virginia State Police plan to check the Federal Bureau of Investigation's (FBI's) Interstate Identification Index (III) (for out-of-State criminal history records) at the immediate point-of-sale, beginning about July 1, 1991. The State police expect to continue providing an initial response to dealers within about 90 seconds.

[7]The disposition of an arrest is the final outcome, e.g., the arrest charges may be dropped by the police or prosecutor before going to trial, or they may result in a court conviction or acquittal.

[8]About 65 percent of State criminal history records are automated and include final dispositions, as a national average.

[9]A "false positive" is a record check that indicates a person has a criminal record and therefore is initially disapproved to purchase a firearm, but where subsequent verification determines that the criminal record is not disqualifying (and the purchase is therefore approved or that the criminal record is on another person perhaps with a similar but different name).

on a record "hit" on the wrong person (similar but different name), a felony arrest that did not result in conviction, or a misdemeanor conviction that is not disqualifying.[10] The Virginia State Police verifies all initial disapprovals and corrects any false positives within hours or by the close of the next business day.

Premature use of POS systems would, in States with much lower disposition reporting levels than Virginia, predictably result in the following:

1. higher false positive rates than Virginia;
2. frustrated criminal justice officials;
3. unhappy law-abiding firearm purchasers;
4. substantial time and effort spent verifying records after an initial disapproval; and,
5. in States with incomplete arrest as well as disposition reporting, an unknown number of felons and fugitives who are unintentionally authorized to, in effect, illegally purchase firearms ("false negatives").[11]

This points up the dilemma for POS systems in States with low record quality. If every firearm purchaser with any kind of criminal history record is initially disapproved, most of these record "hits" will turn out not to be disqualifying after verification (false positives). If only firearm purchasers with listed felony convictions are disapproved, purchasers with disqualifying convictions may also be inadvertently approved (false negatives) because disposition (and perhaps arrest) information is missing from the criminal records. A key concern is: what levels of false positives and false negatives are acceptable for States to participate in POS systems, until such time that all States have substantially complete and up-to-date criminal history records? This involves a balancing of: the effort and time, ranging from minutes to hours to days, required to verify initial disapprovals; the inconveniencing of lawful firearm purchasers whose purchases are delayed due to "false positive" record checks; and the effort, time, and risk associated with retrieving firearms from ineligible purchasers who had been inadvertently approved because of faulty records. (The same considerations apply to any type of record check—manual or automated, whether at the POS or during a waiting or preapproval period.)

National Felon File

One possible shortcut to POS systems is the creation of a national felon file—an option identified by a U.S. Department of Justice task force.[12] This new computerized file would contain the names and personal identifiers of all convicted felons. It would, in theory, solve State and Federal record quality problems and be more cost effective than checking firearm purchasers against all criminal records. A national felon file would be difficult to implement in the short-term because it would first require the following:

1. the screening of each State's criminal history records against each State's firearm laws, since the definition of disqualifying felony offenses varies from State to State;
2. the flagging of disqualifying in-State felony convictions in every individual State criminal history file; and
3. the resolution of privacy and security issues, especially regarding the possibility of non-criminal justice direct access (e.g., by gun dealers) to such a file.

A national convicted felon file would not, by definition, include other persons who are prohibited from purchasing or receiving firearms under Federal law (those who are formally charged[13] with a felony offense or who are fugitives from justice); nor would it necessarily include persons with misdemeanor convictions that are disqualifying under State or Federal laws. Virginia has interpreted Federal law as justifying the checking of State and National wanted person files as well as State and National criminal

[10]Criminal record managers consider initial false positives to be a routine occurrence when record checks are based on name and personal descriptors rather than fingerprints. Name checks frequently identify several persons with similar names and descriptors. Criminal records personnel review these initial record "hits" to determine if any of the records actually match the person being checked, conduct further verification if needed, and request relevant criminal history information. In this view, an initial name check is simply the first step in a process leading to a determination as to whether the person does or does not have a criminal history record. A true "false positive" would occur only if a misidentification is made and not corrected by the end of the records checking process, including cases of mistaken identity (the purchaser is erroneously linked to a criminal record).

[11]A "false negative" is a record check that indicates a person does not have a criminal record and therefore is approved to purchase a firearm, when the person in fact has a disqualifying criminal record but escapes detection due to incomplete records (or use of phony identification).

[12]Attorney General's Task Force on Felon Identification in Firearm Sales.

[13]Under indictment or information. An indictment is a formal accusation of a crime presented by a grand jury; an information is a formal accusation made by a prosecuting attorney.

history files. If one accepts the Virginia approach, a national felons file may never be needed—only the further improvement and automation of the basic State and Federal criminal record systems, which is needed anyway.

National Crime Information Center (NCIC)

Another POS shortcut is to use—like Virginia does today—existing systems for the interstate exchange of criminal justice information. The backbone of this interstate network consists of the FBI's NCIC (for locating wanted persons and fugitives from justice) and Interstate Identification Index (III) (for locating persons with out-of-State criminal history records). The III can be used in conjunction with firearm purchaser checks, but the quality of the criminal history records exchanged via III will be no better than the quality of the records in the source States. The NCIC and III can be important supplements or complements to, but not substitutes for, State wanted person and criminal history files, since many wanted persons, fugitives, and criminal offenders are not (and may never be) included in the FBI files. The III could serve as a de facto national felons file, but only after State criminal history records are screened and flagged.[14]

Fingerprint Identification

The lack of positive identification of the prospective firearm purchaser is a potential weakness with the Virginia-style POS system. Firearm purchasers are required to present one government-issued photo-identification card, such as a Virginia driver's license (which has name, address, sex, date of birth, height, and social security number as well as a photo). Virginia officials have not detected a problem with phony identification; but other criminal justice officials remain skeptical.[15] Many in the criminal justice community consider fingerprints to be the only reliable form of positive identification.

Possible POS technical solutions include live scanning of fingerprints (with video or laser beams, rather than using inked prints), and smart cards (with fingerprint and criminal record information stored on magnetic or laser-readable strips or computer chips).[16] Both of these technologies exist today; but their further development and deployment to support POS firearm purchaser checks is likely to take years. Realistically, this will probably not happen until: States adopt smart cards for other, broader governmental purposes, such as driver's licenses; and fingerprint (or other biometric)[17] identification becomes a standard adjunct to, for example, credit card transactions for purposes of reducing retail fraud.

Waiting Periods

Waiting periods help provide the time needed for criminal record checks in many States using whatever combination of manual and automated capabilities exists. The amount of time required for checks is, all other things being equal,[18] inversely related to automation, record quality, and the ability to accurately identify firearm purchasers. The more automated and complete a State's criminal records, and the lower the incidence of false identification, the less the need for waiting periods for purposes of criminal record checks.

Even in the more automated States, time is needed to confirm initial record hits. States like Virginia with high levels of automation and disposition reporting can usually do this in a matter of minutes to hours (although Virginia can take, and sometimes needs, up to 2 working days—the close of the next business day—to verify initial POS disapprovals). States with intermediate levels of automation and dispositions are likely to need up to several days. Florida, which also has a Virginia-style POS system, allows and frequently needs up to 3 working days to verify initial disapprovals. Some intermediate States

[14]Optimal use of the III for automated firearm purchaser checks would require full implementation of the III/NFF (National Fingerprint File) concept, including enactment of an interstate compact or Federal legislation on the interstate exchange of criminal history and identification information. For discussion, see U.S. Congress, Office of Technology Assessment, *The FBI Automated Fingerprint Identification Program: Issues and Options*, in preparation.

[15]The FBI believes that about one in six criminal record hits involves persons using alias names and identification that could only be detected using fingerprints. Whether this percentage applies to firearm purchasers in unknown. The Oregon State Police found that about 1 in 14 handgun purchasers with criminal records used phony names and identification, but that very few purchasers using phony identification (1 out of 70) actually had disqualifying criminal records.

[16]Credit or debit type cards with magnetic strips have limited capability, but can store personal identification information that can be read by inexpensive card scanners. The true "smart" card can process and transmit as well as store information.

[17]Unique human descriptors or measurements.

[18]Like the State's population, volume of firearm sales, and resources available to conduct checks.

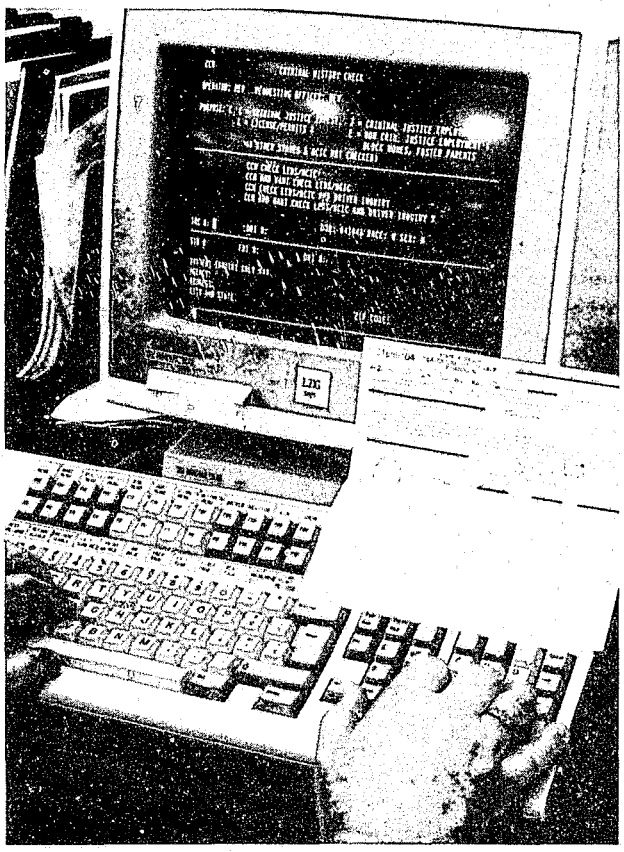
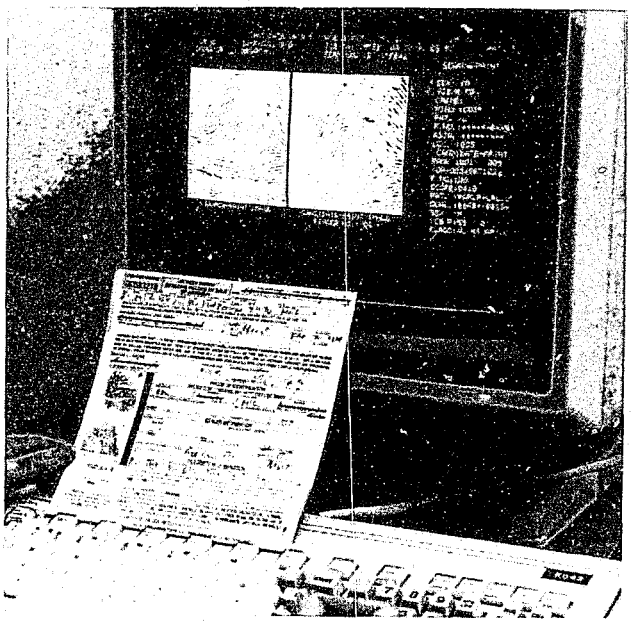


Photo credits: Oregon State Police



Top left
A prospective handgun purchaser in Oregon is thumbprinted by the licensed firearm dealer. The prints along with name and personal identifiers are forwarded to local and State police for checking during the mandatory 15-day waiting period.

Top right
Local law enforcement agencies check the criminal history records of handgun purchasers in Oregon.

Bottom left
The Oregon State Police check the thumbprints of handgun purchasers in Oregon. The thumbprints are processed by an automated fingerprint identification system; possible matches with prints on file are displayed on a computer screen.

require 3 to 15 days to conduct and verify record checks. States with little automation and few dispositions may need up to several weeks.

Over the next few years, each additional day of waiting period would permit additional States to be able to complete criminal record checks of firearm purchasers within the time allowed.[19] The average time needed for record checks should decline in the future, if Federal and State resources continue to be applied to improving the automation and completeness of criminal record systems. Over time, more States can be expected to develop the capabilities needed to expedite criminal record checks and ultimately to conduct POS checks. The average waiting time should correspondingly shorten, assuming States do not retain waiting periods for other purposes (e.g., cooling off, checks of noncriminal justice records).

Overall Effectiveness

The effectiveness of criminal record checks—whether manual or automated, at the POS or during waiting periods—depends in part on their coverage as well as their accuracy. About half of the States authorize or require a record check of some sort. The majority of these apply to both dealer and private transactions, and about two-fifths cover some or all long guns[20]. The absence of a Federal record check requirement combined with the patchwork quilt of State record checks means that criminals intent on obtaining firearms may be able to avoid a record check altogether by going to a State with no record check requirement. For maximum coverage, record checks could be authorized or required of all States, and could be extended to all firearm purchases (handguns and long guns) from all firearm dealers and at gun shows or other organized, public outlets.

The effectiveness of criminal record checks is tempered by the large number of firearms already in circulation in the United States (an estimated 200 million[21]), and the many ways criminals obtain firearms that are outside the direct reach of record checks—including black market and individual transactions.

Some gun owner groups remain skeptical that the benefits of record checks—automated or not—are worth the costs and risks. They question whether such checks will effectively deter a significant number of criminals, or are more likely to delay law-abiding citizens from purchasing firearms (and compromise their right to keep and bear arms), with very few active criminals detected or deterred from obtaining firearms. Criminals might, it is argued, simply resort even more to the black market or use of "stooge" purchases[22]. Law enforcement officials counter with statistics on the numbers of convicted felons disqualified and wanted persons identified trying to purchase firearms in those States with record checks. The Department of Justice (DOJ) could help clarify the factual uncertainties by periodically compiling statistics (and issuing reports) on firearm purchaser checks, including the number of: purchasers screened, initial disapprovals, confirmed disapprovals, appeals of disapprovals (with results of these appeals), and prosecutions of illegal purchasers (and resulting convictions).

Other Record Check Realities

Building the infrastructure necessary for automated POS firearm purchaser record checks will require a continued, strong Federal and State resource commitment. The additional funding is likely to be in the $200 to $300 million dollar range over the next 3 to 5 years for the State computerized criminal history record systems (including timely, substantially complete arrest and disposition reporting) needed to support automated POS name checks.[23] If fingerprint checks of firearm purchasers are desired, an additional roughly $200 million for State and Federal automated fingerprint identification systems would be needed over the next 5 years. Most of these funds would be needed anyway for criminal record and identification system improvements supporting a wide range of criminal justice purposes. If POS fingerprint checks are desired, an

[19]The marginal utility of each additional day of waiting period could be estimated, but would require a detailed State-by-State examination—perhaps best conducted by the Bureau of Justice Statistics.

[20]Includes rifles and shotguns.

[21]BATF estimate.

[22]Purchases made by persons without criminal records who are acting on behalf of criminals.

[23]This is to be distinguished from the cost of setting up individual State telephone "hot lines" at a cost of about $25 million. The "hot line" cost excludes the cost of needed State criminal record system improvements.

additional half a billion to several billion dollars would be needed over the next 5 to 10 years. Firearm purchaser "smart" cards would cost another several hundred million dollars.

Possible revenue sources for the State and local portion of record system improvements include additional State and local general revenues, Federal block or discretionary grants, licensing fees (from gun dealers), and user fees (from firearm purchasers). Most State and local government budgets are strained, and many of the States with the most serious record system deficiencies are strapped for funds. This makes Federal funding even more important.

The Bureau of Justice Assistance (BJA) and Bureau of Justice Statistics (BJS) could conduct a State-by-State examination of the following:

1. needed criminal record system improvements;
2. the cost of needed improvements;
3. how quickly (and by how much) these improvements might reduce record check response time, and upgrade completeness and accuracy; and
4. how police, prosecutors, judges, and criminal record managers might best cooperate in making these improvements.

Such an examination could be included in the program evaluation BJA/BJS are planning for fiscal year 1992, and could cover both State/local criminal record system improvements and full implementation of the FBI's separate but related III and National Fingerprint File (NFF).[24] The results could form the basis for a phased implementation of automated record checks.

The National Institute of Justice (NIJ), BJS, Federal Bureau of Investigation (FBI), and Bureau of Alcohol, Tobacco, and Firearms (BATF) could collaborate to improve understanding of how and where criminals obtain firearms; research on firearm purchasers in States and at gun shows (or other outlets) without record checks would be useful, as would studies on the use of phony identification and stooge purchases.

BATF has fallen behind in issuing the annual compilation of State firearm laws required to be provided to licensed gun dealers. BATF could issue periodic updates on a more timely and cost-effective basis consistent with legislative intent.

All record check systems—automated or not—need to be sensitive to privacy, security, and constitutional concerns. Many gun owners attach great importance to the right to keep and bear arms. Record check systems can be designed, as in Virginia, to prevent the compiling of lists of law-abiding gun owners and guns, and to prohibit or severely limit noncriminal justice access to criminal record information. High record quality, quick response, and expeditious verification of initial disapprovals can be mandated for automated POS systems, to protect the rights of firearm purchasers. Periodic audits, simple and speedy appeal procedures, and meaningful sanctions may be needed to help ensure compliance and public confidence.

Difficult as criminal record checks may be, the challenges posed by checking other types of records are even greater. Federal law also prohibits firearm purchase or possession by: unlawful users of controlled substances; persons adjudicated as mental defectives or committed to mental institutions; illegal aliens; persons dishonorably discharged (from military service); and renunciates (of U.S. citizenship). The outlook is not good for including these other disqualifying categories in automated firearm purchaser checks. Records do not exist on perhaps four-fifths of the people in these categories; half the records that do exist are not automated and many are of unknown quality. Nationwide POS checks of these categories of persons are not likely to be feasible for many years—if ever—with the possible exception of the dishonorably discharged and renunciates and perhaps persons involuntarily committed to mental institutions.

Further improvements in State and FBI automated fingerprint identification systems (AFIS) would be needed if automated firearm purchaser checks are to include fingerprints. There should be no illusion, however, that even these systems will permit instantaneous POS fingerprint identification; several hours or, more likely, days is the best that can be expected to the year 2000.

Improvements in FBI and State automated fingerprint identification capability will make it more feasible for BATF to conduct fingerprint as well as name checks on gun dealer license applicants and

[24]See OTA, *FBI Automated Fingerprint Identification Program*, op. cit., footnote 14, in preparation.

renewals. BATF could, in the interim, seek FBI and State and local law enforcement assistance in running fingerprint checks where feasible with existing systems. BATF also could run periodic name checks on licensees, rather than only at the time of initial application.

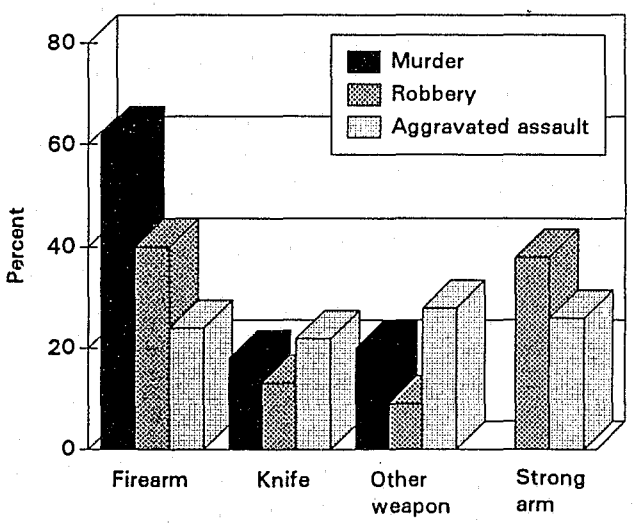
Firearm purchaser record checks should be viewed as only one of many actions needed to help reduce firearm-related crime. Other actions might include stiffer, mandatory sentences for repeat or violent firearm offenders, intensified investigation and prosecution of illegal gun trafficking, and firearm safety and security courses.

Introduction

Interest in automated criminal record checks has increased for several reasons. First, about one-fourth to one-third of the most violent crimes involve the use of firearms (see figure 1),[25] and three-fifths or more of these crimes are committed by repeat offenders who are prohibited from legally purchasing or possessing firearms.[26] The proportion of firearms illegally purchased from licensed dealers by felons is uncertain; most apparently are obtained through the black market or by theft.[27] In the absence of criminal record checks, the current system may be leaky and open to abuse. Gun traces conducted by BATF show significant movement of firearms from States without record checks to States with record checks.[28]

Second, proposals for waiting periods before a purchaser can take possession of firearms are based in part on the time required to conduct record checks. These checks can take days to weeks with manual record systems. Automated record checks can reduce the time down to hours, minutes, or even seconds, if records are complete and up-to-date.

Figure 1—Violent Crime by Type of Weapon, 1989



SOURCE: Federal Bureau of Investigation, 1991.

Third, automated record checks depend on improvements to the criminal record systems in Federal, State, and local jurisdictions. Current technology permits almost instantaneous exchange of criminal record information among the States and Federal Government. However, its potential cannot be realized as long as some States or the Federal Bureau of Investigation (FBI) still have manual files, incomplete files, or both. Response time is slowed considerably in these situations, because information must be retrieved and processed manually before it can be transmitted electronically.

Fourth, the information being checked must be complete and accurate to minimize wrong decisions. If a felony acquittal is missing from a record, a purchase could be denied or delayed until the criminal history information is updated. If a felony

[25]Uniform Crime Reports data provided by the FBI indicate that, in 1989, firearms were used in 62 percent of murders, 33 percent of robberies, and 22 percent of aggravated assaults. Comparable figures in 1980 were 62 percent of murders, 40 percent of robberies, and 24 percent of aggravated assaults. Comparable figures for California in 1989 were 66 percent of murders, 33 percent of robberies, and 19 percent of aggravated assaults. See California Department of Justice, Bureau of Criminal Statistics, *Crime and Delinquency in California, 1980-1989* (Sacramento, CA: California DOJ, July 1990). Roughly 650,000 violent crimes of all types are committed in the United States with handguns each year, and perhaps another 150,000 with long guns. For handguns, see M.R. Rand, *Handgun Crime Victims*, special report (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 1990). For long guns, the FBI's Uniform Crime Reports data indicate that long guns (rifles and shotguns) are used in about 20 percent of firearms-related murders, handguns 80 percent.

[26]The overall recidivism rate for violent offenders is about 60 percent, based on surveys of released prisoners, ranging from 66 percent for robbers to 42 percent for murderers. See A.J. Beck and B.E. Shipley, *Recidivism of Prisoners Released in 1983* (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, April 1989). Recidivism is defined as a rearrest within 3 years after release from prison.

[27]See J.D. Wright and P.H. Rossi, *The Armed Criminal in America: A Survey of Incarcerated Felons* (Washington, DC: U.S. Department of Justice, National Institute of Justice, July 1985).

[28]See Bureau of Alcohol, Tobacco, and Firearms, Boston District Office, and Boston Police Department, *Trace Study: City of Boston, October 1989-June 1990* (Boston, MA: U.S. Department of the Treasury, BATF, 1990).

conviction is missing, an illegal purchase could be approved.

This report focuses on automated checks of criminal records to identify persons disqualified from purchasing firearms under Federal law:

- if formally charged with a felony offense (under indictment or information),
- if convicted of a felony offense, or
- if determined to be a fugitive from justice.[29]

It briefly considers automated checks of record systems that cover other disqualifying conditions—users of illegal drugs; persons adjudicated as mental defectives or committed to mental institutions; illegal aliens; dishonorably discharged military service personnel; or those who have renounced U.S. citizenship.[30] The analysis and discussion of firearm purchaser checks are relevant to pending legislation[31] and various U.S. Department of Justice programs and initiatives.[32]

[29]18 U.S.C. 44, sec. 922(d)(1) and (2), sec. 922(g)(1) and (2).

[30]18 U.S.C. 44, sec. 922(d)(3)-(7), and sec. 922(g)(3)-(7).

[31]H.R. 7 and S. 257, the "Brady Handgun Violence Prevention Act," 102d Cong., 1st sess., Jan. 3, 1991; H.R. 1412, the "Felon Handgun Purchase Prevention Act of 1991," 102d Cong., 1st sess., Mar. 13, 1991.

[32]See U.S. Department of Justice, Office of Justice Programs, *Attorney General's Program for Improving the Nation's Criminal History Records and Identifying Felons Who Attempt To Purchase Firearms*, NCJ-128131 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, March 1991).

The debate over criminal record checks of firearm purchasers centers on how to implement existing Federal law. Convicted felons are legally proscribed from purchasing or possessing firearms. It is assumed that felons cannot be trusted to truthfully complete firearm purchase forms; therefore, it is argued, some means is needed to check the criminal records of purchasers to ensure that they qualify for purchase. Viewed thusly, the debate focuses on methods to conduct criminal record checks in a timely, accurate, cost-effective way.

This report narrowly addresses criminal record checks of firearm purchasers. However, record check issues relate to the larger debate over guns in America and the facts and value judgments that drive these debates. First, there are already an estimated 200 million firearms in the United States (excluding the police and military).[33] The majority of these are legally owned by an estimated 70 million persons.[34] This is about 2.5 times the total criminal offenders in the FBI's criminal identification file.[35] An estimated 7.5 million new or used firearms are sold by licensed dealers annually in the United States.[36] Gun owner groups are concerned that record checks will excessively burden law-abiding citizens in order to identify the small percentage of criminal purchasers. Gun owner groups generally believe that waiting periods for conducting record checks impose an unfair burden by delaying lawful firearm purchases and eroding the constitutional rights of law-abiding citizens. Opinion polls suggest that a large majority of gun owners, like the general public, support criminal record checks and a waiting period to conduct the checks.[37] Personal views and State laws differ on the preferred or required length of waiting periods—ranging from no wait to a few minutes to a few hours, days, or weeks.

Second, the right to keep and bear arms is cherished by many gun owners (and, opinion polls suggest, by the general public).[38] One point of view holds that the second amendment to the U.S. Constitution establishes the right of American citizens to possess firearms, and was intended by the framers to protect the people from the possibility of government tyranny. Another view is that the second amendment simply reaffirmed a preexisting right to keep and bear arms. Both of these views are based on analysis of Anglo-American law and English and colonial history that documents the pivotal role of firearms in the struggle for freedom and liberty. The outcome of the American Revolutionary War could have been different had the colonials not been armed. A third perspective suggests that the second amendment was intended to affirm the right of the States to raise and maintain militias, presumably for use in defending the nation from foreign adversaries. Some argue that this included defending the States from an oppressive central government, and that at the time the Bill of Rights was drafted, militias were mustered from citizens who supplied their own firearms. Thus, the right to keep and bear arms is

[33]BATF estimate.

[34]Assumes an average of two to three firearms per owner.

[35]The FBI criminal history file included records on about 24 million persons, as of January 1991.

[36]BATF estimate; based on a 10-year average of domestic firearms production (adjusting for imports and exports) plus used gun sales (estimated at about 50 percent of all sales of new firearms). Some gun owner groups estimate total sales to be at least double, when private sales of used guns are included.

[37]A 1988 Gallup poll found that 91 percent of the general public and 90 percent of gun owners supported a national law requiring a 7-day waiting period before a handgun could be purchased, in order to determine whether the prospective buyer has been convicted of a felony or is mentally ill. See George Gallup, Jr., *The Gallup Report*, report No. 280 (Princeton, NJ: The Gallup Poll, January 1989), p. 26, reprinted by permission in T.J. Flanagan and K. Maguire (eds.), *Sourcebook of Criminal Justice Statistics* (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 1990), p. 180. This and other polls have found broad support across the demographic and political spectrum (see R.S. Shinn, *Guns and Gun Control: National Public Opinion Polls*, CRS report for Congress (Washington, DC: Congressional Research Service, Nov. 26, 1990). These results are not inconsistent with surveys indicating that high percentages of gun owner group members are opposed to waiting periods. James Baker of the National Rifle Association has testified, for example, that the majority of NRA members oppose waiting periods, but that NRA members represent only a small percentage of all gun owners (testimony at a Mar. 21, 1991, hearing of the House Committee on the Judiciary, Subcommittee on Crime and Criminal Justice). The NRA is supporting so-called "instant checks" of criminal records at the point-of-sale. For other gun owner group views, see Gun Owners of America, *Background Checks: Gun Owner Harassment in Disguise*, issue brief, no date; and Citizens Committee for the Right to Keep and Bear Arms, *Point Blank* vol. 19, No. 9, p. 7, September 1989, and vol. 20, No. 1, pp. 4-5, January 1990.

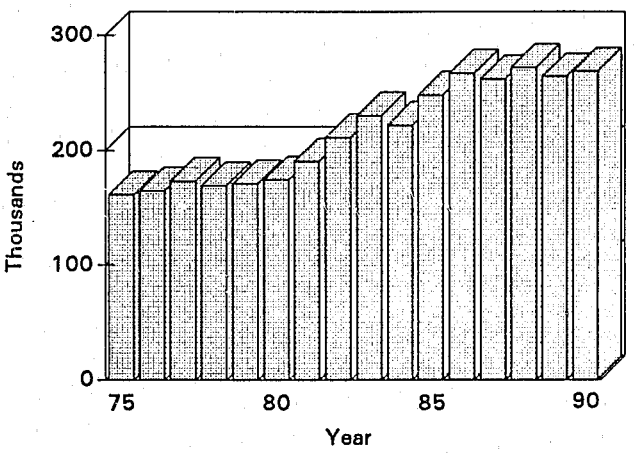
[38]Public opinion polls suggest that about 90 percent of U.S. citizens believe: a) the right to own a gun is protected by the U.S. Constitution; and b) waiting periods and record checks for gun purchasers are appropriate. See Shinn, *Guns and Gun Control*, op. cit., footnote 37.

viewed as key to either a narrow or broad interpretation of the second amendment.[39]

Regardless of one's views on the second amendment, it is an important part of the context of the debate over criminal record checks for firearm purchasers. These concerns raise anxieties that record checks and waiting periods might intimidate, discriminate against, or block law abiding citizens from legally obtaining firearms, thereby indirectly abridging their constitutional rights. Information provided on firearm purchase forms might be used to create lists or indices of gun owners and guns; record checks might place too much discretionary power over firearm purchases in the hands of police. Proponents of record checks and waiting periods assert that the intent is not to prevent law-abiding citizens from legally obtaining firearms, only to enforce firearm laws. They argue that record checks and waiting periods do not erode or challenge constitutional rights. Some also advocate waiting periods for a "cooling off time" to deter spontaneous crimes of passion. Opponents question whether cooling off time would really make a difference.[40]

Third, the criminals obtain firearms from several sources. These include: "black market" transactions between individuals (where guns might be exchanged for drugs or money); thefts from licensed dealers, manufacturers, military bases, and individuals; illegal interstate transportation of firearms (gun-running) from States with lax gun laws to States with strong gun laws; "straw person" or "stooge" purchases from licensed dealers (where the criminal has someone else buy the guns); direct but fraudulent purchases from licensed dealers (where the criminal lies about his/her criminal history); and direct but fraudulent purchases from licensed dealers or individuals at gun shows and flea markets.[41] Even among licensed dealers, the situation is complex. Of the 270,000 current federally licensed firearm dealers (see figure 2), only about 15,000 operate storefront gun shops, and another 5,000 operate retail gun sections in sporting goods or department stores.[42] The rest are gun collectors, gunsmiths, hobbyists, pawnshops, and the like. Most

Figure 2—Number of Federal Firearms Licenses, 1975-90



SOURCE: Bureau of Alcohol, Tobacco, and Firearms, 1991.

[39]For general discussion of second amendment issues, see National Rifle Association of America, Inc., "Comments on [the U.S. Attorney General's] Draft Report for Identifying Felons Who Attempt To Purchase Firearms," 1989; S.P. Halbrook, "Police Surveillance and Temporary Suspension of the Exercise of a Constitutional Right: Testimony on S. 1236," Nov. 21, 1989, prepared for the U.S. Senate, Committee on the Judiciary, Subcommittee on the Constitution; S.P. Halbrook, "Prior Restraint, Police Surveillance, and the Purchase of Constitutionally Protected Firearms: Testimony on S. 466," Aug. 2, 1988, prepared for the U.S. Senate, Committee on the Judiciary, Subcommittee on the Constitution; and S.P. Halbrook, "To Keep and Bear Their Private Arms: The Adoption of the Second Amendment, 1787-1791," *Northern Kentucky Law Review* vol. 10, pp. 13-39, 1982. For contrasting views, see K.A. Ehrman and D.A. Henigan, "The Second Amendment in the Twentieth Century: Have You Seen Your Militia Lately?" *University of Dayton Law Review* vol. 15, pp. 5-58, 1989, and references cited therein. For a range of viewpoints and analyses, see U.S. Congress, House, Committee on the Judiciary, Subcommittee on Crime, *Handgun Violence Prevention Act of 1989*, hearing, 101st Cong., 2d sess. (Washington, DC: U.S. Government Printing Office, 1990); and U.S. Congress, Senate, Committee on the Judiciary, Subcommittee on the Constitution, *The Right to Keep and Bear Arms*, report, 97th Cong., 2d sess. (Washington, DC: U.S. Government Printing Office, 1982).

[40]See, for example, the testimony or statements of Handgun Control, Inc.; Coalition to Stop Gun Violence; International Association of Chiefs of Police; National Rifle Association; Gun Owners of America; Firearms Coalition; and Citizens Committee for the Right to Keep and Bear Arms; among others, at hearings of the U.S. Congress, House, Committee on the Judiciary, Subcommittee on Crime, "Handgun Violence Prevention Act of 1989," 101st Cong., 2d sess., Apr. 26, 1990, and Subcommittee on Crime and Criminal Justice, "Brady Handgun Violence Prevention Act of 1991," 102d Cong., 1st sess., Mar. 21, 1991.

[41]According to BATF, "[t]here is no national data on the number of firearms entering the criminal community, nor, given the longevity of firearms, a basis to estimate such a figure based on production," Mar. 19, 1991, letter and attachments to OTA. BATF does initiate criminal investigations in most of these categories. In fiscal year 1990, BATF submitted cases to U.S. Attorneys for prosecution in the following areas: gun show/flea market (280 cases); strawman purchase (250 cases); stolen firearms trafficker (543 cases); licensee involved as suspect (167 cases); and interstate firearms trafficker (403 cases).

[42]Data from the National Alliance of Stocking Gun Dealers. BATF reports 269,079 Federal firearms licensees in fiscal year 1990, including: 235,684 firearms dealers (no further breakdown available from BATF); 9,029 pawnbrokers; 14,287 gun collectors; 7,945 ammunition manufacturers; 978 firearms manufacturers; and 946 firearms importers.

of the BATF's compliance effort is aimed at storefront gun shops that account for the largest share of firearm sales.

The number of illegal firearm sales that could be avoided by criminal record checks is uncertain. One survey of prisoners suggests that perhaps one-sixth of criminals purchase firearms from gun dealers, but statistically valid national data are lacking.[43] The BATF and National Institute of Justice (NIJ) are conducting further studies on sources of firearms.[44] States with criminal record checks have found that about 1 to 2 percent of purchasers have prior felony convictions.[45] Statistics for States without record checks are not available. Firearm thefts and black market transactions are not likely to be reduced by criminal record checks. Some hypothesize that thefts and black marketeering could increase if legal outlets were denied to criminals.[46] The impact on straw person purchases is unclear. Such purchases might be deterred to some degree, to the extent a record check scares stooges off. Straw person purchases might increase, if effective record checks caused more criminals to seek accomplices without criminal records. Controls over illegal purchases might be further tightened if record checks covered even the lowest volume licensed dealers, and dealer and individual sales at gun shows or other organized sales outlets.

Record check proponents believe that the illegal interstate transportation of firearms could be reduced if checks were required uniformly in all States. This could make it more difficult for criminals to purchase firearms in States without checks and transport them to States with mandatory checks. How much more difficult will depend in part on how the criminal justice system treats firearm offenders and how society deals with the violent crime problem. The efficacy of record checks in reducing the criminal use of firearms and firearm-related crime is uncertain and is linked to the Nation's overall anticrime strategy.

Fourth, the criminal record check of firearm purchasers is not a panacea for reducing violent crime. Firearms are involved in about one-fourth to one-third of the most violent crimes (e.g., homicide, aggravated assault), and perhaps one-eighth of all violent crime.[47] The impact of record checks would be greatest if applied to all jurisdictions, assuming that checks are some deterrence. Opinions on the causes of crime in America vary widely.[48] It is evident that the criminal record check is just one weapon in the arsenal for preventing and fighting crime. Record checks can complement—and be complemented by—other anticrime actions.

Fifth, success in using criminal record checks depends on improvements in Federal, State, and local criminal identification and record systems.

[43]See Wright and Rossi, *The Armed Criminal in America*, op. cit., footnote 27. This survey of incarcerated felons found that about 20 percent obtained firearms from retail outlets—16 percent by purchase and 3 percent by theft. Retail outlets were defined to include gun shops, pawnshops, and hardware or department stores. The survey found that about 26 percent of felons obtained firearms from the "gray or black market" (11 percent by purchase, 10 percent by theft, 5 percent by trade, borrow, or gift), and 44 percent from family or friends (17 percent by purchase, 10 percent theft, 8 percent borrow/rent, 6 percent gift, 4 percent trade). The study does not state: 1) whether and how gun shows, flea markets, and other less formal sales or trading outlets (in which gun dealers might participate) were covered in the survey; or 2) the extent to which family, friends, and fences obtained firearms for felons through stooge purchases from gun dealers. The study does not purport to be "a 'nationally representative probability sample' of States, prisons, or prisoners" (Wright and Rossi, op. cit., footnote 27); thus the degree to which the study results are representative of the broader convicted felon, prisoner, or criminal population cannot be determined without follow-up validation research.

[44]BATF continues to analyze traces of firearms used in criminal activities to better understand where and how criminals obtain firearms. NIJ is sponsoring a survey of juveniles in correctional institutions regarding their acquisition and use of firearms. NIJ is not, however, sponsoring a much-needed direct follow-up to the 1985 Wright and Rossi, op. cit., footnote 27, survey of prisoners.

[45]1990 data for California, Delaware, Florida, Illinois, Oregon, and Virginia suggest a confirmed hit range of about 0.6 percent to 3 percent, depending in part on the method of calculation. See, for example, Oregon State Police, *Study of Retail Firearm Sales and Concealed Handgun Licensing in Oregon* (Salem, OR: Oregon State Police, Criminal Investigation Division, 1990). 1991 data for Florida suggest a confirmed hit rate of about 3 percent. See Florida Department of Law Enforcement, "First Two Months Operation of the Firearm Purchase Program," memo from Deputy Commissioner McLaughlin, Apr. 3, 1991.

[46]See Wright and Rossi, *The Armed Criminal in America*, op. cit., footnote 27; and J.D. Wright, "The Armed Criminal in America," research in brief, U.S. Department of Justice, National Institute of Justice, November 1986.

[47]See, for example, Rand, *Handgun Crime Victims*, op. cit., footnote 25.

[48]The roots of criminal behavior have been variously attributed to factors such as economic and social conditions, peer pressures, family instability, mass media violence, and drug addiction. See, for example, U.S. Department of Justice, Bureau of Justice Statistics, *Report to the Nation on Crime and Justice* (Washington, DC: DOJ/BJS, March 1988), and references cited therein. For some gun owner perspectives, see, for example, D.B. Kates, Jr., "Gun Laws Cannot Overcome Basic Cultural Values Which Determine Violence," *Petersen's Handguns*, April 1991, pp. 14-15, and "Anti-gunners Skewing Foreign and Domestic Crime Statistics to Support Their Self-Serving Claims," *Petersen's Handguns*, January 1991, pp. 16-17; and B.S. Centerwall, "Exposure to Television As A Risk Factor for Violence," *American Journal of Epidemiology* vol. 129, pp. 643-652, 1989.

Congress recognized this in requiring the U.S. Attorney General (AG) to study and implement a system for the immediate, accurate identification of felons attempting to purchase firearms.[49] Several reports from the AG's study team emphasized that any effective felon identification system—whether on a preapproval, waiting period, or POS basis—requires accurate, automated FBI and State and local record systems.[50]

The Attorney General has endorsed a POS instantaneous criminal record check, and is moving to improve the record systems needed to support such record checks.[51] These improvements should expedite record checks for firearm purchaser waiting periods, firearm owner identification cards, concealed weapons permits, and other preapprovals of firearm purchase or ownership required by some States.

The AG's plan include the following:

1. survey of current record quality and automation in State criminal record systems (completed, will be updated in 1992);
2. development of a voluntary standard for State and Federal reporting and the flagging of felony convictions in criminal history record systems (completed);[52]
3. allocation of $9 million per year for 3 years for State and local record systems improvements [fiscal year (FY) 1991 grant awards complete—will continue for FY92 and FY93];
4. allocation of $12 million in FY92 funds to reduce the arrest, disposition, and manual record backlog in the FBI's Identification Division.[53]
5. allocation of an additional $20 million per year for State/local record system improvements (in response to the Crime Control Act of 1990's requirement for a 5-percent set-aside of Bureau of Justice Assistance block grants for this purpose, beginning in FY92); and
6. support of the revitalization and modernization of the FBI's Identification Division (Congress appropriated $185 million in FY91 funds for a new site and building near Clarksburg, WV—the automated equipment is estimated to cost several hundred more million dollars, although the President's FY92 budget includes no additional funding).[54]

The AG views firearm purchaser checks as part of a comprehensive approach to crime control that also includes stiffer, mandatory sentences for repeat firearm offenders, especially violent offenders, coupled with intensified criminal investigations of illegal gun and drug trafficking.[55]

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[49]The Anti-Drug Abuse Act of 1988, Public Law 100-690, sec. 6213, requires that: a) "The Attorney General shall develop a system for immediate and accurate identification of felons who attempt to purchase 1 or more firearms but are ineligible to purchase firearms by reason of section 922(g)(1) of title 18, United States Code. The system shall be accessible to dealers but only for the purpose of determining whether a potential purchaser is a convicted felon. . .The Attorney General shall begin implementation of the system 30 days after the report to the Congress provided in subsection (b)"; b) "Not later than 1 year after the date of the enactment of this Act, the Attorney General shall report to the Congress a description of the system referred to in subsection (a) and a plan (including a cost analysis of the proposed system) for implementation of the system. . ."; and c) "The Attorney General. . .shall conduct a study to determine if an effective method for immediate and accurate identification of other persons who attempt to purchase 1 or more firearms but are ineligible to purchase firearms by reason of section 922(g) of title 18, United States Code. . .Such study shall be completed within 18 months after the date of enactment of this Act. . ."

[50]See U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General on Systems for Identifying Felons Who Attempt To Purchase Firearms* (Washington, DC: U.S. Department of Justice, Assistant Attorney General for Justice Programs, October 1989); J.M. Tien and T.F. Rich, Enforth Corp., *Identifying Persons, Other Than Felons, Ineligible To Purchase Firearms: A Feasibility Study* (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, May 1990); and SEARCH Group, Inc., *Legal and Policy Issues Relating to Biometric Identification Technologies* (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, June 16, 1989).

[51]See Nov. 20, 1989, letter from Attorney General Dick Thornburgh to The Honorable Dan Quayle, President, U.S. Senate; U.S. Department of Justice, Office of Justice Programs, *Attorney General's Program* , op. cit., footnote 32; and U.S. Congress, House, Committee on the Judiciary, Subcommittee on Crime, *The Attorney General's Report to Congress on the Option Selected for Identifying Felons Who Attempt To Purchase Firearms*, hearing, 101st Cong., 2d sess. (Washington, DC: U.S. Government Printing Office, Jan. 25, 1990).

[52]See U.S. Department of Justice, Federal Bureau of Investigation and Bureau of Justice Statistics, "Recommended Voluntary Standards for Improving the Quality of Criminal History Record Information," *Federal Register* 56:5849-5850, Feb. 13, 1991.

[53]See U.S. Department of Justice, *Attorney General's Program*, op. cit., footnote 32; and testimony of Paul J. McNulty, Acting Director, Office of Policy Development, U.S. Department of Justice, and Dennis G. Kurre, Deputy Assistant Director, Identification Division, Federal Bureau of Investigation, before a Mar. 21, 1991, hearing of the House Committee on the Judiciary, Subcommittee on Crime and Criminal Justice.

[54]Ibid.; OTA is conducting a separate but related assessment of the FBI's plan for modernization of its fingerprint identification operations. See OTA, *The FBI Automated Fingerprint Identification Program*, op. cit., footnote 14. The FBI does have some identification automation funds available from user fees.

[55]See statement of U.S. Attorney General Richard Thornburgh before an Apr. 18, 1991, hearing of the Senate Committee on the Judiciary.

Improvements in Federal, State, and local criminal record systems could facilitate record checks for other purposes in addition to screening felons from purchasing firearms, such as: persons arrested, booked, charged, or sentenced for criminal offenses; those seeking Federal or State employment and licenses requiring record checks; and applicants for U.S. citizenship or permanent visas.

National criminal record checks of firearm purchasers would require: means to determine the purchaser's identity; and query of local, State, and Federal criminal record systems, which could include State or Federal felon identification files listing the names and identifiers of persons with disqualifying felony convictions. Proposals that have been advanced include record checks conducted:

- at the POS (e.g., at a gun shop or gun show while the customer is present);
- during a waiting period (typically 3, 7, or 15 days from the time a customer purchases a firearm to delivery); and
- during an application and prior approval period (typically several weeks or months) before an identification card or purchase permit is issued (see figure 3).[56]

About half the States currently require record checks during a waiting or prior approval period (e.g., California, Oregon, and Illinois) or at the POS (e.g., Virginia, Florida, Delaware). About half the States do not require record checks. The States that require checks vary widely in how the checks are carried out.

Automated checks are essential for any POS system. Manual checks take hours to days, under the best conditions, and can take weeks. The feasibility of automated checks depends on the use of computer technology by each State to maintain criminal record files (criminal history and wanted person), including automated fingerprint identification files when needed for firearm purchaser checks. The efficacy of the checks depends on the completeness and accuracy of these files. These criteria also apply to Federal criminal record systems maintained by the FBI.

If these requirements are met, automated checks could be made through a combination of gun dealer options:

1. direct access to State and Federal computerized felon identification or criminal record files via a touchtone telephone or computer terminal;
2. indirect access to felon or criminal history information (not the records themselves) via a telephone connection with a local, State, or Federal law enforcement agency;
3. live scanning of the purchaser's fingerprints (using laser or video scanning instead of ink);
4. live scanning of other purchaser biometric identifiers (e.g., retina, voiceprint); and
5. scanning of the purchaser's smart card (that includes a magnetic or laser data strip or computer chip with identification information).

These technologies could be used as part of POS waiting period, or prior approval systems for automated checks of firearm purchasers.

Point-of-Sale (POS) Systems

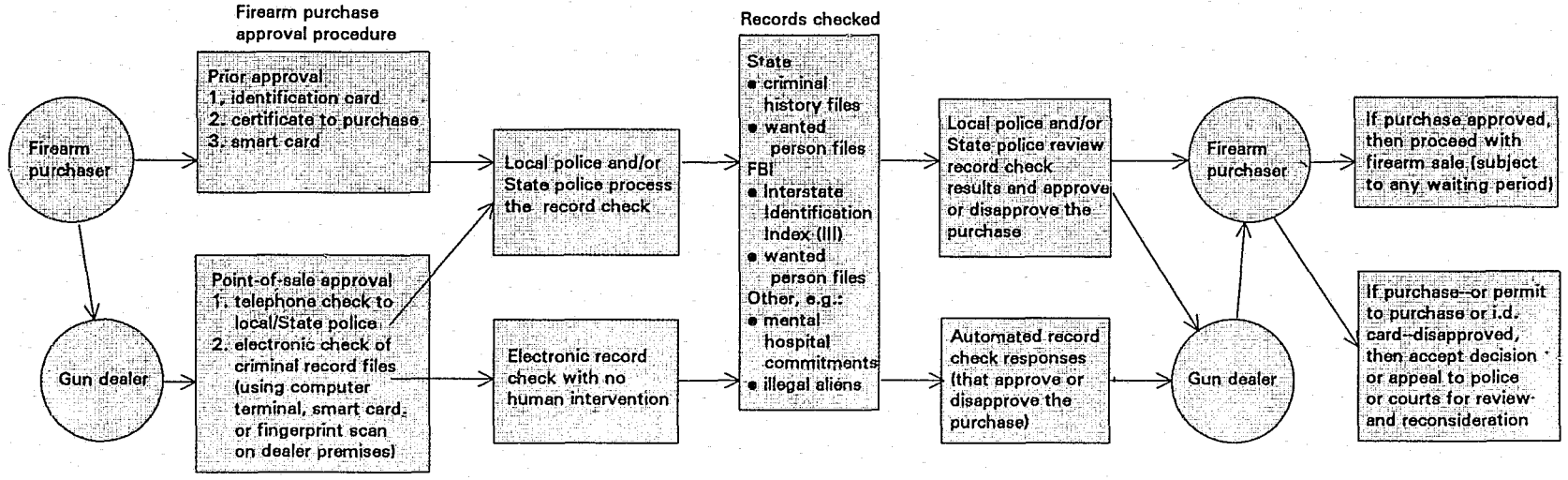
How POS Checks Work

POS record checks make the most demands on criminal record systems. The records must be computerized, indexed, and accessible online in real time. The FBI's computerized National Crime Information Center (NCIC) responds to remote inquiries from criminal justice agencies nationwide in seconds. NCIC maintains computer files on wanted and missing persons and stolen property (e.g., vehicles, boats), and handles about 1 million inquiries a day nationwide. The NCIC telecommunication network permits remote access to the Interstate Identification Index (III) file maintained by the FBI's Identification Division. The III includes the names and identifiers (e.g., date of birth, race, sex) of persons with arrest records. The computerized criminal history records of persons listed in the III can be accessed electronically, usually within about 15 seconds, from the States or the FBI. (During peak periods, the sending or receiving of computerized records on persons in the III can take up to 15 minutes—an infrequent occurrence.)[57] Any manual records on a person listed in the III could be accessed in hours or even days—not minutes—because the source State would have to search for and retrieve the records by hand and then send them (by mail or facsimile, unless keyboarded) to the requestor.

[56]See U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General*, op. cit., footnote 50, for discussion of a wide range of proposals.

[57]Note that the quality of the criminal history records transmitted as a result of a III hit can only be as good as the record quality in the State (or Federal) repositories from which the records are sent.

Figure 3—Automated Criminal Record Checks of Firearm Purchasers: An Overview



SOURCE: Office of Technology Assessment, 1991; and Bureau of Justice Statistics, 1989.

States with computerized criminal history records and so-called "hot files" (e.g., wanted persons, stolen vehicles) can also provide responses within seconds. Virginia was the first State to implement (on Nov. 1, 1989) a POS system for checking the criminal records of firearm purchasers buying handguns with a barrel length under 5 inches (Virginia will extend coverage to all firearm purchases from licensed dealers starting July 1, 1991). The other States with POS systems are Delaware (operational since Jan. 14, 1991) and Florida (operational since Feb. 1, 1991). Both are modeled after Virginia and likewise apply to dealer sales only. Delaware record checks apply to handgun and rifle purchases, but not shotguns; Florida record checks apply to all firearm purchases.

Licensed firearm dealers in Virginia call an 800 number at Virginia State Police headquarters in Richmond to check the criminal records of handgun purchasers (see figure 4). The dealer provides the name and identification information of each purchaser to an operator, who keys the information into a computer terminal connected to State and FBI record systems. The Virginia State Police can check both Virginia criminal history and wanted person records and the NCIC hot files while connected on the phone with the dealer (the III also will be checked online, starting about July 1, 1991). The State police can usually provide an initial response within 90 seconds.

About 94 percent of the inquiries result in a "no hit" (no records indicated), and the purchase is approved.[58] Six percent are "hits," and the purchase is temporarily disapproved. The State police staff reviews each hit, obtains more detailed criminal record information if necessary, and confirms every disqualifying criminal record. About one-quarter of the hits (1.5 percent of all inquiries) are confirmed and the disapproval stands. Three-quarters of the time hits are on a different person (e.g., with a similar but different name and identifiers), or reveal a felony arrest charge that did not lead to a conviction or a conviction for a misdemeanor that is not disqualifying. The State police contact the dealers on false positives within hours, or at the latest by the end of the next business day, to change initial disapprovals to approvals.

The Virginia experience points up the strengths and weaknesses of the 800 number approach to POS record checks. The main advantage is that the initial record check can be completed in a few seconds. This is only possible, however, because Virginia has a substantially computerized criminal history record system. Several other States are also computerized, but most States have either incomplete or no computerized criminal history files. Even computerized States like Virginia still have some manual records, usually for older, inactive offenders who are least likely to be involved in current crimes.

The Problem of Record Quality

A State computerized criminal history (CCH) file is needed to provide rapid response and, potentially, a complete and accurate response. State CCH records maintained by the FBI are missing some arrests and many more dispositions. About half the arrests in the FBI's criminal history files are missing dispositions.[59] The FBI finds it difficult to get these dispositions, and the FBI and the States are collaborating on a strategy to get the FBI out of the criminal history recordkeeping business—except for Federal offenders. The III would be used to access CCH records in the State repositories. The operational responsibility for record completeness and accuracy would lie with the States. About 80 percent of all offenders are single-State offenders (with a criminal record in only one State);[60] thus the vast majority of CCH hits in any record check system (POS, waiting period, or preapproval) will be on in-State records.

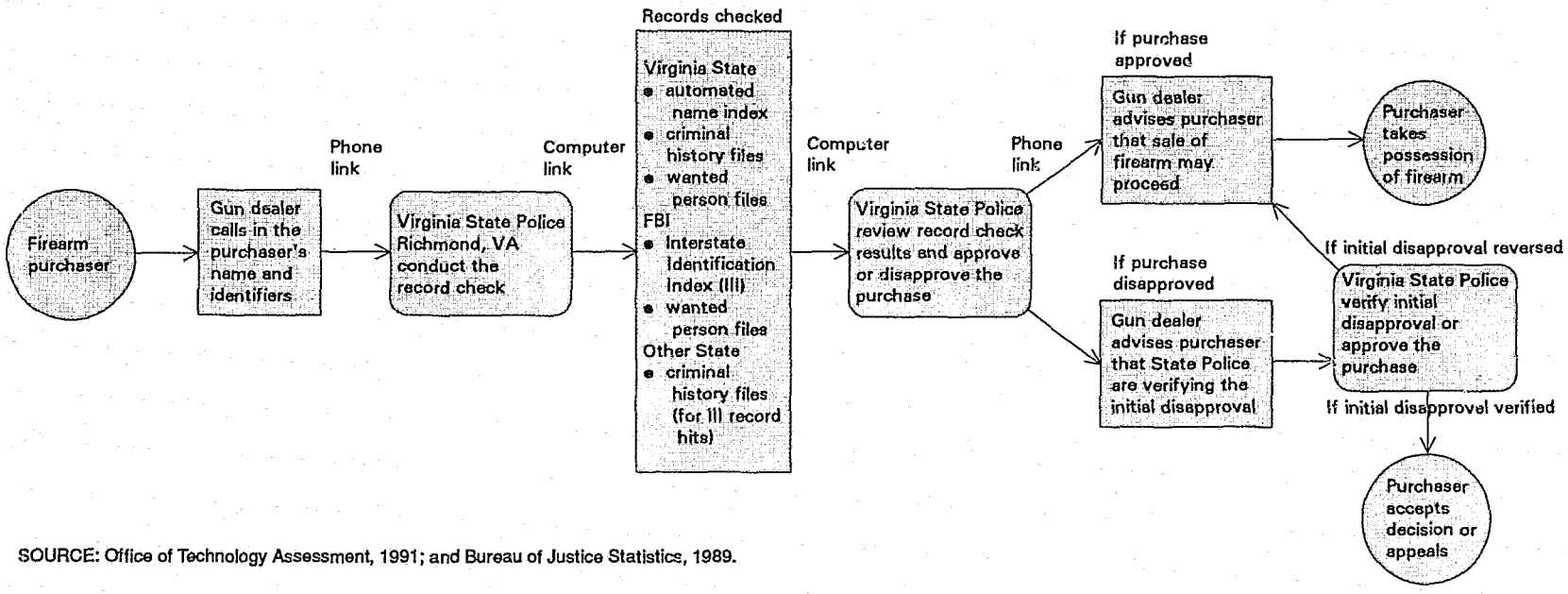
A computerized CCH does not guarantee high record quality. Virginia happens to have a relatively

[58]Operational data on the Virginia POS system were provided by the Virginia State Police. For further details, see Virginia State Police, *Virginia Firearms Transaction Program: Procedures for Dealers* (Richmond, VA: Virginia State Police, Nov. 1, 1989), *Virginia Firearms Transaction Program: Report for the Office of the Governor* (Richmond, VA: Virginia State Police, 1990).

[59]The FBI currently receives about 8,000 disposition reports per day compared to about 17,000 arrest reports. This suggests a disposition reporting rate of 47 percent, which is consistent with 1980 and 1986 FBI data indicating about 45 percent disposition reporting. The FBI notes that an unknown number of arrest reports may contain disposition information that makes filing of a formal disposition report unnecessary. For further discussion, see U.S. Congress, Office of Technology Assessment, *An Assessment of Alternatives for a National Computerized Criminal History System*, OTA-CIT-161 (Springfield, VA: National Technical Information Service, October 1982), pp. 89-96; and statement on "Criminal Justice Record Quality" by Fred B. Wood, OTA Project Director, before a July 16, 1986, hearing of the House Committee on the Judiciary, Subcommittee on Civil and Constitutional Rights.

[60]As of Jan. 1, 1991, the FBI estimates that single-State offenders accounted for 81 percent of the records indexed by States participating in the Interstate Identification Index. Earlier estimates (1979-81) suggested a single-State offender rate of about 70 percent.

Figure 4—Telephone "Instant" Check by Gun Dealers



SOURCE: Office of Technology Assessment, 1991; and Bureau of Justice Statistics, 1989.

high level of disposition reporting (roughly 85 percent for all arrests, 95 percent for recent arrests) and is using computerized techniques to improve record quality further. Some States have better record quality than Virginia, but many States have worse. Record quality is essential to all record check systems but is critical to POS systems because there is no time available for updating or verifying information before making an initial response. The initial firearm purchase approval or disapproval must be made within seconds; any followup on disapprovals must be made within hours (or within 2 to 3 working days at most, in current POS States). The better the record quality, the fewer the missed hits due to missing felony arrests and convictions (false negatives) or false positive hits due to missing felony acquittals.

The ideal is 100 percent arrest and disposition reporting; but few States are perfect today—nor can they expect to be for some time. What level of record quality is acceptable for POS firearm purchaser checks? Most agree that the record quality of the FBI's criminal history file is unacceptable. With half of the dispositions missing, a large percentage of record hits would have to be checked (through telephone calls to local courts, prosecutors, etc.), and many would likely be found to be false positive hits. Virginia's 85 to 95 percent disposition reporting is more acceptable. Most of the false positive hits on the Virginia POS system are not due to State CCH record quality problems, but to hits on similar but different names in the FBI's NCIC wanted person file. (NCIC is programmed to pick up anyone with similar names and dates of birth.)

The Problem of Positive Identification—the Promise of Live Scans

A major weakness of 800 number POS systems is the lack of positive identification. Identification of firearm purchasers in the Virginia system was based on the requirements of two forms of identification (ID), including one with a photo. (A recent legislative action reduced the number of required IDs to one, if it is a government-issued photo ID.) The Virginia State Police report few problems with false identification during the first year of operation. Critics claim that purchasers using fake identification are likely to go undetected. The FBI believes that about one in six persons with a criminal record may be using alias names and identification. But whether this ratio applies to firearm purchasers is unknown.[61]

Currently, a set of fingerprints is the only form of positive biometric identification (based on unique human descriptors or measurements, i.e., biometrics) accepted by the criminal justice community. Voiceprints, handprints, retina scans, and electronic mug shots and signatures are used for some high-security purposes—primarily in the defense and intelligence communities—but are still many years away for widespread criminal justice use. Only the electronic mug shot along with electronic fingerprints were included in the final version of a long-range plan for the NCIC—known as NCIC 2000; identifiers like DNA profiles were judged premature for widespread application.[62]

Fingerprint identification could be included in POS systems by live scanning the purchaser's fingerprints and: 1) electronically transmitting the prints for checking against State and, if necessary, Federal automated fingerprint files; or 2) comparing the live scanned prints against those stored digitally on a smart card issued to the purchaser. In addition to a live scan positive identification with prerecorded prints on a smart card, dealers must check for criminal activity that had occurred since the issuance of the card. This could be done using an 800 number, touchtone telephone, or computer terminal connected to criminal record repositories. Criminal justice agencies oppose direct access by gun dealers (and other noncriminal justice users) to electronic criminal record systems to protect security and privacy in compliance with State and Federal regulations. Live scan plus an 800 number connect-

[61]The Oregon State Police found that about 1 in 14 handgun purchasers with criminal records used phony names and identification, and very few of these (1 of 70) had disqualifying criminal records.

[62]For further discussion of biometric technologies, see U.S. Congress, Office of Technology Assessment, *Defending Secrets, Sharing Data: New Locks and Keys for Electronic Information*, OTA-CIT-310 (Washington, DC: U.S. Government Printing Office, October 1987); *Criminal Justice: New Technologies and the Constitution*, OTA-CIT-366 (Washington, DC: U.S. Government Printing Office, May 1988); and *Genetic Witness: Forensic Uses of DNA Tests*, OTA-BA-438 (Washington, DC: U.S. Government Printing Office, July 1990). Also see SEARCH Group, Inc., *Biometric Identification Technologies*, op. cit., footnote 50, especially chs. 2 and 3 and the appendix. For discussion of planned NCIC capabilities, see NCIC Advisory Policy Board, Planning and Evaluation Subcommittee, NCIC staff paper, topic #2, "NCIC 2000 Phase II Implementation Schedule" (San Diego, CA, Dec. 3-4, 1990), pp. 3-7.

ing dealers with officials who would access the records may overcome the concerns of the criminal justice agencies.[63]

Live scan technologies exist today; but their further development to support POS firearm purchaser checks involves substantial costs and complexities. All licensed gun dealers must have a live scan fingerprint machine; and all States and the FBI must have an automated fingerprint matching capability for a POS system to work. The cost of live scan fingerprint readers compatible with criminal justice systems is about $40,000 to $50,000 at this time. The low-cost POS scanners now available cannot perform full criminal fingerprint checks.[64] Equipping all gun dealers with suitable live scan readers at today's prices would be costly—about $10.8 billion assuming 270,000 licensed dealers at about $40,000 per unit. Equipping just the storefront gun dealers could cost about $600 million.[65] The cost of live scanners must drop below $1,000 per unit—the range of credit card scanning devices—for widespread application. This could happen within 5 to 10 years, if the market for biometric technologies develops rapidly. Fingerprint or other biometric identification could also reduce fraud in credit card transactions and eliminate use of phony identification for retail transactions—including firearm purchases.

In addition to affordable POS live scan devices, State and Federal criminal fingerprint repositories would need to be able to process a large number of additional fingerprint checks likely to be generated by firearm purchases. About 60 percent of the States have or are implementing automated fingerprint identification systems; most, if not all, States may have such systems in 5 to 10 years. The FBI is planning a major upgrade of its automated fingerprint system to be completed by 1995. These systems could, in principle, handle fingerprint checks of firearm purchasers, but it is improbable whether they could do so at the POS because of the need for a short response time. Even the FBI's planned state-of-the-art automated fingerprint identification system aims for a 2-hour response time for criminal justice checks and 24 hours for noncriminal justice checks.[66] For POS purposes, 2 to 24 hours is too slow. Automated POS fingerprint checks may be feasible in the future, but are not likely to be cost effective on the scale required for firearm purchaser checks until early in the 21st century. In the meantime, there are two other options: a national felon identification file; and smart cards.

National Felons File

A national felons file would include the names and identifiers of all persons convicted of a felony offense who are prohibited under Federal law from purchasing a firearm. A convicted felon file would be much smaller in size than the State and Federal criminal files, which it would replace for firearm purchaser checks. A felon file would exclude misdemeanors and felony arrests not resulting in a conviction. This could alleviate the record quality problem and reduce costs since firearm purchasers need only be checked against the felon file.

A national felon file would be difficult to implement in the short-term for four reasons. First, a national file could not be compiled until each of the State criminal history files has identified in-State felony convictions. Only a few States, including Virginia, have done this to date. A flagged State criminal history file is a prerequisite for any State POS system to avoid picking up excessive false hits, like firearm purchasers convicted of a misdemeanor but not a felony. The new voluntary Federal standards for felony reporting could improve felony flagging

[63]For further discussion, see U.S. Department of Justice, Task Force on Felon Identification in FIrearm Sales, *Report to the Attorney General*, op. cit., footnote 50.

[64]POS fingerprint scanners are used in controlled access facilities where single fingerprints of persons seeking access are compared against a file of fingerprints of persons authorized access. When a person arrives at a door or gate, he or she punches in an identifying number that calls up a stored fingerprint to be compared against his or her "live" scanned fingerprint. The Immigration and Naturalization Service is pilot testing the use of live scanned fingerprints to check detainees against a file of illegal alien criminal offenders; but the file size is much smaller than would be necessary for State or national criminal identification checks.

[65]For discussion of cost estimates for various options, see ibid., and T. Orsagh, "Estimates of Start-up and Operational Costs of Systems for Identifying Felons Who Attempt To Purchase Firearms," contractor paper prepared by Fisher-Orsagh Associates, Inc., 221 Vance Street, Chapel Hill, NC 27514, for the U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, June 1989.

[66]For discussion of the FBI identification automation program, see statements of Fred B. Wood, Senior Associate, Office of Technology Assessment, and Stanley Klein, Deputy Assistant Director, FBI Identification Division, before a Mar. 13, 1991, hearing of the House Committee on the Judiciary, Subcommittee on Civil and Constitutional Rights. Also see OTA, *The FBI Fingerprint Identification Automation Program*, op. cit., footnote 14, in preparation.

of State and FBI criminal history files, but they will take several years to implement.

Second, the definition of a felony offense varies from State to State. Federal firearm laws honor State law definitions of felony (or other) offenses that may be disqualifying for firearm purchasers.[67] The intent in part was to recognize variations in State laws with regard to expungement and restoration of rights (including the right to purchase and possess firearms) for offenders who have served their time or been pardoned. And some State laws disqualify firearm purchasers for serious misdemeanor as well as felony convictions. The result has been to complicate the enforcement of Federal law, both by gun dealers and law enforcement agencies. The BATF is required to issue gun dealers an annual compilation of State firearm laws and felony definitions, so that dealers can answer purchaser questions about what is a disqualifying conviction.[68] Dealers are responsible for knowing the firearm laws of the State and local jurisdiction where the guns are delivered to the customer. This can be difficult. BATF regulations, for example, permit licensed dealers to sell or dispose of rifles and shotguns—but not handguns—over-the-counter at in-State gun shows to out-of-State residents if the sale is legal in both States.[69] BATF has fallen behind in issuing the compilation of State firearm laws; the most recent edition is dated July 1988.[70]

The compilation of a national felon file would require screening of each State's criminal history records and its firearm laws. Law enforcement officials and criminal record managers believe that this task is best accomplished on a State-by-State basis for the time being. A national felon file might eventually be possible, but only after all State records are flagged and screened.[71]

Third, a national convicted felon file would, by definition, exclude persons convicted of certain serious misdemeanors, under indictment for a felony offense, or who are fugitives from justice. Persons in these categores are also prohibited from purchasing or receiving firearms by Federal law. Any person convicted of a misdemeanor punishable by more than 2 years imprisonment, or under indictment or information[72] in any court for a crime punishable by more than 1 year imprisonment, is prohibited.[73] "Fugitives from justice" are defined as any person who has fled from a State to avoid prosecution for a crime or to avoid giving testimony in any criminal proceeding.[74] The State of Virginia interprets Federal law as justifying the checking of State and national wanted person files in addition to State and national criminal history files. In checking NCIC, Virginia assumes that persons listed in NCIC are wanted for a felony offense in another State and by being in Virginia to purchase a firearm are fugitives from justice. The FBI indicates that: 1) almost all NCIC wanted persons are wanted for felony offenses, frequently serious felonies; and 2) arrest warrants have been issued (usually by a judge or magistrate) on almost all NCIC wanted persons.[75]

If the Virginia approach as used in its POS system is accepted as sound, then the rationale for establishing a national felon file may not be justified for purposes of firearm purchaser checks. A national file limited to convicted felons would exclude persons wanted or indicted for murder, armed robbery, rape, and lesser felonies. If the goal is to check for persons wanted or indicted as well as convicted of felony

[67]See U.S. Congress, Senate, Committee on the Judiciary, *Federal Firearms Owners Protection Act*, Senate report No. 98-583, 98th Cong., 2d sess. (Washington, DC: U.S. Government Printing Office, Aug. 8, 1984); Public Law 99-308, the "Federal Firearm Owners Protection Act," 99th Cong., 2d sess., May 19, 1986.

[68]U.S. Department of the Treasury, Bureau of Alcohol, Tobacco, and Firearms, *State Laws and Published Ordinances-Firearms*, 18th ed. (Washington, DC: BATF, July 1988).

[69]See generally U.S. Department of the Treasury, Bureau of Alcohol, Tobacco, and Firearms, *Federal Firearms Regulations, 1988-89* (Washington, DC: BATF, June 1988).

[70]Bureau of Alcohol, Tobacco and Firearms, *State Laws*, op. cit., footnote 68. BATF could issue periodic legal updates on a regular basis (e.g., every 6 months) to meet the legislative intent, while publishing the full compilation less frequently.

[71]See U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General*, op. cit., footnote 50; statement of P.J. Doyle, Florida Department of Law Enforcement and Chairman, NCIC Advisory Policy Board, before a Mar. 13, 1991, hearing of the House Committee on the Judiciary, Subcommittee on Civil and Constitutional Rights.

[72]An indictment is a formal accusation of a crime presented by a grand jury; an information is a formal accusation made by a prosecuting attorney.

[73]18 U.S.C. 44, secs. 921(a)(20), 922(d)(1) and (2), and 922(g)(1) and (2).

[74]18 U.S.C. 44, sec. 921(a)(15).

[75]The Florida POS system also checks wanted person files. During the first 2 months of operation, Florida identified 21 wanted persons attempting to purchase firearms. See Florida Department of Law Enforcement, "Firearm Purchase Program," op. cit., footnote 45.

offenses, a national felon file may not be adequate. Many law enforcement and criminal records officials believe that improvement and automation of the State and Federal criminal record systems is better suited for effective firearm purchaser checks than the development of a national felon file. In their view, automated, updated, and properly flagged State and Federal criminal files should best meet the need. Entries in the FBI's Interstate Identification Index could be flagged so that persons wanted, indicted, or convicted of felony (or serious misdemeanor) offenses could be immediately disapproved for firearm purchases, subject, of course, to followup verification based on the complete criminal records. This option would require that State criminal records first be similarly flagged—a major challenge.[76]

Fourth, a national felon file, and other proposed national computerized files, raise significant privacy and security issues. Each proposal to add a new file to the National Crime Information Center generates debate and controversy. Privacy and civil liberty advocates are concerned that a national felon file might lead to uncontrolled, and inappropriate or illegal, use of criminal record information for noncriminal justice purposes. Some consider a national felon file as another step toward a "virtual" national database of personal and private information. Critics are concerned that someday a felon file might be matched or interconnected with computerized tax, education, health, social security, and similarly sensitive databases. Criminal justice record managers are wary that a national felon file might complicate system security and privacy, especially if tens of thousands of gun dealers were allowed direct electronic access to the NCIC computer network.[77]

Smart Cards[78]

Smart card technology offers advantages if linked to an 800 number POS firearm purchaser check. Smart cards are now used for: financial transactions; distribution of government benefits and entitlements (e.g., food stamps); health and emergency medical information (e.g., blood type, medical history, allergic reactions); and security purposes (e.g., access to restricted facilities, computer centers). Smart cards look like ordinary plastic credit cards but include a magnetic- or laser-readable strip or a computer chip encoded and embedded within. Nearly any digital information can be stored on smart cards, including personal identifiers and criminal history information.

One option proposed would be to issue a smart card to persons who desire to purchase a firearm. The card could include fingerprint identification information that could be compared with the cardholder's live scan fingerprints taken at the POS for positive identification. At the same time, the gun dealer could call an 800 number to check for criminal activity subsequent to the date the smart card was issued.

Another option would be to piggyback on smart cards issued for other governmental purposes, such as driver's licenses. Some States like California are now using smart cards for a variety of purposes. But even the most advanced States would take several years to convert to smart card driver's licenses,[79] many States much longer. Using a general purpose ID card, like a driver's license, for firearm purchaser checks could minimize concerns about the State or Federal Government compiling lists of law-abiding gun owners. Including fingerprint information on

[76]The FBI has concluded that a separate national felon file is not necessary, and that State and III records can be properly flagged for felony convictions. The NCIC wanted-persons file flags fugitives and can be checked simultaneously with III. Many State criminal history files do not, however, maintain information on felony indictments; thus flagging State and Federal files for indictments will be difficult. Virginia again provides a model of how this can be done. The Virginia CCH file includes police and prosecutor as well as court dispositions. A record is flagged for a felony arrest, but the flag is removed in the event of a dismissal, nolle prosse, or acquittal.

[77]See U.S. Congress, Office of Technology Assessment, *An Assessment of Alternatives for a National Computerized Criminal History System*, op. cit., footnote 59; U.S. Congress, Office of Technology Assessment, *Federal Government Information Technology: Electronic Record Systems and Individual Privacy*, OTA-CIT-296 (Springfield, VA: National Technical Information Service, June 1986); U.S. Congress, Office of Technology Assessment, "Issues Relevant to NCIC 2000 Proposals," OTA staff paper, Nov. 12, 1987; J.J. Horning, P.G. Neumann, D.D. Redell, J. Goldman, D.R. Gordon, M. Rotenberg, and L. Siegel, *A Review of NCIC 2000: The Proposed Design for the National Crime Information Center* (Washington, DC: Computer Professionals for Social Responsibility, February 1989); and July 26, 1989, comments of J. Goldman, American Civil Liberties Union, on the U.S. Department of Justice Draft Report on "Systems for Identifying Felons Who Attempt to Purchase Firearms."

[78]The term "smart card" technically refers to cards with built-in computer chips that can process, send, and receive as well as store information. Common usage of "smart card" in the law enforcement community includes magnetic strip cards (that store information) and laser strip cards (that store and update, i.e., read and write) as well as computer chip cards. See U.S. Congress, Office of Technology Assessment, *Electronic Delivery of Public Assistance Benefits: Technology Options and Policy Issues*, OTA-BP-CIT-47 (Washington, DC: U.S. Government Printing Office, April 1988), especially pp. 7-12.

[79]Presumably as new licenses are issued and old licenses renewed.

the card would reduce the potential for fraud, but might cause concern about fingerprinting law-abiding license applicants and the creation of a de facto national identification card.[80]

Automated Record Checks and Waiting Periods

How Waiting Periods Work

Some States have enacted waiting periods to provide time for record checks of firearm purchasers, alone or as part of broader background checks. Specific procedures vary widely. Waiting periods range from 2 days to several weeks (see table 1). The extent of records checked ranges from criminal history records only, to criminal history and wanted person files, to criminal and other records—such as commitments to mental health institutions. In most States that have record checks (e.g., California, Illinois, Oregon, Virginia) the record checks are mandatory before a firearm purchase can be approved. In a few States (e.g., Michigan, Pennsylvania. South Carolina) the record checks are conducted after the purchaser has taken possession of the firearm, because police are unable to complete the record check before the end of the waiting period or because there is no waiting period. Some State waiting periods apply to specific handguns only, others to all handguns and some other firearms (e.g., semiautomatic firearms), and others to all firearms (handguns, rifles, and shotguns).[81]

Waiting periods can be combined with both POS and preapproval systems. Virginia allows until the close of the next business day to confirm POS disapprovals. This amounts to a 24- to 48-hour waiting period for some persons (but not counted as a formal waiting period), depending on the time of day the record check is made. There is no waiting period for Virginia purchasers whose POS record checks clear. Florida combines a POS record check with a 3-working-day waiting period for "cooling off" purposes (as of Oct. 1, 1991). Illinois combines a required firearm owner identification card, which includes a record check, with a 72-hour waiting period for handgun purchases and 24 hours for long gun purchases. California has a 15-day waiting period that applies to all firearm sales in California, whether handguns or long guns, and covers sales

Table 1—Maximum Time Periods Required for Initial Firearm Purchase by State Resident[a]

Handgun		Long gun	
180 days	New York		
60 days	Washington, DC	60 days	Washington, DC*
	Indiana		
40 days	Massachusetts	40 days	Massachusetts**
30 days	Illinois	30 days	Illinois**
	New Jersey		New Jersey*
	North Carolina		
15 days	California	15 days	California***
	Hawaii		Hawaii**
	Oregon		
	Tennessee		
14 days	Connecticut	14 days	Connecticut***
9 days	Missouri		
7 days	Maryland	7 days	Maryland**
	Minnesota		
	Rhode Island		Rhode Island*
5 days	Washington		
3 days	Delaware[b]	3 days	Delaware[b]***
	Florida[c]	3 days	Florida[c]**
	Iowa		
	South Dakota		
2 days	Alabama		
	Pennsylvania		
	Virginia[d]	2 days	Virginia[d]*
	Wisconsin		

[a]Includes waiting time for both documentation (i.e., processing of a firearm purchase application, where and when required) and for taking possession of the firearm. The waiting time listed is for the first purchase. In some states the documentation is good for subsequent purchases in a given time period; in other states the documentation must be processed for each purchase. In most States with waiting periods, the time required for documentation and taking possession is the same. In a few States, the waiting time for taking possession is shorter: Washington, DC (2 days for preregistered handguns—the only handguns allowed in D.C.); Illinois (3 days for handguns, 1 day for long guns); and Indiana (7 days for handguns).

[b]Delaware can take up to 3 working days to verify initial point-of-sale (POS) disapprovals.

[c]Florida can take up to 3 working days to verify initial POS disapprovals; a 3-working-day waiting period for all handgun purchases goes into effect Oct. 1, 1991.

[d]Virginia can take until the close of the next working day to verify initial POS disapprovals; POS checks apply to all firearm purchases as of July 1, 1991.

*All long guns.

**Shotguns and assault rifles only.

***Rifles only.

SOURCE: U.S. Department of Justice, Bureau of Justice Statistics and U.S. Department of the Treasury, Bureau of Alcohol, Tobacco, and Firearms; updated by OTA, 1991.

[80]Ibid.; also see statement of W.J. Henderson, L. Guttentag, and J. Goldman, American Civil Liberties Union, on "Voluntary Work Authorization Cards" before a Nov. 9, 1989, hearing of the House Committee on the Judiciary, Subcommittee on Immigration, Refugees, and International Law. For a general discussion of smart card options, see U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General*, op. cit., footnote 50.

[81]For details on State waiting periods, see U.S. Department of the Treasury, BATF, *State Laws and Ordinances-Firearms*, op. cit., footnote 68; U.S. Department of Justice, Bureau of Justice Statistics, "State Requirements and Systems Controlling Firearms Sales," Apr. 4, 1989, prepared for the Task Force on Felon Identification in Firearms Sales.

from a licensed dealer and an individual. Oregon has a 15-day wait combined with a fingerprint and record check on handgun purchasers. Oregon gun dealers ink the purchaser's fingerprints (thumbs only) on the store premises and mail the prints to the Oregon State Police for processing (the completed purchase forms are sent to both local and State police). Oregon is one of a handful of States known to actually run fingerprint checks on purchasers; most States with record checks use names and identifiers, not fingerprints.

The impact of automated record checks on waiting periods or preapproval periods differs depending on the original purpose of the waiting period. If the wait was intended to allow time for criminal record checks, then automating the process could reduce the waiting period for issuing a firearm owner identification card. With enough time and resources, most States should be able to implement a POS system. However, waiting or preapproval periods would not necessarily be reduced. States may want to keep them for cooling off purposes, to provide time for background checks beyond criminal records, or to conduct fingerprint checks that would not be possible at the POS.

State Computerized Criminal History (CCH) Files—A Key Prerequisite

The key prerequisite for automated firearm purchaser record checks is State computerized criminal history (CCH) files. State CCH files must meet several conditions to reduce the time for record checks and move toward POS checks. These requirements include the following:

1. complete and fully automated master name index to criminal offenders;
2. complete CCH file, at least for recent felony offenders;
3. an acceptable level of final dispositions in the CCH file; and
4. substantially complete flagging of felony convictions in the CCH file.

Most States meet some of these requirements today; few meet all.

In 1989, 44 States had all in-State offenders in a master name index, and three other States had over 85 percent of the offenders included.[82] Of those 47 States, 39 have fully automated name indexes. Illinois and Ohio are the only States with large populations that do not have automated name indexes. Most States, however, have only partially automated criminal history files. Ten States have fully automated files with computerized records for all offenders.[83] Eight States have manual files. Most States fall somewhere between (see figure 5).[84] The percentages may be somewhat better for purposes of firearm purchaser checks, since many partially automated States give priority to computerizing records of recent, felony offenders. Nationwide, about 60 to 70 percent of State criminal history records are automated.[85]

Most States have only partially complete disposition reports.[86] Just one State—Massachusetts—indicates 100 percent reporting. Thirteen States include 10 to 50 percent of the final dispositions for arrests in the criminal history file. The remaining States include between 60 and 95 percent of the final dispositions (see figure 6).[87] Nationwide, about 65 to 70 percent of State criminal history records include final dispositions.[88]

The level of "acceptable" disposition reporting is debatable. The goal for most States is 100 percent; many are taking steps to improve reporting. Only a few States can match the disposition reporting levels of Virginia, which are 86 percent of all arrests and 95 percent of arrests occurring within the last 5 years.

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[82]See SEARCH Group, Inc., *Survey of Criminal History Information Systems*, NCJ-125620 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, March 1991), which is the primary data source for the following discussion of State criminal record system capabilities. The survey results should be interpreted as an approximate snapshot or profile of State criminal record systems, rather than a precise accounting. Many States do not have reliable, complete statistics on their record systems and therefore responded to the survey with best estimates.

[83]Colorado, Georgia, Hawaii, Idaho, Michigan, Montana, Nevada, Oregon, Rhode Island, and Washington.

[84]13 States with 1 to 50 percent of records automated; 7 States with 51 to 75 percent automated; and 13 States with 76 to 99 percent automated.

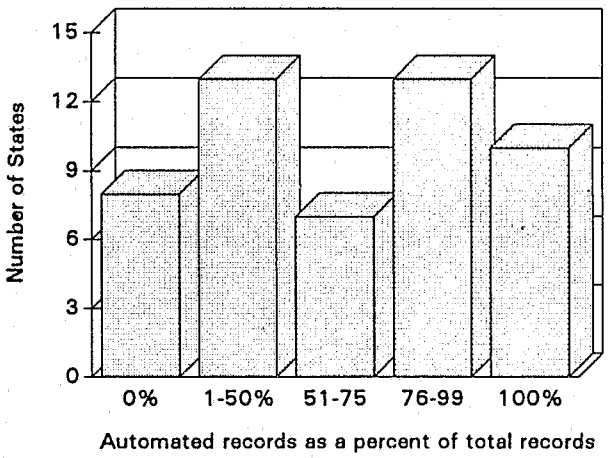
[85]The BJS/SEARCH Group, Inc. survey found that about 60 percent of all State criminal history records were automated as of 1989. See SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82. The percentage likely has increased somewhat since 1989.

[86]SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82.

[87]14 States with 60 to 75 percent disposition reporting; and 12 States with 76 to 95 percent disposition reporting.

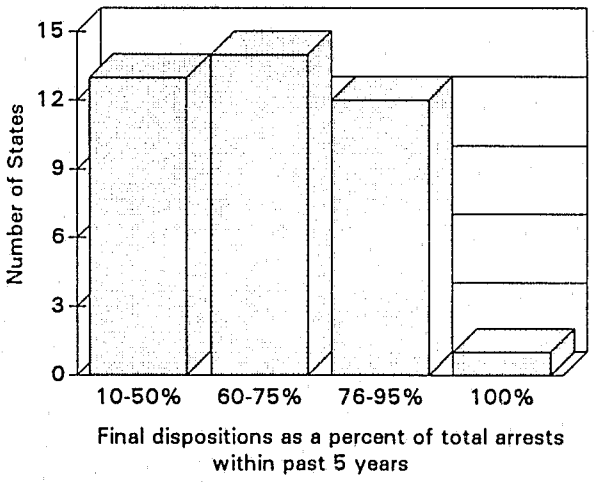
[88]The BJS/SEARCH Group, Inc. survey found that about 63 percent of all State criminal history records included final dispositions (for completed arrest cycles) as of 1989. See ibid. The percentage likely has increased somewhat since 1989.

Figure 5—Automation of State Criminal History Records, 1989



SOURCE: Bureau of Justice Statistics/SEARCH Group, Inc., 1991.

Figure 6—Final Dispositions in State Criminal History Files, 1989



SOURCE: Bureau of Justice Statistics/SEARCH Group, Inc., 1991.

If the Virginia level of disposition reporting was accepted as a standard, the States meeting this criterion in 1989 would include: Connecticut, Maine, New Jersey, and North Carolina, in addition to Virginia.[89]

Other States could meet lower standards. At 80-percent current disposition reporting, for example, California, Iowa, Minnesota, Montana, New Jersey, and North Dakota would also "qualify."[90] At each increment of lower disposition reporting, the percentage of false positive hits and the time and effort needed to verify these hits would likely increase. Waiting periods and preapproval periods are used in part to compensate for incomplete disposition reporting. Criminal records personnel use waiting time to check all questionable hits and to identify false positive hits. Under the Virginia and similar POS systems, all purchases resulting in hits are initially disapproved, since there is no time allowed to check incomplete records before responding to the dealer. In Virginia, California, Illinois, Oregon, and other States with statistics, the great majority of initial hits are false positives.[91]

For purposes of firearm purchaser checks, State criminal history files should be flagged to identify persons with felony convictions. Flagging means entering a code designation into the database that indicates a felony conviction, so that a search of the file will indicate whether a person has a felony conviction without having to review the entire criminal history record. Persons formally charged (e.g., indicted) for felony offenses, which also disqualifies persons to purchase firearms under Federal law, could be flagged as well. Only six States have flagged all persons with felony convictions: Idaho, Illinois, New York, South Dakota, Virginia, and Wisconsin. A few States have flagged some felony convictions; the majority of States have flagged none. Most of the States claim to have the necessary information in their criminal history systems; but it will take time and resources to flag convictions (23 States could flag all felony convictions, and 18 States could flag some convictions).[92] And States can only flag convictions that have been reported to the State criminal history repository; when final dispositions are missing, convictions cannot be flagged.

Wide Variability in State CCH Systems

States vary widely in the ability to conduct criminal record checks of firearm purchasers. The

[89]Ibid.

[90]Ibid.

[91]Approximate false hit ratios (false positive initial hits:total initial hits) reported to OTA by State officials are, by State: Virginia (4:6 to 5:6); California (27:28); Oregon (17:18); Delaware (7:10); and Florida (3:5).

[92]SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82.

1989 SEARCH Group survey of the States (sponsored by the Bureau of Justice Statistics (BJS)) compiled information on the key components of each State's criminal record check capabilities.[93] This information should be analyzed by BJS to rank the States in order of: length of time to conduct criminal record checks, and reduction in time for checks at 1-year intervals in the future based on different assumptions. Ability of a State to reduce record check time depends on it's current status of name index and criminal history automation and disposition reporting. Well-automated States with complete reporting can reduce the record check response times easier than those with incomplete records.

California is positioned to reduce record checking time because it has the following:

1. a fully automated, complete name index of criminal offenders;
2. a substantially automated criminal history file (67 percent of all offenders, all recent or active offenders);
3. 75-percent disposition reporting (85 percent for arrests within 5 years); and
4. some felony conviction flags in place with information available to flag all felony convictions.

California's waiting period for handgun purchases was once 5 days. But that was too short to complete record checks, so the waiting period was extended to 15 days.

California Department of Justice officials estimate that improvements in the automated record system, cost recovery user fees (raised from $7.50 to about $15.00 per transaction), and possibly smart id cards could halve the processing time. Then, the 15-day waiting period could be reduced. Some California officials and gun dealers opt for a POS/smart card system with a 3- to 7-day waiting period for cooling off. Minnesota, Montana, New Jersey, New York, North Carolina, and South Carolina are also well positioned to improve their record checks.

Many States have serious deficiencies in their CCH systems that make it more difficult to improve record check accuracy and response time. Arkansas, for example, has a manual criminal history file, low disposition reporting rate (20 to 30 percent), and no current capability to flag convicted felons. Colorado has a fully automated name index and criminal history file, but low disposition reporting (10 percent) and no felony conviction flags. Other States have the following serious CCH deficiencies: no CCH file (Maine, Mississippi, New Mexico, Tennessee, Vermont, West Virginia, and the District of Columbia, along with Arkansas); limited CCH file, with automated records on 40 percent or fewer offenders (Arizona, Indiana, Kansas, Louisiana, Massachusetts, Nebraska, North Dakota, Ohio, Oklahoma, and Pennsylvania); low disposition reporting, with 40 percent or fewer dispositions reported for arrests within the past 5 years (Alabama, Alaska, Delaware, Georgia,[94] Idaho, New Mexico, Arkansas, and Colorado); and no current capability to flag convicted felons (Colorado, Connecticut, District of Columbia, Georgia, Idaho, Illinois, Iowa, Nebraska, Ohio, Oklahoma, West Virginia, and Arkansas).[95]

Problem of Funding

Record check improvements will take significant time and increased funding. How fast improvements can be made depends on the volume of firearm purchaser record checks (a function of population), the commitment of State legislatures and the Congress to improving record checks of firearm purchasers (enabling the reduction of waiting or preapproval periods and movement toward POS checks), and the financial resources available.

The U.S. Department of Justice has not yet performed a detailed State-by-State analysis of the money and time required to implement various firearm purchaser check options. The BJS and FBI, and various States, have conducted or sponsored several preliminary, partial studies of selected op-

[93]Ibid.

[94]Georgia indicates that over 70 percent of dispositions were reported within the past 5 years; the problem is that many of these dispositions were not recorded in the State criminal history records, due to a large processing backlog that is now being reduced. For purposes of automated firearm purchaser checks, however, a disposition reported but not recorded is just as inaccessible as a disposition not reported.

[95]Ibid.

tions or components thereof.[96] The composite results provide the following order-of-magnitude estimates of nationwide start-up costs and time:

- A purchaser POS "instant" telephone check "hot line" in each State (based on name and identifier checks, not fingerprint checks) would cost roughly $25 million, exclusive of the costs of needed criminal record system improvements.[97]
- A purchaser POS "instant" check option (whether with a national or individual State telephone "hot lines") would require roughly $260 million over the next 3 to 5 years to provide a substantially automated, complete, and up-to-date criminal history records infrastructure.[98]
- A purchaser fingerprint check option (not at the POS) would require roughly an additional $200 million ($40 million Federal, $160 million State)[99] and 5 plus years to provide the necessary automated fingerprint identification capability.
- A POS purchaser fingerprint check option would cost an additional $600 million to $11 billion,[100] depending on whether only storefront or all gun dealers are equipped with the necessary equipment, if implemented over the next 5 to 10 years (the cost might drop significantly in 10 plus years).
- A purchaser smart card option with POS check (but no fingerprints) would roughly cost an additional $410 million for magnetic strip cards ($270 million for dealer equipment, $140 million for issuing cards)[101] up to $890 million for computer chip cards[102] over the next 3 to 5 years.

The State CCH and AFIS criminal record funds would be required in any event for general improvements in criminal record and identification systems. Smart cards would add another few hundred million dollars, and POS fingerprint checks a few hundred million to several billion dollars.

Funds for upgrading record check capabilities and for operating costs could come from the following sources: 1) State and local government general revenues, 2) Federal block or discretionary grants, 3) licensing fees (from gun dealers), and 4) user fees (from firearm purchasers). All States provide general revenue funding for State and local criminal record systems development and operation. The amounts provided vary widely by State and over

[96]See generally U.S. Department of Justice, *Report to the Attorney General*, op. cit., footnote 50; T. Orsagh, "Estimates of Start-up and Operational Costs," op. cit., footnote 65; U.S. Department of Justice, Bureau of Justice Statistics, "Summary of Criminal History Record Improvement Grantees," Mar. 13, 1991. Also see cost analyses of numerous individual States planning or implementing computerized criminal history and automated fingerprint identification systems.

[97]Assumes the Virginia POS "instant" check start-up cost (about $250,000 for checks on handguns with barrel length under 5 inches) can be extrapolated to all States checking all firearm purchases from dealers. The BJS contractor arrived at a similar estimate in 1989; see U.S. Department of Justice, *Report to the Attorney General*, op. cit., footnote 50, and T. Orsagh, "Estimates of Start-up and Operational Costs," op. cit., footnote 65. OTA did not estimate operating costs. The BJS contractor estimated State "hot line" operating costs at about $40 to $50 million per year; the Congressional Budget Office estimated the cost of an FBI "hot line" at $5 to $10 million per year, although the comparability of these estimates is unknown. Both estimates exclude the cost of record system improvements.

[98]Cost depends on the level of automation and record quality, and also on the size of the State and the baseline condition of record systems. Achieving 90 to 95 percent automation and 90 to 95 percent disposition reporting in all States is estimated to cost two to three hundred million dollars over the next 3 to 5 years. This assumes an average automation cost of roughly $132 million ($5 million, $2 million, and $1 million per State for the 21, 7, and 13 States with 0 to 50 percent, 51 to 75 percent, and 76 to 99 percent automation respectively, as of 1989) and an average disposition reporting cost of roughly $134 million ($6 million, $3 million, and $2 million per State for the 13, 14, and 12 States with 10 to 50 percent, 60 to 75 percent, and 76 to 95 percent reporting respectively, as of 1989). This cost estimate also assumes that records of many older, inactive criminals (e.g., no activity for 25 to 30 years) might never be fully automated, but would be listed in automated, flagged name indexes. Time is also widely variable. Implementation of major State CCH or AFIS systems takes, on the average, 2 to 4 years from initial planning to full operation; upgrades typically take 1 to 2 years. Major improvements in record quality likewise usually take years. See SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82, for State-by-State data on rates of improvement in automation and record quality during 1983-1989. The Congressional Budget Office estimated the infrastructure improvement cost to support automated firearm purchaser checks at "hundreds of millions over several years." See letter from Robert D. Reischauer, CBO Director, to Rep. Charles E. Schumer, May 3, 1991.

[99]The Federal cost is based on preliminary estimates of the FBI's fingerprint identification automation program (excluding building and site acquisition), and assumes that the incremental cost of supporting firearm purchaser checks would be about $40 million (or 10 to 15 percent of the total FBI AFIS cost). The State cost assumes AFIS upgrades for 30 States at $2 million each to handle the additional workload from firearms purchaser checks, and new AFIS systems for 20 smaller States at $5 million each (assumes that the larger States have already invested in AFIS at costs of, typically, $10 to $25 million each). For further discussion, see OTA, *The FBI Fingerprint Identification Automation Program*, op. cit., footnote 14.

[100]Assumes 15,000 to 270,000 dealer terminals at $40,000 each.

[101]Assumes 270,000 dealer terminals at $1,000 each plus 70 million magnetic or laser strip cards at $2 each.

[102]Assumes 270,000 dealer terminals at $2,000 each plus 70 million computer chip cards at $5 each.

time. This reflects differences in economic conditions and political commitment to criminal justice improvements. Funding is influenced by the vagaries of the regional and national economies. Most State and local government budgets are strained, and many of the States with the most serious record system deficiencies are strapped for funds. This makes Federal funding even more important.

Federal funds for State and local record system improvements are available from the Bureau of Justice Assistance (BJA). BJA, with the assistance of BJS, administers the $9 million per year (for 3 years, starting in FY91) discretionary criminal record quality improvement program and the roughly $20 million per year (starting in FY92) 5-percent set-aside Anti-Drug Abuse block grant program for record system improvements.[103] The block grant set-aside program is still being defined. Only States that can demonstrate complete and accurate criminal record systems will be eligible to waive the 5-percent requirement. The discretionary program is already operational. These funds can be used for any component necessary to implement automated firearm purchaser checks, such as:

- flagging of felony convictions in criminal history records, with emphasis on arrests and convictions within the last 5 years;
- implementing the FBI's voluntary reporting standards for convicted felons, including the use of fingerprint identification;
- improving the reporting of arrests, dispositions, and other criminal history information to central State repositories;
- auditing the record quality of criminal history record systems;
- implementing or enhancing automated name indexes and computerized criminal history record systems; and
- improving the capability to participate in the Interstate Identification Index (III) system for the interstate exchange of criminal history information.[104]

As of March 13, 1991, BJA and BJS had awarded $8.7 million to 26 States, with $1.3 million intended for 3 States in process. Projects range from eliminating backlogs of unfiled arrests and dispositions, to designing a CCH (for States with a manual system), to automating the information exchange among judicial and law enforcement record systems, to conducting record quality audits.[105]

Full implementation of the BJA and BJS grant programs will speed up the improvement of State and local criminal record systems and improve the ability of those systems to support automated record checks of firearm purchasers. BJA and BJS have not yet conducted a State-by-State examination of: needed criminal record system improvements; the cost of needed improvements; and how quickly (and by how much) these improvements might reduce record check response time, and upgrade completeness and accuracy. Such an examination might be included in the program evaluation that BJA and BJS are planning for FY 1992,[106] and could cover both State and local criminal record system improvements and full implementation of the FBI's separate but related Interstate Identification Index (III) and National Fingerprint File (NFF).[107]

Licensing and user fees are other sources of revenue for automated firearm purchaser checks. The current Federal firearm dealer license fee is $10 per year, renewable every 3 years.[108] This fee could be increased to raise additional funds for implementating automated firearm purchaser checks and to cover the cost of more extensive criminal record checks on license applications. A licensing fee of $100 every 3 years, for example, would raise about $7 million per year (assuming 70,000 new or renewal licenses per year). About $2 million could be used to fund complete criminal record and fingerprint checks on license applicants and renew-

[103]See U.S. Department of Justice, Office of Justice Programs, *Attorney General's Program*, op. cit., footnote 32.

[104]U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Assistance and Bureau of Justice Statistics, "Improvement of Criminal History Record Information and Identification of Convicted Felons," *Federal Register*, vol. 56, pp. 11275-11278, Mar. 15, 1991.

[105]U.S. Department of Justice, Bureau of Justice Statistics, "Summary of Criminal History Record Improvement Grantees," Mar. 13, 1991, submitted for the record of a Mar. 13, 1991, hearing of the House Committee on the Judiciary, Subcommittee on Civil and Constitutional Rights.

[106]See U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Assistance, *Edward Byrne Memorial State and Local Law Enforcement Assistance Program: Discretionary Program Application Kit* (Washington, DC: BJA, Feb. 20, 1991), especially p. 38, "Criminal History Information System Evaluation."

[107]See OTA, *FBI Automated Fingerprint Identification Program*, op. cit., footnote 14, in preparation.

[108]It costs $25 per year for pawnbrokers; $50 per year for firearms and ammunition manufacturers or importers. See 18 U.S.C. 44, sec. 923(a).

als. The remaining $5 million could be transferred to the BJA and BJS grant program to augment funds for record system improvements necessary to support automated firearm purchaser checks.

User fees vary by State and range from no charge to $29 per firearm purchaser.[109] Fees for criminal record checks based on name and personal identifiers range from about $2 to $10 per purchaser, when fees are charged.[110] Fees for full record checks including fingerprints range from about $12 to $29. Some States (e.g., Oregon) do not charge even for fingerprint checks, with funding provided from general revenues.[111] A user fee surcharge could raise significant additional funds to offset costs. A $2 Federal surcharge could generate roughly another $5 million per year, assuming, conservatively, 2.5 million firearm purchases per year at licensed dealers (multiple purchases in the same transaction would still be assessed at $2). These funds could go directly to each State, or be transferred to BJA and BJS for redistribution to the States as part of the criminal record grant programs. States could, alternatively, add a $2 surcharge themselves and deposit revenues in an account reserved for State and local record system improvements.[112] Some gun owner groups view user fees and possible surcharges as, in effect, a tax on the exercise of their constitutional right to keep and bear arms. Some law enforcement agencies view such revenue sources as a legitimate way to cover the costs of conducting record checks and to make the improvements needed to help ensure these checks are as complete and timely as possible.

Challenge of Improving Record Quality

Additional resources will be needed, whether from Federal grants, increased licensing or user fees, or elsewhere, if complete and accurate firearm purchaser record checks are to be provided. Problems with record quality are compounded by delays and omissions in the information submitted by courts and law enforcement agencies to State repositories and delays in entering information once submitted into State criminal record systems.[113]

Many States, but not all, require criminal justice agencies to provide arrest cycle information to the State record repositories, that is, information on what happens to each offender after the initial arrest (see figure 7).

This means that arrests can be legally carried in the criminal history records with no indication if the charges were dropped (one-third of the States) and with no indication of final felony dispositions (one-fifth of the States). Even when prosecutor and court disposition reporting is required, reporting levels vary widely. Some States with mandatory prosecutor reporting estimate that half or more of prosecutor declinations are never submitted to the State repository.[114] Some States with mandatory felony court disposition reporting likewise estimate that half or more of final dispositions are never submitted.[115] Even when dispositions are submitted, the timeliness varies widely (see table 2).

It is apparent that State disposition reporting rates vary from very low to very high. Many court dispositions are never filed with the State criminal record repository or filed late. When filed, many State repositories take weeks to months to enter the dispositions into the criminal history records. Even States with high overall disposition reporting (e.g., 95 percent in Virginia) and rapid entry of dispositions once received (5 days in Virginia) still experience significant delays. An initial hit with the Virginia POS firearm purchaser record check, for

[109]See SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82.

[110]Virginia charges $2 per record check, but estimates that the full cost is about $10 per check. The difference is provided from general revenues. See Virginia State Police, *Virginia Firearms Transaction Program: Report for the Office of the Governor*, op. cit., footnote 82.

[111]The Oregon State Police estimate an approximate total direct cost of $11 per check, $6 for the fingerprint check by state police and $5 for other record checks by local law enforcement. The indirect capital cost of additional automated fingerprint identification capability could add as much as another $10 per check. See Oregon State Police, *1990 Study of Retail Firearm Sales*, op. cit., footnote 45.

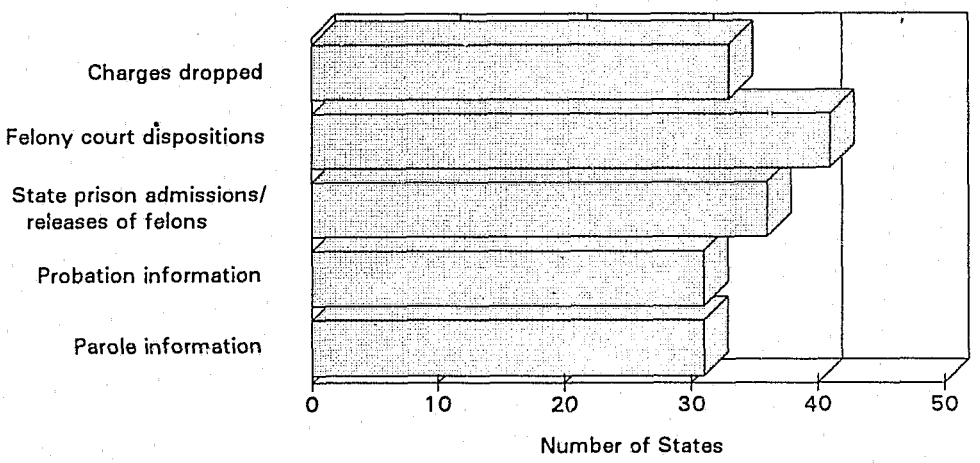
[112]Florida charges $10 per record check, which generated $367,000 during the first 2 months of operation. These funds cover both operating costs and related record system improvements. Virginia charges $2 per record check, and recovers only a part of the operating costs. Virginia estimates the full cost (operating and related infrastructure) at $10 per check.

[113]See OTA, *Assessment of Alternatives for a National Computerized Criminal History System*, op. cit., footnote 59; U.S. Congress, Senate, Committee on the Judiciary, Subcommittee on Patents, Copyrights, and Trademarks, *Computerized Criminal History Records*, hearing, 98th Cong., 1st sess. (Washington, DC: U.S. Government Printing Office, May 12, 1983); U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General*, op. cit., footnote 50; and SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82.

[114]Alabama, District of Columbia, Illinois, Indiana, Kansas, Maine, Mississippi, South Dakota, Utah, and Washington.

[115]District of Columbia, Florida, Illinois, Louisiana, Mississippi, Nebraska, New Mexico, Tennessee, and Washington.

Figure 7—Types of Criminal History Information Submitted to State Repositories, 1989



SOURCE: Bureau of Justice Statistics/SEARCH Group, Inc., 1991.

Table 2—Average Time Required To Receive and Enter Final Dispositions Into State Criminal History Records, 1989

State[a]	Average number of days between: Court disposition and submission to State repository	Average number of days between: Receipt of disposition and entry into State criminal history records
Arizona	57 days	45 days
California	30	40
Florida	180	180[b]
Idaho	35	730[b]
Maine	14	1
Nebraska	365	14
New Jersey	7	60-90[b]
Pennsylvania	180	2
Tennessee	28-42	2
Utah	180	14
Virginia	90-120	5
Washington	60	28
Wisconsin	14	60-90[b]
Wyoming	7	3

[a]Illustrative States with mandatory final disposition reporting.
[b]Backlog of entering dispositions into criminal history database.

SOURCE: BJS/SEARCH Group, Inc., 1991.

Table 3—Average Time Required To Receive and Enter Arrest Information Into State Criminal History Records, 1989

State[a]	Average number of days between: Arrest event and submission to State repository	Average number of days between: Receipt of arrest data and entry into State criminal history records
Alabama	7 days	3 days
California	21	15-20
Colorado	2	2
Georgia	3-4	252[b]
Illinois	1-5	1
Louisiana	7	365[b]
Massachusetts	28	300[b]
Michigan	7	5
New Jersey	7-14	1
New York	7	1-14
South Carolina	5	10
Virginia	3-5	5

[a]Illustrative States.
[b]Backlog of entering data into criminal history database.

SOURCE: BJS/SEARCH Group, Inc., 1991.

example, could turn out to be false, since a court acquittal could take 3 to 4 months to be reported and entered into the Virginia State CCH file.

The situation is further complicated because Virginia is one of the majority of States whose State laws provide for expungement of felony convictions, pardon of felons, or restoration of felons' civil rights. These actions typically must be noted on the criminal history records. In some States, the record itself must be destroyed, sealed, or returned to the court or originating agency. All of these actions could affect the right of a convicted felon to purchase or possess firearms.

The reporting of arrests to State repositories also varies, although not as much as for disposition reporting (see table 3). Arrests typically are reported to the State repository within a week or two and entered into the criminal history records within a few days to a week of receipt. Some States have problems obtaining timely submissions from arresting agencies or in eliminating filing backlogs, which

delay the entry of arrest information into criminal history databases. Just as missing dispositions can lead to erroneous firearm purchaser record checks, so can missing arrests—if the arrestee was formally charged with a felony offense. An arrestee out on bond or personal recognizance, for example, could get a clean POS record check at a gun dealer and walk out with a firearm if the arrest had not yet been entered into the State criminal history file. (Missing arrests present similar problems for record checks conducted during waiting or preapproval periods.)

Achieving even reasonably complete and accurate criminal history records on a nationwide basis will require substantial procedural and automation improvements by police, prosecutors, courts, and criminal record repositories.[116] These improvements will take considerable time and resources, even if assigned a high priority—thus the need to consider sources of additional funds.

[116]See OTA, *Assessment of Alternatives for a National Computerized Criminal History System*, op. cit., footnote 59; SEARCH Group, Inc., *Strategies for Improving Data Quality*, NCJ 115-339 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, April 1989) and *Data Quality of Criminal History Records*, NCJ-98079 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, October 1985); U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General*, op. cit., footnote 50.

Value of Criminal Record Checks

Assigning an overall value to criminal record checks of firearm purchasers is difficult since it involves the weighing of both quantitative and qualitative benefits and costs. Record checks can help implement Federal and State laws that prohibit convicted felons from purchasing or possessing firearms. States with record checks have found, on the average, that about 1 to 2 percent of purchasers from licensed dealers are convicted felons or are otherwise disqualified. Reliable data are lacking on States without record checks. (NIJ, BJS, or BATF could commission survey research on a statistically valid sample of firearm purchasers from dealers in States without record checks to fill this knowledge gap.) The limited research on how criminals obtain firearms (based on surveys of convicted and incarcerated felons) suggests that purchases from licensed gun shops are the source in about one in six cases. More often, criminals obtain firearms from friends, the black market, and less formal sales or exchange outlets such as gun shows.[117] Thousands of gun shows are held each year. Criminal record checks are rarely required at gun shows, even though gun show transactions are subject to Federal law. Nor is there any available research on the criminal backgrounds of gun show purchasers. (NIJ, BJS, or BATF could sponsor research on a sample of firearm purchasers from gun shows.[118])

The possible extension of record checks to all gun shows raises several questions. First, would gun shows or other traditionally cash-and-carry ad hoc sales outlets be possible with record checks? Some gun owner groups are concerned that record checks involving a waiting period would so discourage gun show sales that many of the shows would fold. Virginia requires POS record checks of gun show purchases from dealers (but not private party transactions). This approach seems to be working with a minimum of hassles for gun show vendors and purchasers, and could be extended to all gun show transactions. Federal law prohibits all convicted felons, fugitives from justice, and other disqualified persons from purchasing or receiving firearms, regardless of location. California, on the other hand, recently (in January 1991) extended record checks and a 15-day waiting period to long gun sales and gun shows; the effects on gun shows are not yet known. Gun owner groups believe that waiting periods threaten the viability and, indeed, the very existence of gun shows.

We cannot precisely estimate the total number of firearms reaching the criminal community either directly or indirectly (e.g., via stooge purchases) from gun dealers, gun shows, and other outlets that could reasonably be covered by mandatory record checks. The number of firearms potentially affected, however, is likely to be in the range of tens to hundreds of thousands per year. Direct criminal purchases from gun dealers alone could account for, conservatively, about 50,000 firearms per year, assuming that 2 percent of purchasers are criminals and 2.5 million dealer sales per year (out of 7.5 million total firearm sales by dealers per year).[119] Adding gun show transactions could increase the number of firearms affected.

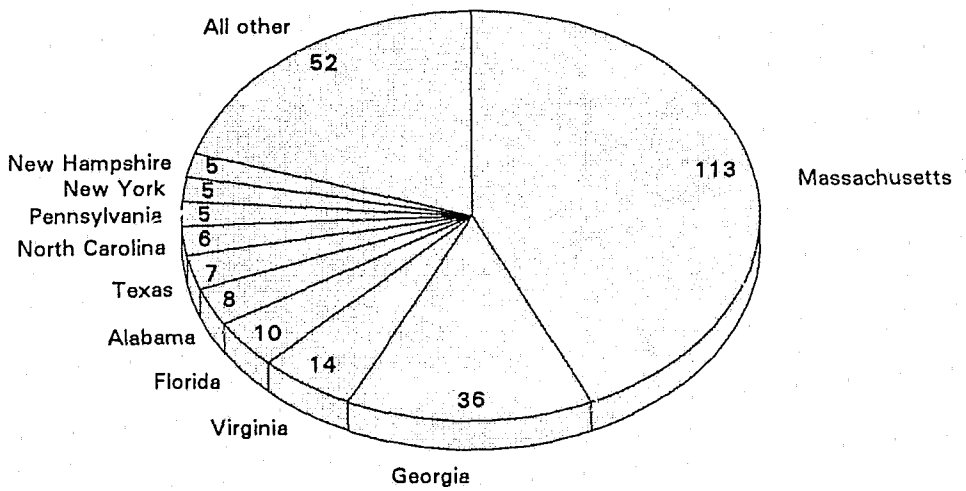
Better estimates will require new and innovative research on the flow of firearms to the criminal community. NIJ or BJS could, as a first step, sponsor a research methodology conference to: first, discuss conceptual strategies for more comprehensively researching the sources of criminal firearms (including gun shows, flea markets, pawn shops, small dealers, and interstate transfers as well as purchases from storefront dealers and chain stores); and second, review survey, sampling, and interviewing methodologies that can produce the most statistically valid results. NIJ and BJS might fund several

[117]In fiscal year 1990, BATF did recommend 280 cases to U.S. Attorneys for criminal prosecution of persons illegally selling or receiving firearms at gun shows or flea markets. Various BATF regional and district offices report illegal gun show transactions. The nature and extent of such transactions are unknown.

[118]BATF is considering an exploratory inquiry to better understand the extent and regional distribution of gun shows, and the nature and extent of any illegal firearms transactions at gun shows.

[119]BATF estimates total annual U.S. gun sales by dealers to be about 7.5 million, based on the roughly 4 million firearms manufactured domestically and 1 million firearms imported per year (as reported to BATF) and assuming that used firearm sales equal 50 percent of new firearm sales. The estimate of 50,000 additional firearms per year that could be affected by record checks assumes: 2.5 million dealer sales of firearms are not currently covered by firearm purchaser record checks; and 2 percent of firearm purchasers in those States/jurisdictions without record checks have disqualifying criminal records.

Figure 8—Interstate Movement of Firearms: The Case of Boston, MA, October 1989 to June 1990



SOURCE: Bureau of Alcohol, Tobacco, and Firearms and Boston Police Department, 1990.

alternative approaches, in order to provide a more robust basis for interpreting the research. A well-balanced research advisory panel seems especially appropriate and necessary, given the sensitivity of this line of inquiry. The panel could provide feedback on the methodology and help assure the validity, objectivity, and credibility of the results.[120]

Criminal record checks should make it tougher for criminals to get firearms from gun dealers, gun shows, and other organized, public outlets. Some criminals may be deterred from getting guns altogether; others may simply rely more on theft and the black market. This underscores the importance of measures to deter firearm theft (e.g., physical security at stores and homes) and to investigate, prosecute, and punish those who obtain or trade in firearms through illegal channels (e.g., theft, illegal interstate transportation of firearms, guns for drugs deals).

The effectiveness of criminal record checks will depend in part on their coverage. Federal law prohibits the sale, transfer, or interstate transport of any firearm (and ammunition) by or to anyone who has been formally charged or convicted of a felony offense or who is a fugitive from justice.[121] The absence of a Federal record check requirement combined with the patchwork quilt of State record checks means that criminals intent on obtaining firearms may be able to avoid a record check altogether. About half of the States have laws that authorize or require a firearm purchaser record check of some sort.[122] The majority of these State laws extend checks to both dealer and private transactions.[123] About two-fifths of these State laws cover some or all long gun purchases as well as handguns.[124]

BATF gun traces have documented significant interstate movement of firearms used in criminal activity. A 1989 trace of firearms used by Boston, MA criminals, for example, found that the majority of firearms (57 percent) came from out-of-State (see figure 8). The largest out-of-State source was Georgia, which accounted for 14 percent of the firearms traced and does not require a firearm purchaser record check. Altogether, about one-third of the traced firearms (60 percent of the out-of-State firearms) came from States without any record check requirements, and another 5 percent from States that

[120]OTA's use of project advisory panels and workshops could serve as a prototype.

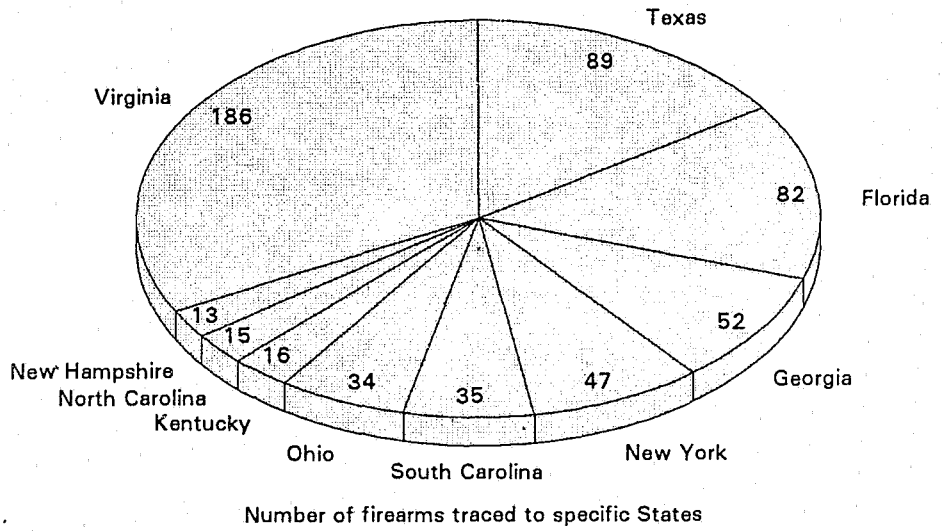
[121]18 U.S.C. 44, Sec. 922(d), (g), and (n).

[122]Twenty-five States plus Washington, DC.

[123]Seventeen States plus Washington, DC.

[124]Eleven States plus Washington, DC.

Figure 9—Interstate Movement of Firearms: The Case of New York City, 1987-90



SOURCE: Bureau of Alcohol, Tobacco, and Firearms, 1991.

checked in-State but not FBI record systems.[125] BATF gun traces suggest that the majority of out-of-State firearms used in crime come from States without criminal record checks or waiting periods prior to purchase (see figure 9).[126] The methodology and statistical significance of these gun traces has not been rigorously reviewed. The degree to which the guns traced are representative of all crime guns is unknown. (NIJ/BJS could commission a review of gun trace methodology and validity.)

About three-fifths of the States with record checks have limited checks to handgun purchases. Crime statistics indicate that handguns account for about 80 percent of firearm-related crime, long guns about 20 percent (see figure 10).[127] Handguns represent, in comparison, about 40 to 45 percent of total firearm sales, long guns the remaining 55 to 60 percent.[128] The presumption is that record checks on handgun purchasers are likely to identify a much higher percentage of ineligible persons than checks on long gun purchasers. Whether this is the case could be another subject of NIJ, BJS, or BATF sponsored research.[129] The fact remains, however, that long guns are estimated to be used in about one-fifth of firearm-related crime. To the extent criminals obtain long guns from dealers or other sources where record checks could be applied, limiting record checks to handguns allows a significant exception.

Benefits of firearm purchaser record checks must be weighed against costs. These include both the

[125]U.S. Department of the Treasury, Bureau of Alcohol, Tobacco, and Firearms, and Boston Police Department, *Trace Study: City of Boston*, op. cit., footnote 28. A 1976 BATF trace of handguns used in Boston, MA crime found that 65 percent came from out-of-State. See U.S. Department of the Treasury, Bureau of Alcohol, Tobacco, and Firearms, *Project Identification: A Study of Handguns Used in Crime* (Washington, DC: U.S. Department of the Treasury, BATF, February 1976). BATF concluded that, in general, "[t]he percentage of crime handguns purchased interstate was directly proportional to the degree of local handgun control." For example, 96 percent and 92 percent of crime handguns in New York City and Detroit, MI (both requiring record checks and permits prior to purchase), respectively, came from out-of-State sources. Primary source States included Ohio, Kentucky, Virginia, South Carolina, Georgia, Florida, and Mississippi (none of which at the time had criminal record checks or waiting periods prior to handgun purchase). The pattern was not entirely consistent. The majority of crime handguns in Oakland and Los Angeles, CA, 74 percent and 82 percent respectively, came from California sources, although most of the out-of-State handguns came from States without record checks or waiting periods. A 1991 BATF trace of firearms used in New York City crimes from 1987 to 1990 found that, similar to the 1976 study, 94 percent came from out-of-State sources. Six States accounted collectively for two-thirds of the firearms (Virginia, Texas, Florida, Georgia, South Carolina, Ohio).

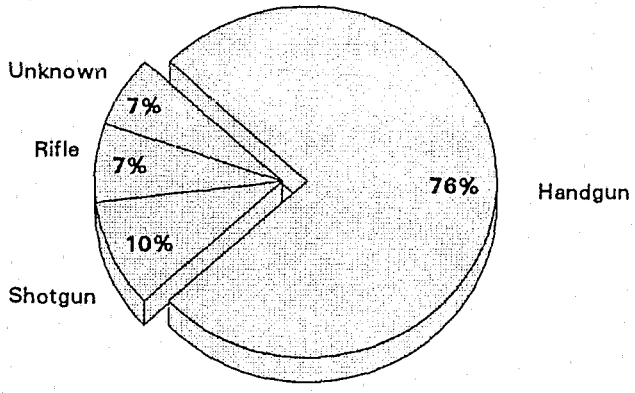
[126]BATF, *Project Identification*, ibid.; also see BATF, Detroit District Office, *Detroit District/Detroit Police Trace Project*, 1990.

[127]This was almost exactly the percentage in the Boston gun trace study. See ibid.; also see U.S. Department of Justice, Federal Bureau of Investigation, *Uniform Crime Reports 1989: Crime in the United States* (Washington, DC: U.S. Government Printing Office, 1990), and FBI update for 1990.

[128]BATF receives data from firearms manufacturers but not dealers. In calendar 1989, U.S. companies manufactured about 4 million firearms intended for domestic sale (total production less exports); about 45 percent were handguns (pistols and revolvers) and 55 percent long guns (rifles, shotguns, combination guns).

[129]In Oregon, the opposite was true for 1990. About 1.5 percent of long gun purchasers were disqualified, compared to 0.7 percent of handgun purchasers. See Oregon State Police, *1990 Study of Retail Firearm Sales*, op. cit., footnote 45.

Figure 10—Homicides by Type of Firearm, 1989



SOURCE: Federal Bureau of Investigation, 1991.

financial costs of implementing record check options, and the intangible costs of the possible compromise of individual rights to the extent such record checks are not accurate and timely. The monetary costs of near-term options for actually conducting automated record checks (not for the infrastructure) are likely modest and could be recovered through user fees in the $5 to $15 range, if general government revenues are not available or insufficient. The longer term options involving smart cards and POS fingerprint (or other biometric) identification could entail substantially higher costs.

The largest costs, however, are probably not for record checks per se but for record quality improvements needed to ensure that record checks are reasonably accurate and timely. Erroneous checks can cause additional delays for prospective firearm purchasers and waste the time and effort of criminal justice officials (and perhaps the purchasers) to correct the records. Errors can also result in authorizing purchases for persons who should be disqualified. Either way, the less complete and more inaccurate the criminal records, the greater the costs to firearm purchasers, criminal justice agencies, and, ultimately, societal goals such as reduction of crime—and especially violent crime.

From the perspective of some gun owner groups, the risk or cost of record checks goes up if such checks lead to the creation of lists or indices of gun owners, or otherwise have a "chilling" effect on the right to keep and bear arms. Some gun groups are concerned that police or other government officials could sometime use such lists to confiscate firearms or intimidate firearm owners. The Virginia POS system, for example, addresses this problem by retaining detailed information only on disqualified purchasers. The names and personal identifiers of law abiding purchasers are not retained more than 30 days by the Virginia State Police, only a log sheet that lists the time, date, gun dealer identification number, and a confirmation number assigned to each record check.[130] This information permits the State police to verify that a check was conducted, should any questions arise, and to collect any applicable fees from gun dealers, but prevents the police from maintaining a list of law-abiding gun buyers and their firearms.

The fact remains that computerized criminal record systems maintain, as standard operating procedure, transaction logs to document who is using the system, when, for what purposes. Transaction logs are needed to help assure system accountability and security. The Virginia transaction log does not include the names of firearm purchasers, but the potential exists regardless of legal prohibitions. State statutes generally do not impose penalties for failure of criminal justice personnel to comply with privacy, security, and related criminal record requirements. Penalties when prescribed are typically misdemeanors, and violations are rarely prosecuted.[131]

Audits of State police records personnel and recordkeeping practices should help ensure compliance with firearm purchaser check requirements and record quality standards. Audits could be conducted on both a periodic and random basis for maximum impact. Firearm purchasers need simple and speedy appeal procedures to resolve questionable record check results.[132] Some combination of administrative, civil, and criminal penalties also could encourage compliance and provide further assurance to

[130]Gun dealers do retain in their files copies of the Federal firearms transaction form that includes details on the purchasers and firearm purchased.

[131]See SEARCH Group, Inc., *Data Quality of Criminal History Records*, op. cit., footnote 116; and NCIC Advisory Policy Board, Planning and Evaluation Committee, NCIC staff paper, topic #7, "Federal Legislation to Criminalize Misuse of NCIC," San Diego, CA, Dec. 3-4, 1990, pp. 19-25.

[132]During the first 2 months of Florida's POS record check program, about 0.3 percent of all record checks (10 to 15 percent of disapprovals) were appealed by purchasers. About 60 percent of the appeals resulted in a reversal from disapproval to approval of the firearm purchase. See Florida Department of Law Enforcement, "Firearm Purchaser Program," op. cit., footnote 45.

firearm purchasers that automated (or other) record checks will not be abused.[133]

Some gun owner groups remain skeptical that the benefits of record checks—automated or not—are worth the costs and risks. They question whether such checks will effectively deter a significant number of criminals from obtaining firearms, or are more likely to delay law-abiding citizens from purchasing firearms and compromise their right to keep and bear arms, with very few active criminals actually detected or deterred. Law enforcement officials counter with statistics on the numbers of convicted felons identified trying to purchase firearms in those States with record checks. BJA/BJS could periodically compile statistics (and issue reports) on the results of automated (or all) firearm purchaser checks, including the number of: purchases screened, initial disapprovals, confirmed disapprovals, appeals of disapprovals (with results of appeals), and prosecutions of illegal purchasers (and resulting convictions).

Value of Waiting Periods for Record Checks

The value of waiting periods for criminal record checks is, as a general rule, inversely related to the ability of a jurisdiction to conduct complete and timely checks of relevant criminal (and other) record systems. The value of waiting periods is also inversely related to the ability to accurately identify the firearm purchaser. The more automated and complete a State's criminal records, and the lower the incidence of false identification, the less the need and value of waiting periods to check the records of firearm purchasers. States like Virginia are able to do an initial check of State criminal history and State and Federal wanted person systems in a matter of seconds, with relatively low known false positive (or false negative) rates. About 4 out of 100 Virginia handgun purchasers are initially disapproved based on false positive record hits; these false positives are usually corrected within several hours (2 out of 100 are confirmed hits). If this level of false positives is judged acceptable, then the value of a waiting period for the purpose of criminal record checks is relatively low. Some support a waiting period in Virginia for cooling off purposes, to make positive fingerprint identification of firearm purchasers, or both. The number of purchasers successfully using phony identification is unknown.

In California, by comparison, the firearm purchaser record checks take 4 to 7 days on the average, not counting mail delays. This is part of the justification for California's current 15-day waiting period. California takes longer than Virginia for several reasons:

- much larger volume of firearm purchaser record checks (about 330,000 in 1990 compared to 70,000 in Virginia);
- somewhat lower level of disposition reporting for recent arrests (85 percent compared to Virginia's 95 percent); and
- the necessity to check noncriminal justice records (e.g., mental health commitments) for other firearm purchase disqualifications.

California experiences a high initial false positive rate—so high that a POS system might be unacceptable even if technically feasible. About 28 out of every 100 California firearm purchasers are initially identified as potentially disqualified, based on the record checks. Only 1 out of 28 is actually confirmed as disqualified. Because of the waiting period, the 27 false positive hits are corrected before responses are sent back to the gun dealers. The gun dealers and purchasers know only that 1 out of 100 purchasers are disapproved and that the other 99 are approved. But in a POS system, an initial response would have to be provided to the dealers and purchasers before the hits could be checked out.

States could be ranked according to the ability to conduct automated POS criminal record checks of firearm purchasers. States with an automated name index and criminal history file, relatively high disposition reporting, and some ability to flag felony convictions—e.g., New Jersey, Oregon, and South Carolina—are in the best position to implement POS systems, should they decide or be required to do so. These States would need relatively little time and resources for POS development, and a relatively shorter waiting period to conduct record checks in the interim. States with a manual criminal history file or low disposition reporting—such as Arkansas, Mississippi, and New Mexico—are in the weakest

[133]Gun Owners of America recommends that: 1) the compilation of law-abiding firearm owner lists be legally prohibited; 2) felony penalties be established for criminal justice employees who create such lists; and 3) a right of civil action against the government be provided to any citizen who believes such lists may exist, with legal fees to be paid by the government if the allegations prove correct.

position. They would need more time and resources to implement a POS system, and would need a relatively longer waiting period to conduct criminal record checks until a POS system was operational. Most States fall somewhere between, with differing combinations of strengths and weaknesses.

The rate of criminal record quality improvement will be the major pacing factor in implementing POS systems for many States. Telecommunication and computing technologies might be acquired or upgraded relatively quickly, given the necessary (and, for some States, substantial) funding. Assuring reasonably complete and timely arrest and disposition information frequently requires procedural and legal as well as technical improvements. Several major components of the criminal justice community must cooperate to achieve high record quality, especially the police, prosecutors, and courts.[134] Forcing POS systems prematurely on States that do not have the necessary criminal record infrastructure could result in: 1) large numbers of false positive hits, frustrated criminal records officials, and unhappy gun purchasers; and 2) an unknown number of felons and fugitives who are erroneously authorized to, in effect, illegally purchase firearms (false negatives). To avoid these consequences, proposals for automated record checks must be geared to the actual and projected capabilities of State (and Federal) criminal record systems.

A complete ranking requires further BJS and SEARCH Group, Inc. examination of State-by-State capabilities starting with the results of the 1989 survey summarized in figures 11 and 12. In any given year for the next few years, each added day of waiting period would permit additional States to complete criminal record checks of firearm purchasers within the time allowed. The marginal utility of each additional day could be estimated by BJA/BJS, based on a State-by-State followup analysis of the 1989 survey results. The average time needed for record checks should decline in the future, assuming that checks are required and that Federal and State resources continue to be available for improving the automation and completeness of criminal record systems. Over time, more States can be expected to develop the capabilities needed to expedite criminal record checks and ultimately to conduct POS checks. Some States probably could develop POS systems within months; most will need years. The average waiting time needed to conduct criminal record checks should correspondingly shorten, assuming States did not retain waiting periods for other purposes (e.g., cooling off, checks of noncriminal justice records).

Difficult as criminal record checks may be, the challenges posed by checking other types of records are even greater. Federal law prohibits other categories of persons (in addition to felons and fugitives) from purchasing or possessing firearms, including: unlawful users of controlled substances, persons adjudicated as mental defectives or committed to mental institutions, illegal aliens, persons dishonorably discharged from military service, and renunciates of U.S. citizenship. As many as 20 million persons may fall in one or more of these categories, but records do not even exist on perhaps four-fifths of these people. Half the records that do exist are not automated, and many of the records are subject to complicated, conflicting laws, rules, and traditions on disclosure of personal information.[135]

The National Institute of Drug Abuse, for example, estimates that about 14.5 million persons are unlawful users or addicted to controlled substances (e.g., cocaine, heroine). Only about 3 percent are included in some kind of record system (not counting the unknown number that are also felons or fugitives). A BJS contractor estimates the number of illegal aliens to be 2.7 million, based on Immigration and Naturalization Service and Census Bureau figures, but only about one-fourth are listed in a record system.[136]

The "mental defective" category poses other problems.[137] Federal law covers persons adjudicated as a mental defective or committed to a mental institution. The law does not specify whether commitment can be voluntary or need be involuntary. BATF has adopted the narrower definition—only persons adjudicated or committed by a court,

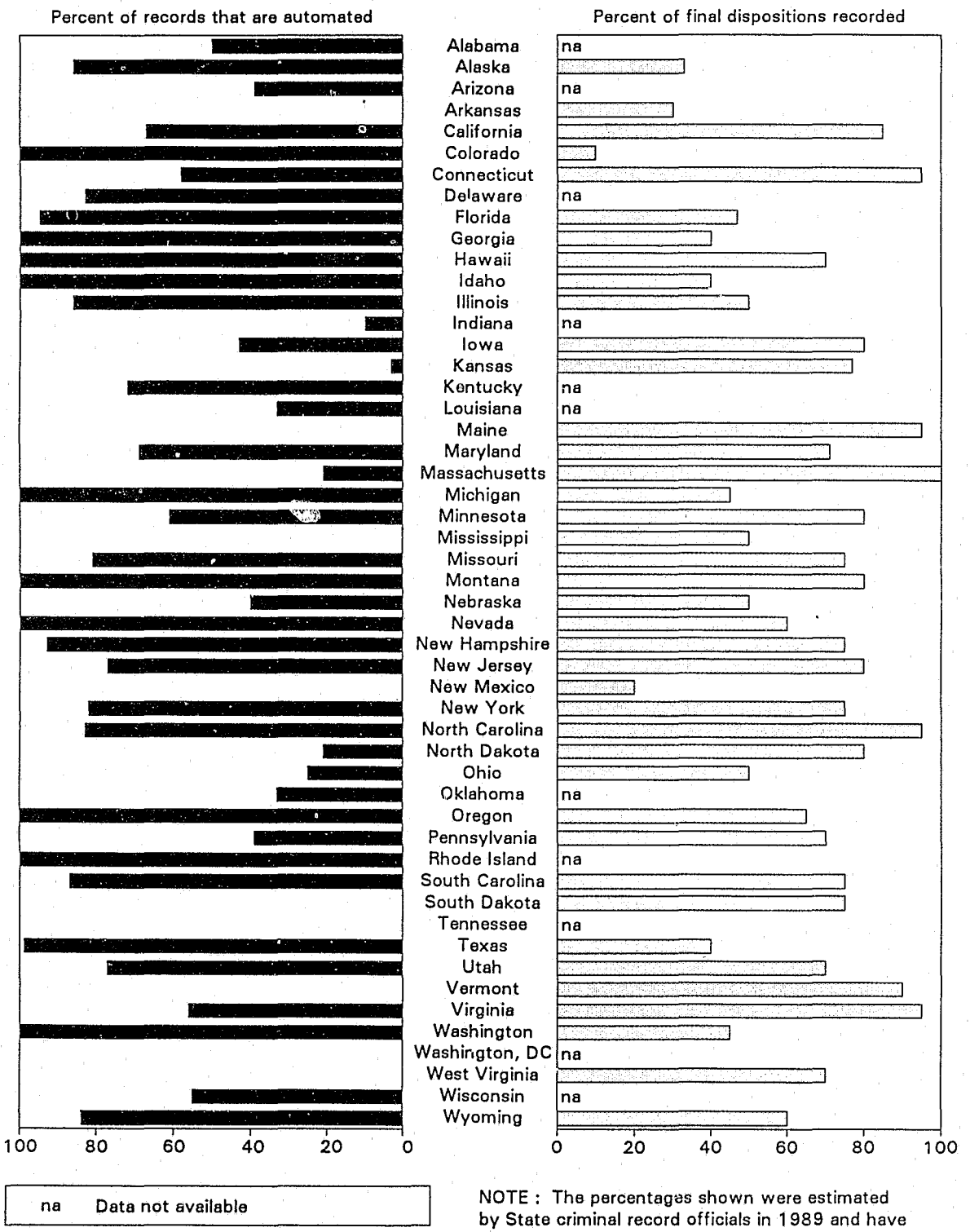
[134]See SEARCH Group, Inc., *Strategies for Improving Data Quality*, op. cit., footnote 116.

[135]See J.M. Tien, Enforth Corp., *Identifying Persons, Other Than Felons, Ineligible To Purchase Firearms: A Feasibility Study*, op. cit., footnote 50, which is the primary data source for the following discussion.

[136]Ibid.

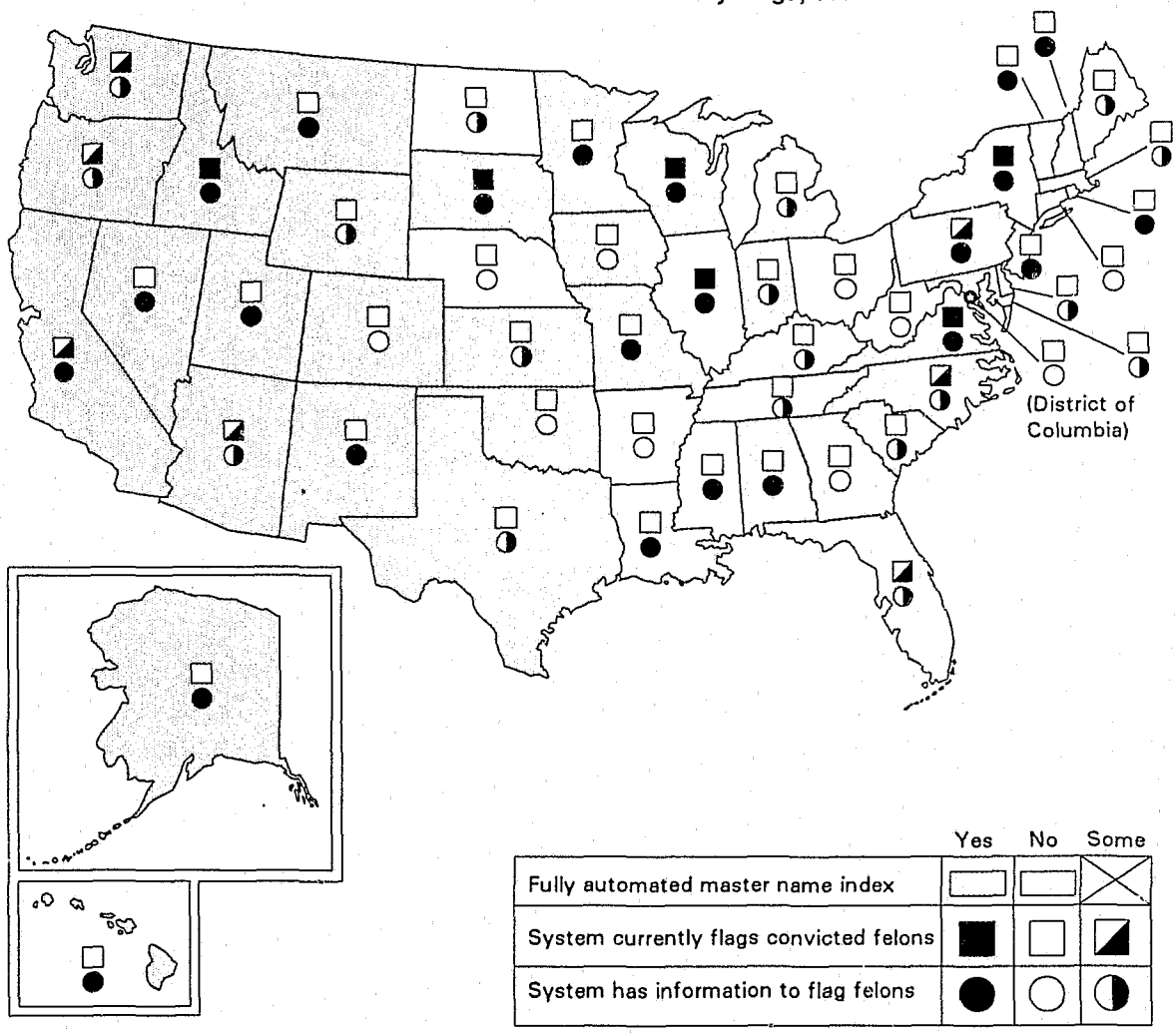
[137]Mental health professionals object to the use of the term "mental defective" as degrading, and would prefer that this terminology not be included in statute (as in 18 U.S.C. 44) or otherwise.

Figure 11—State-by-State Capabilities To Support Automated Firearm Purchaser Checks: Automated Records and Final Dispositions, 1989



SOURCE: Office of Technology Assessment, based on Bureau of Justice Statistics/SEARCH Group, Inc., 1991.

Figure 12—State-by-State Capabilities To Support Automated Firearm Purchaser Checks: Automated Name Index and Felony Flags, 1989



NOTE: The data shown were provided by State criminal record officials in 1989 and have not been independently verified or updated.

SOURCE: Office of Technology Assessment, based on Bureau of Justice Statistics/SEARCH Group, Inc., 1991.

authority, commission, or board are ineligible to purchase or possess firearms. BATF has indicated that commitments by family members, friends, family doctor, and oneself (self-commits or voluntary admissions) are not covered. According to the National Institute of Mental Health, about three-fourths of all mental institution commitments are voluntary; the rest are involuntary—mostly civil and a very small percentage (about 2 percent) criminal. Criminal commitments include persons found incompetent to stand trial, not guilty by reason of insanity, and guilty but mentally ill.[138]

A BJS contractor estimated that 2.7 million persons are mentally defective, counting just involuntary commitments, and that almost all have a record somewhere because they are in some kind of mental institution. Many (perhaps two-thirds) of these persons are in databases maintained by State mental health departments. The completeness and accuracy of these records are largely unknown; most

[138]Ibid.

of these records are not automated. California is one of those States currently attempting to check mental health records as part of broader firearm purchaser checks. Expanding these checks to voluntary and private mental hospital commitments raises major procedural, legal, and privacy questions.[139]

Records for the dishonorable dischargees and renunciates are in comparatively good shape. The Defense Manpower Data Center maintains an automated database with an estimated 90 percent of all persons dishonorably discharged since 1971 (only about a third of all dishonorable discharges still living). The U.S. State Department Passport Office has an automated database of all persons who have renounced U.S. citizenship since 1941. These two categories of disqualified persons account, however, for an insignificant percentage (0.15 percent) of the total.[140]

The outlook is not good for including all disqualifying categories in routine firearm purchaser record checks. Illegal drug users and illegal aliens pose perhaps insurmountable problems, because most are not included in any record system. Involuntarily committed mental defectives might eventually be checked on a systematic basis; but substantial record automation and quality improvements would be needed in most States.[141] Voluntary commitments account for the vast majority of mental cases, and would be much more difficult (and controversial) to check.

In sum, nationwide POS checks of noncriminal justice record systems are not likely to be feasible for many years, with the possible exception of dishonorably discharged, renunciates, and persons involuntarily committed to mental institutions. To the extent checks for all disqualifying categories are conducted, a lengthy waiting period may be necessary to locate and search whatever records exist. Law enforcement officials might in most cases have to simply do the best they can in whatever time is available, knowing that the desired information may not exist or be accessible.

Value of Fingerprint Identification

All currently operational POS record check systems are based on the name and personal identifiers (e.g., address, date of birth, social security number, photo) of the firearm purchaser, not on fingerprint or other positive biometric identification. The use of phony identification cards is prevalent in U.S. society. Driver's licenses, credit cards, and social security cards are all relatively easy to fake or alter. Some law enforcement officials are concerned that a significant percentage of firearm purchasers with criminal records or other disqualifications might use phony identification in order to escape detection. The risk would appear to be higher with POS record checks because: decisions to approve or disapprove a purchaser must be made quickly; and criminal records officials do not have firsthand access to the identification cards being presented (information is phoned in by the gun dealer). The Virginia State Police has experienced few known problems with phony identification during the first 20 months of firearm purchaser POS record checks. Other criminal justice officials remain skeptical, however. The FBI's analysis of criminal record checks of employment or licensing applicants (not firearm purchasers) found that, on the average, each 100 checks result in 5 record hits based on name and identifiers and one hit based on fingerprints (that would have otherwise been missed).[142] BJS could conduct or sponsor a survey of those States with any kind of firearm purchaser record checks to determine the extent of known use of phony IDs. BATF could followup gun traces that identify Virginia (and perhaps Florida) sources to attempt to determine how the firearms were initially purchased or obtained, and whether phony identification was used.

One option is to fingerprint firearm purchasers either at the POS or as part of an application for a firearm owners identification card or permit to purchase card. Indiana, New Jersey, New York, North Carolina, Oregon, Washington, and the District of Columbia require fingerprints of some or all firearm purchasers.[143] Fingerprints are obtained at

[139]Ibid.

[140]Ibid.

[141]Illinois is one of the few States that systematically checks firearm purchasers (in this State, firearm identification card applicants) against computerized records of persons committed to mental health hospitals.

[142]Data provided by Virgil Young, FBI Identification Division, Apr. 22, 1991.

[143]SEARCH Group, Inc., *Survey of Criminal History Information Systems*, op. cit., footnote 82.

the POS in Oregon. Here, the gun dealer takes the inked thumbprints of handgun purchasers and mails the prints (and other purchaser information) to the Oregon State Police for checking against State and regional automated fingerprint files (purchaser information is also sent to the local law enforcement agency that conducts local record checks). These checks are conducted during the 15-day waiting period for handgun purchases (neither the fingerprint check or waiting period are required for long gun purchases). State police indicate that, because of mail delays, it would be difficult to complete the fingerprint checks in less than 10 days. About 1 percent of purchasers are disqualified overall (0.7 percent for handguns based on a name and fingerprint check, 1.5 percent for long guns based on a retroactive name check). The overall percentage is in the same range as California and Virginia.

Oregon is currently evaluating the fingerprint checks to determine if the benefits are worth the costs. The number of handgun purchasers using phony IDs was very small, but this may have been in part because of the deterrent effect of fingerprinting purchasers at the POS. Oregon processed 30,323 total handgun sales in 1990. About 15 percent of the handgun purchasers had a prior criminal record, and about 0.6 percent had disqualifying criminal records. But only 337 purchasers with a criminal record (about 1 percent of all purchasers) were identified through use of fingerprints. Most of these purchasers were women who had changed names due to marriage or were persons of foreign extraction who used multiple surnames with variable spelling. Only 5 purchasers (0.02 percent of all handgun purchasers, 0.1 percent of those with a criminal record) were actually disqualified based on a fingerprint check that uncovered use of a false name and identification. The Oregon State Police recommend that purchasers be required to provide all prior names or aliases and prints of all 10 fingers[144] in order to reduce the cost of name and fingerprint checks.[145] The more information provided, the better the chances of making a name "hit" without the necessity of a more expensive fingerprint check. And when needed, fingerprint checks run on 8 or 10 finger prints are less expensive than checks based on 2 fingers.

The process could be speeded up if gun dealers faxed rather than mailed fingerprints to the State police (assuming facsimile copies are suitable for automated processing), and if the State police faxed rather than mailed the results back to the local law enforcement agency. This might cut the total response time to the 4- to 7-day range of those States that have automated fingerprint systems, as does Oregon. About three-fifths of the States have or are planning automated fingerprint identification systems (known as AFIS); it is possible that all States will have access to some AFIS capability by as early as 1995 and quite likely by 2000. This does not guarantee, however, that these systems will be able to handle a large volume of firearm purchaser checks. Oregon participates in a regional AFIS (known as the Western Identification Network, Inc.), which had to be upgraded to handle Oregon's firearm purchaser fingerprint checks.

Whether or not firearm purchasers are routinely fingerprinted, fingerprint identification is central to almost all State criminal history record systems and is a primary basis on which any disputes over mistaken identity or erroneous records would be resolved. Most States, and all populous States except Massachusetts, back up virtually all of their criminal history records with fingerprints (see figure 13).[146]

The criminal justice community has long concluded that fingerprints are essential to the identification and tracking of criminal offenders. No other positive identifier is likely to be available for widespread use for many years.[147] The majority of criminals are repeat offenders, and many are highly motivated to escape detection and identification. In sharp contrast, the vast majority of firearm purchasers have no criminal record at all, and have no obvious reason to falsify their identify. This is why the benefits of fingerprinting all firearm purchasers compared with the costs and time delays are matters of continuing debate. Some gun owner groups also are concerned about the stigma and possible abuse of fingerprinting, for what they consider to be the

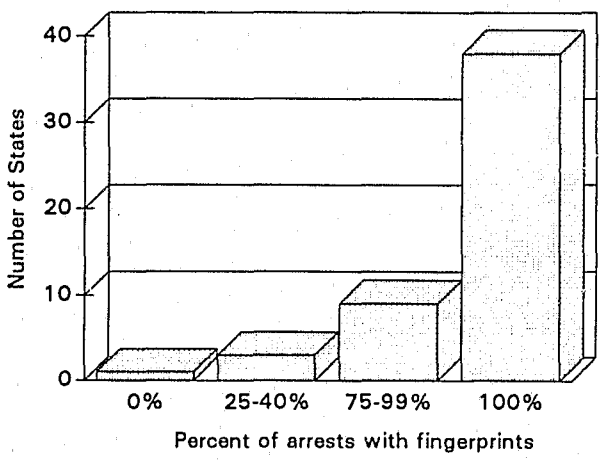
[144]Rolled thumbprints plus plain (flat) prints of the other 8 fingers.

[145]See Oregon State Police, *1990 Study of Retail Firearm Sales*, op. cit., footnote 45.

[146]Thirty-eight States maintain fingerprints for 100 percent of arrests; 9 States for 75 to 99 percent of arrests; and only 1 State does not maintain fingerprints at all.

[147]See U.S. Department of Justice, Task Force on Felon Identification in Firearm Sales, *Report to the Attorney General*, op. cit., footnote 50; SEARCH Group, Inc., *Biometric Identification Technologies*, op. cit., footnote 50.

Figure 13—Arrests Supported by Fingerprints in State Criminal History Files, 1989



SOURCE: Bureau of Justice Statistics/SEARCH Group, Inc., 1991.

exercise of their constitutional right to keep and bear arms. The benefits, costs, and concerns may change sometime in the future when, and if: 1) fingerprints (or some other positive biometric data) become part of standard identification information required for issuance of driver's licenses, credit cards, or other widely used IDs; and 2) POS fingerprint scanning and checking systems become cost-effective for widespread use.

Another option would be to include fingerprint checks as part of the Federal firearm dealer licensing process. Dealers are subject to the same legal prohibitions as purchasers. BATF does run an FBI name check on all dealer applicants, but not a fingerprint check. This is because of the cost and delay associated with FBI fingerprint checks, and because BATF lacks fingerprinting capability. Applicant fees could be increased by about $20 to $40 to cover the cost. The FBI claims that fingerprint checks can be completed in about 20 days, not counting mail delays. Allowing 10 days for mailing to and from BATF, the total time for fingerprint checks should be about 30 days—still within the 45-day limit on applicant processing. If FBI checks are not timely, for whatever reasons, BATF could at least ask the applicant's State of residence to run a fingerprint check against State criminal record files. BATF could seek the cooperation of local law enforcement agencies in taking the applicant fingerprints and forwarding the prints to State or FBI criminal record repositories. BATF also could run periodic name checks on licensees, perhaps once a year or on a random basis, rather than only at the time of initial application or renewal.[148] As it stands now, BATF must depend largely on voluntary dealer reporting of felony convictions or other disqualifying activities.

The point is that firearm dealers (and manufacturers and importers) have direct and unimpeded access to firearms, to a far greater extent than most firearm purchasers. Running fingerprint checks on the perhaps 70,000 license applications and renewals per year would be much less costly and time consuming than running such checks on millions of firearm purchasers. The percentage of dealers engaged in criminal activity is unknown; BATF name checks on firearm license applicants suggest that about 2 percent have a disqualifying criminal record.[149] The percentage of dealers who are actually selling firearms is also unknown. The Oregon State Police found that, of 4,837 federally licensed firearm dealers in Oregon, only about one-third reported sales of handguns in 1990. Preliminary followup suggests that significant numbers of dealers:

- were out of business;
- could not be located or contacted;
- were in business but did not sell a firearm in 1990;
- obtained a license solely to purchase firearms for their own use and collections; and
- sold firearms but did not report due to lack of awareness of State reporting requirements.[150]

During fiscal year 1990, BATF conducted 8,471 dealer inspections—directed primarily at the larger storefront dealers—for compliance with Federal law, and identified 7,477 violations.[151] The nature

[148]BATF did run name checks on a 10 percent sample of license renewals during April-September 1990. The pilot test found no disqualifying criminal record information on the 2,118 renewals checked.

[149]According to BATF, in fiscal year 1990 1,408 license applications were abandoned or withdrawn, 75 denied, and 9 revoked, based primarily on criminal record checks. This would be about 2 percent of all applicants, assuming 70,000 license applications or renewals per year.

[150]Oregon State Police, *1990 Study on Retail Firearm Sales*, op. cit., footnote 45.

[151]During fiscal year 1989, BATF conducted 7,142 dealer compliance inspections, yielding 4,731 violations.

and severity of these violations have not been analyzed.[152] Only about one-half of Virginia's and Florida's licensed dealers are participating in the respective State POS record check programs. The status of the nonparticipating dealers is unknown.

Value of the National Fingerprint File/ Interstate Identification Index

About one in five criminals commit crimes in more than one State; about one in three Federal offenders have multi-State records. The illegal interstate transportation of firearms is a major focus of BATF investigations. Any system to check the criminal records of firearm purchasers on a national basis depends on the timely interstate exchange of criminal justice information. The National Crime Information Center (NCIC) serves this need for wanted persons and fugitives from justice; the Interstate Identification Index (III) provides a listing of persons with a criminal record and the State(s) of record. The FBI operates both NCIC and III in cooperation with State and local law enforcement and criminal justice agencies.

A few States already query III, and some NCIC, as part of firearm purchaser checks. Virginia and Oregon, for example, check both. III and NCIC could, in principle, be used by all States as part of firearm purchaser checks. The computer capacity of III may need expansion to accommodate the additional traffic (10,000 more inquiries per day would be about a 15-percent increase in III volume). The telecommunication capacity of NCIC should be adequate (10,000 more inquiries would be only a 1-percent increase in total NCIC daily volume). If high record quality is required, with a minimum of false hits, then the completeness and automation of Federal and State criminal history records must be improved.

If a national fingerprint check is included as part of firearm purchaser checks, then full implementation of State and FBI automated fingerprint identification systems is essential. Current FBI fingerprint checks take far too long (20 to 30 days, including mailing time) to meet the record check requirements of most States, even States with long waiting periods. The only exceptions are States that require preapproved firearm owner identification or permit to purchase cards. The FBI is planning a major fingerprint identification automation program built around the National Fingerprint File (NFF) concept.

The NFF would greatly reduce the number of duplicate criminal fingerprint cards received and maintained by the FBI. In combination with the III and state-of-the-art AFIS technology, the NFF is expected to reduce the time for FBI fingerprint checks from weeks to hours or days. Under the NFF/III concept, the FBI would retain: 1) one fingerprint card per criminal offender per State (the NFF); 2) no criminal history information on non-Federal offenders (except for name and basic identifiers such as date of birth and race); and 3) an index (the III) to offenders with records in one or more States (but not the records themselves).[153]

Full NFF/III implementation will take 4 to 5 more years[154] and could easily stretch to 2000 or beyond if not accorded continuing high priority. Implementation will depend on:

1. funds available (several hundred million dollar range at the Federal and State levels);
2. automated Federal and State fingerprint identification and criminal history record systems;
3. improvement in Federal and State criminal record quality; and
4. an interstate agreement on rules and responsibilities for the interstate exchange of criminal justice information.

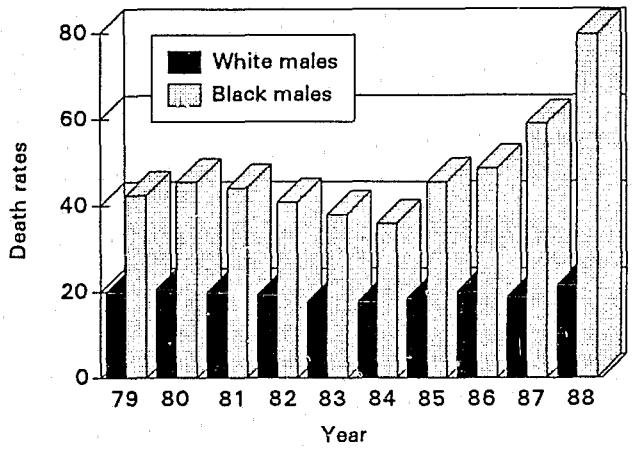
An interstate compact or Federal legislation may be needed to reconcile the differences in Federal and

[152]In fiscal year 1990, BATF recommended 167 cases to U.S. Attorneys for prosecution of dealers suspected of criminal activity. A 1989-90 BATF gun trace in Detroit, MI identified 13 licensed dealers supplying firearms to the criminal community. See BATF, *Detroit Trace Project*, op. cit., footnote 126.

[153]For an overview of the NFF/III history, see, for example, OTA, *Assessment of Alternatives for a National Computerized Criminal History System*, op. cit., footnote 59; U.S. Department of Justice, Federal Bureau of Investigation, *Interstate Identification Index Phase Three Test Findings June-July, 1987* (Washington, DC: FBI, Nov. 30, 1987), *Interstate Identification Index Program: National Fingerprint File Operational Plan* (Washington, DC: FBI, July 10, 1990), *Automation Program for Identification Division Revitalization* (Washington, DC: FBI, Aug. 30, 1990); National Crime Information Center Advisory Policy Board, III Ad hoc Subcommittee, Identification Services Task Group, *Identification Division Revitalization*, August 1989, available from the FBI.

[154]FBI estimate, assuming full funding. For further discussion of the FBI identification automation program, see OTA, *FBI Automated Fingerprint Identification Program*, op. cit., footnote 14 in preparation.

Figure 14—Firearm Death Rates per 100,000 Population, Males 15 to 19 Years Old, 1979-88



SOURCE: U.S. Department of Health and Human Services/National Center for Health Statistics, 1991.

State laws, especially regarding noncriminal justice use of criminal records.[155]

Today, most firearm purchaser checks are considered criminal justice inquiries, and therefore are authorized uses of III. In principle, firearm purchaser checks are no different than checks of applicants for government employment or licenses, teachers, child care providers, and others whose criminal record is a factor in selection or approval decisions. Even if fully implemented, however, the NFF/III would not support POS fingerprint record checks of firearm purchasers in seconds or minutes. The checks probably could be conducted in several hours if given a high priority and using electronic fingerprint transmission. Several days seem more likely, since fingerprint checks of persons wanted, arrested, or prosecuted for specific crimes presumably would receive higher priority.

Value of a Firearm Safety and Security Education Program

Firearm purchaser record checks should be viewed as only one of many actions needed to help reduce firearm-related crime. Other actions might include stiffer, mandatory sentences for repeat firearm offenders, intensified investigation and prosecution of illegal gun trafficking, and firearm safety and security courses.

Citizens of all ages would benefit from firearm safety and security programs. Firearm dealers and owners could learn the latest security techniques for preventing firearm theft. Firearm users could review and update their knowledge of the rules of safe sports and target shooting. Even young children, all too frequently involved in gun accidents, could learn something about the hazards of firearms in the hands of untrained, inexperienced persons. Older children and adults of all ages could learn more about Federal and State firearm laws. These kinds of programs could be sponsored and funded by Federal, State, and local education departments and boards, working in cooperation both with gun owner groups and with school safety, law enforcement, and crime prevention organizations.

Such courses could be particularly helpful in addressing the problem of guns and youth. Recent surveys indicate that youths under the age of 19 are increasingly perpetrators and victims of firearm-related violence (see figure 14). In 1988, nearly 4,000 youths ages 1 to 19 died from the use of firearms; about 2,000 were homicide victims, 1,400 suicide victims, and 600 accident (unintentional shooting) victims. For white males 15 to 19 years of age, in 1988 the firearm death rate exceeded the death rate from natural causes for the first time (by about 11 percent). The comparable firearm death rate for black teenage males (15 to 19 years old) was 2.6 times the natural death rate. Firearm deaths accounted for about 20 percent of all teenage (15 to 19) deaths. The firearm homicide rate for black teenage males was about 11 times the rate for white teenage males. The firearm suicide rate for white male teenagers was double that of black male teenagers. Unintentional firearm deaths account for 40 percent of all firearm deaths of younger children (aged 1 to 14), but only 10 percent of teenager

[155]For three interstate compact proposals, see SEARCH Group, Inc., "Interstate and Federal-State Compact on the Exchange of Criminal History Records," July 20, 1989; U.S. Department of Justice, Federal Bureau of Investigation, "Interstate Compact on the Exchange of Criminal History Records," working draft, Aug. 4, 1989; and NCIC Advisory Policy Board, Interstate Identification Index Subcommittee, "Interstate and Federal-State Compact on the Exchange of Criminal History Records for Noncriminal Justice Purposes," final draft, Nov. 16, 1989, and revised final draft, Dec. 4, 1990.

firearm deaths.[156] Between 1979 and 1988, the total firearm death rate for teenagers age 10 to 19 increased while the rate for persons 20 to 29 was stable or actually declined (although still 20 to 30 percent higher than for teenagers).[157]

Federal law prohibits licensed firearm dealers (and manufacturers, importers, and collectors) from selling or delivering: handguns (and handgun ammunition) to anyone under 21 years of age, and rifles and shotguns (and related ammunition) to anyone under 18 years of age.[158] Note that the Federal prohibition does not apply to transfers between individuals. Firearm purchaser record checks, even if 100 percent effective in screening out underage purchasers, are unlikely to have much direct impact on teenager access to firearms. Teenagers and children apparently obtain most firearms from their own homes, secondarily from friends, and infrequently by theft.[159] One-third to one-half of adolescent boys, and one-fifth to one-quarter of adolescent girls, believe that they could get a handgun if they wanted one.[160] (The source and use of firearms by juveniles are subjects of an ongoing NIJ-sponsored study.)

The National School Safety Center and other groups concerned with the health and safety of school-age children have concluded that a multifaceted program is needed to deal with youth and guns.[161] One priority might be to educate gun owners on how to secure their firearms from intentional or accidental use by children. Another priority might be to encourage or require firearm safety courses for all firearm owners and their families who have children under age 18. Firearm safety courses also could be offered as part of school health and safety programs. Many of these programs already cover other causes of school age injury and death, such as drugs, alcohol, and driving.[162] For schools with students bringing firearms on campus, tough rules and penalties may be needed as well as firearm education. Parental and community involvement seems essential in these areas. Some schools are resorting to the use of metal detectors, restricted entry, and gun-free zones and signs (similar to drug-free zones already set up around many schools). Another possibility is to enact or strengthen laws holding parents liable for damages or injuries resulting from firearm use by their children, if the gun belongs to a parent.[163]

These kinds of educational and awareness programs could be an important complement to firearm purchaser record checks and other, related actions collectively intended to reduce the rates of firearms related death, injury, and criminal activity in the United States.

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[156]L.A. Fingerhut et al., "Firearm Mortality Among Children, Youth, and Young Adults 1-34 Years of Age, Trends and Current Status: United States, 1979-88," *Monthly Vital Statistics Report*, vol. 39, No. 11, Mar. 14, 1991, available from U.S. Department of Health and Human Services, National Center for Health Care Statistics; U.S. Congress, Office of Technology Assessment, *Adolescent Health—Volume I: Summary and Policy Options* (Washington, DC: U.S. Government Printing Office, April 1991), and *Adolescent Health—Volume II: Background and the Effectiveness of Selected Prevention and Treatment Services* (Washington, DC: U.S. Government Printing Office, September 1991).

[157]Ibid.

[158]18 U.S.C. 44, sec. 922(b)(1) and (2).

[159]See National School Safety Center, *Weapons in Schools*, NSSC Resource Paper (Malibu, CA: NSSC, Pepperdine University, June 1990), sponsored by the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Education, and Pepperdine University; and surveys conducted by the Florida School Board Association (FSBA) and Center to Prevent Handgun Violence. The FSBA survey (for the 1986-88 school years) found that students obtained weapons (including firearms): primarily from their own home (87 percent of the time); secondarily the home of a friend or relative (6 percent); and infrequently by theft (1 percent). All other sources totaled 6 percent. The CPHV survey of 532 child shootings (from 1986-88) found that the firearms involved were owned: primarily by the victim's or friend's parents (75 percent of the time); secondarily by another relative (13 percent) or the victim's or parent's friend (13 percent); and rarely by the victim him/herself (2 percent) or a relative's employer (1 percent).

[160]American School Health Association, Association for the Advancement of Health Education, and Society for Public Health Education, Inc., *The National Adolescent Student Health Survey: A Report on the Health of America's Youth* (Oakland, CA: Third Party Publishing, 1989), based on a sample of 12,067 8th and 10th grade students and sponsored by the U.S. Department of Health and Human Services, Public Health Service, Office of Disease Prevention and Health Promotion, Centers for Disease Control, and National Institute on Drug Abuse.

[161]See National School Safety Center, *Weapons in Schools*, op. cit., footnote 159; also see discussion in OTA, *Adolescent Health*, ibid.

[162]Firearms could be included in programs like "Just Say No" and DARE (Drug Abuse Resistance Program) that emphasize partnerships between schools, students, parents, the community, and law enforcement. The intent is to strengthen each student's character, self-esteem, decisionmaking skills, and sense of personal responsibility.

[163]Ibid.; also see National School Safety Center, *School Crisis Prevention and Response*, NSSC Resource Paper (Malibu, CA: NSSC, Pepperdine University, March 1990) and *Student and Staff Victimization*, NSSC Resource Paper (Malibu, CA: NSSC, Pepperdine University, June 1989); and OTA, *Adolescent Health*, op. cit., footnote 160.

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