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Development of the RAND State Firearm Law Database and Supporting Materials

The RAND Corporation launched its Gun Policy in America initiative in January 2016 with the goal of creating objective, factual resources for policymakers and the public on the effects of gun policies and laws. Research in this area has often consisted of cross-sectional studies examining how firearm outcomes differ in a particular year across states with different policies. Many fewer studies have used more-powerful longitudinal research designs for evaluating the effects of gun laws, partly because longitudinal data on most state gun laws are not widely available and are difficult and time-consuming to construct. Therefore, as part of its Gun Policy in America initiative, RAND developed a longitudinal database of state firearm laws that is free to the public, including other researchers, to support improved analysis and understanding of the effects of various laws. This paper documents the methods that RAND researchers used to construct the RAND State Firearm Law Database and provides definitions and other information that will facilitate its use.¹

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Approach to Developing the RAND State Firearm Law Database

Our objective in developing the RAND State Firearm Law Database was to produce a data set that would be useful to those interested in understanding the effects of several classes of laws over time. We used a two-stage approach to develop the data set:

1. We relied on secondary sources to collect laws that others had identified and classified.
2. We systematically searched for and reviewed all laws identified in the first stage, as well as laws omitted in the first stage that corresponded to one of the classes of laws we wished to identify.

Specifically, we sought complete information on all state laws from 1979 through January 2020 that corresponded to the law categories listed in Table 1. When a state had no law in place in 1979 for a particular law class, the database reflects this fact, and such entries may be superseded when a law of that type is first implemented.

TABLE 1

State Firearm Law Categories Used in the RAND State Firearm Law Database

Gun Law Category	Specification	Definition
Background checks	Private sales <ul style="list-style-type: none"> • Handgun • Long gun 	Requires a background check of individuals purchasing guns; includes background checks for permits to purchase where the permit is valid for 30 days or less
	Private sales – optional <ul style="list-style-type: none"> • Handgun • Long gun 	Allows private sellers to conduct a background check of individuals purchasing guns; includes background checks for permits to purchase where the permit is valid for 30 days or less
	Sales from dealers <ul style="list-style-type: none"> • Handgun • Long gun 	Requires licensed dealers to conduct a background check of individuals purchasing guns
	Sales from dealers – federal <ul style="list-style-type: none"> • Handgun • Long gun 	Requires licensed dealers to conduct background checks pursuant to federal laws passed in 1994 (interim provisions) and 1998 (National Instant Criminal Background Check System [NICS])
	Permit to purchase <ul style="list-style-type: none"> • Handgun • Long gun 	Requires law enforcement to conduct a background check before a permit to purchase a gun may be issued
	Extra time <ul style="list-style-type: none"> • Handgun • Long gun 	Extends the period of time a dealer must wait before transferring a firearm without a completed background check
Carrying a concealed weapon (CCW)	Prohibited <ul style="list-style-type: none"> • Handgun 	Prohibits individuals from carrying guns in a concealed manner
	May issue <ul style="list-style-type: none"> • Handgun 	Requires permits for concealed carrying; gives law enforcement discretion to issue permits to allow concealed carrying of weapons; may include subjective criteria for issuing permits
	Shall issue <ul style="list-style-type: none"> • Handgun 	Requires permits for concealed carrying; removes law enforcement discretion in issuing permits; only includes objective criteria for issuing permits
	Shall issue (permit not required) <ul style="list-style-type: none"> • Handgun 	Allows individuals to carry concealed weapons without a permit
Castle doctrine	<ul style="list-style-type: none"> • Handgun • Long gun 	Allows individuals to use deadly force in defense of themselves, others, and their homes without the duty to retreat
	Expanded 1 <ul style="list-style-type: none"> • Handgun • Long gun 	Expands castle doctrine beyond the home to the vehicle (or a family member's vehicle) or place of work
	Expanded 2 <ul style="list-style-type: none"> • Handgun • Long gun 	Expands castle doctrine beyond the home, vehicle, or place of work to other specific places (e.g., private property owned by the individual, homes of others who have invited the individual to join them), although duty to retreat from a threat of deadly force in some contexts (e.g., a public street) remains in place
	Stand your ground <ul style="list-style-type: none"> • Handgun • Long gun 	Expands castle doctrine to any location
Child access prevention (CAP) laws	Negligent storage <ul style="list-style-type: none"> • Handgun • Long gun 	Mandates safe storage of guns
	Intentional, knowing, or reckless provision <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits individuals from furnishing guns to minors

Table 1—Continued

Gun Law Category	Specification	Definition
Dealer license	<ul style="list-style-type: none"> • Handgun • Long gun 	Requires dealers of firearms to be licensed by the state
Firearm removal at the scene of a domestic violence incident	Required <ul style="list-style-type: none"> • Handgun • Long gun 	Requires police officers to seize a firearm at the scene of a domestic violence incident
	Authorized <ul style="list-style-type: none"> • Handgun • Long gun 	Allows police officers to seize a firearm at the scene of a domestic violence incident
Firearm sales restrictions	Assault weapon ban <ul style="list-style-type: none"> • Handgun • Long gun 	Bans assault weapons
	Handgun ban <ul style="list-style-type: none"> • Handgun 	Bans handguns
	Saturday night special ban <ul style="list-style-type: none"> • Handgun 	Bans junk guns
	One gun per month <ul style="list-style-type: none"> • Handgun 	Prohibits the purchase of more than one gun in a 30-day period
Firearms in colleges or universities	Private – possession prohibited <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of all firearms on the property of all private colleges and universities
	Public – possession prohibited <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of all firearms on the property of all public colleges and universities
	Public and private – possession prohibited <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of all firearms on the property of all private and public colleges and universities
	Public – CCW allowed <ul style="list-style-type: none"> • Handgun 	Allows concealed carrying on the property of all public colleges and universities
	Public – CCW allowed, open areas <ul style="list-style-type: none"> • Handgun 	Allows concealed carrying in the open areas of all public colleges and universities
	Public – CCW not allowed <ul style="list-style-type: none"> • Handgun 	Prohibits concealed carrying on the property of all public colleges and universities
	Public and private – CCW not allowed <ul style="list-style-type: none"> • Handgun 	Prohibits concealed carrying on the property of all public and private colleges and universities
	Public and private – CCW allowed <ul style="list-style-type: none"> • Handgun 	Allows concealed carrying on the property of all private and public colleges and universities
Local laws preempted by state	Selective <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits local laws for a specific class of laws (e.g., registration), specific use of firearms (e.g., concealed carry), or specific class of firearm (e.g., imitation guns); the seven types of preemption laws are represented by a unique law class subtype in the data set (e.g., selective: manufacture, sale, or possession of imitation firearms)
	Comprehensive <ul style="list-style-type: none"> • Handgun • Long gun 	Broadly prohibits local laws

Table 1—Continued

Gun Law Category	Specification	Definition
Minimum age	Youth possession <ul style="list-style-type: none"> • Handgun • Long gun 	Establishes a minimum age for possession of a gun
	Purchase and sale <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the sale to and/or purchase of guns by individuals under a specified age
Open carry	License required <ul style="list-style-type: none"> • Handgun • Long gun 	Requires licenses for the open carrying of guns
	License required – loaded <ul style="list-style-type: none"> • Handgun 	Requires licenses for the open carrying of loaded guns
	Limited <ul style="list-style-type: none"> • Handgun • Long gun 	Allows individuals to openly carry guns without a license but with specific limitations, such as time of day or location
	Limited – prohibited, loaded <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the open carrying of loaded guns
	Prohibited <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the open carrying of guns
	Not restricted <ul style="list-style-type: none"> • Handgun • Long gun 	Does not restrict the open carrying of guns
Permit to purchase	Handgun <ul style="list-style-type: none"> • Long gun 	Requires prospective purchasers to first obtain a license or permit from law enforcement; does not include voluntary permit schemes
	Maximum waiting period <ul style="list-style-type: none"> • Handgun • Long gun 	Establishes the maximum amount of time law enforcement may wait before issuing a permit or denying the application
Prohibited possessor	Mental health – those adjudicated as being mentally incompetent, incapacitated, or disabled <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of firearms by individuals adjudicated as being mentally incompetent, incapacitated or disabled; includes individuals who have court-appointed guardians and conservators; who are subject to court order due to mental illness; who have been judicially pronounced to be a danger to others as a result of a mental disorder or mental illness; who have a history of violent behavior; and who have an intellectual disability ^a
	Mental health – those committed to a mental health facility <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of firearms by individuals who have been involuntarily committed to mental institutions; includes all findings of insanity, mental illness, or incapacity pursuant to a criminal trial ^a
	Mental health – those committed to a mental health facility – voluntary <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of firearms by individuals who have been voluntarily committed to mental institutions ^a
	Mental health – those committed to a mental health facility – outpatient <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of firearms by individuals who have been court-ordered to attend outpatient mental health institutions ^a

Table 1—Continued

Gun Law Category	Specification	Definition
Prohibited possessor (cont.)	Mental health – those adjudicated by police as being mentally incompetent, incapacitated, or disabled <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of firearms by individuals who have been found by the police to be mentally incompetent, incapacitated, or disabled ^a
	Mental health – those diagnosed with a significant behavioral, emotional or mental disorder <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits the possession of firearms by individuals who have been diagnosed with a significant behavioral, emotional, or mental disorder ^a
	Extreme risk protection order (ERPO) <ul style="list-style-type: none"> • Handgun • Long gun 	Allows law enforcement officials to petition a court to remove firearms from a person who is known to be a risk to themselves or others
	ERPO – expanded <ul style="list-style-type: none"> • Handgun • Long gun 	Allows people other than law enforcement, such as family members or medical professionals, to petition a court to remove firearms from a person who is known to be a risk to themselves or others
	ERPO – ex parte <ul style="list-style-type: none"> • Handgun • Long gun 	Allows law enforcement to petition a court to temporarily remove firearms from a person before the person has appeared in court
	ERPO – ex parte, expanded <ul style="list-style-type: none"> • Handgun • Long gun 	Allows law enforcement and others, such as family members or medical professionals, to petition a court to temporarily remove firearms from a person known to be a risk to themselves or others before the person has appeared in court
	Domestic violence restraining order (DVRO) <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits an individual served with a DVRO from owning, possessing, or purchasing firearms
	DVRO – surrender <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits an individual served with a DVRO from owning, possessing, or purchasing firearms and outlines a process for ensuring the surrender of currently owned firearms
	DVRO – removal <ul style="list-style-type: none"> • Handgun • Long gun 	Prevents an individual served with a DVRO from owning, possessing, or purchasing firearms and outlines a process for the removal of currently owned firearms
	DVRO – discretionary <ul style="list-style-type: none"> • Handgun • Long gun 	Prevents an individual served with a DVRO from owning, possessing, or purchasing firearms if a judge determines that certain criteria are met or believes that the person is a credible threat to the victim
	DVRO – discretionary surrender <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits an individual served with a DVRO from owning, possessing, or purchasing firearms and outlines a process for ensuring the surrender of currently owned firearms; in some cases, the surrender is at the court’s discretion based on the circumstances of the case (e.g., whether the person has violated an order previously or the judge believes that there is an immediate threat of harm to others)
	DVRO – discretionary removal <ul style="list-style-type: none"> • Handgun • Long gun 	Prohibits an individual served with a DVRO from owning, possessing, or purchasing firearms and outlines a process for the removal of currently owned firearms; in some cases, the removal is at the court’s discretion based on the circumstances of the case (e.g., whether the person has violated an order previously or the judge believes that there is an immediate threat of harm to others)
	DVRO – expanded <ul style="list-style-type: none"> • Handgun • Long gun 	Extends the DVRO prohibition on firearm ownership, purchase, or possession to dating partners

Table 1—Continued

Gun Law Category	Specification	Definition
Prohibited possessor (cont.)	DVRO – ex parte <ul style="list-style-type: none"> • Handgun • Long gun 	Temporarily prevents an individual served with an ex parte DVRO (executed before the individual appears in court to defend himself or herself) from owning, possessing, or purchasing firearms
	DVRO – ex parte, discretionary <ul style="list-style-type: none"> • Handgun • Long gun 	Temporarily prevents an individual served with an ex parte DVRO from owning, possessing, or purchasing firearms if a judge determines that certain criteria are met or believes that the individual is a credible threat to the victim
	DVRO – ex parte, expanded <ul style="list-style-type: none"> • Handgun • Long gun 	Extends the ex parte DVRO prohibition to dating partners
	DVRO – ex parte, surrender <ul style="list-style-type: none"> • Handgun • Long gun 	Temporarily prevents an individual served with an ex parte DVRO from owning, possessing, or purchasing firearms and outlines a process for surrendering currently owned firearms
	DVRO – ex parte, discretionary surrender <ul style="list-style-type: none"> • Handgun • Long gun 	Temporarily prevents an individual served with an ex parte DVRO from owning, possessing, or purchasing firearms and outlines a process for ensuring the surrender of currently owned firearms; in some cases, the surrender is at the court’s discretion based on the circumstances of the case (e.g., whether the person has violated an order previously or the judge believes that there is an immediate threat of harm to others)
	DVRO – ex parte, removal <ul style="list-style-type: none"> • Handgun • Long gun 	Temporarily prevents an individual served with an ex parte DVRO from owning, possessing, or purchasing firearms and outlines a process for removing currently owned firearms
	Convicted of firearm-prohibiting crime – removal <ul style="list-style-type: none"> • Handgun • Long gun 	Requires police to remove firearms from individuals convicted of a firearm-prohibiting crime
	Convicted of domestic violence crime – removal <ul style="list-style-type: none"> • Handgun • Long gun 	Requires police to remove firearms from individuals convicted of a crime of domestic violence
Registration	<ul style="list-style-type: none"> • Handgun • Long gun 	Requires a recordkeeping system controlled by a government agency that stores the names of current owners of each firearm of a specific class and requires that these records are updated after firearms are transferred to a new owner (with few exceptions)
Required reporting of lost or stolen firearms	Lost or stolen firearms <ul style="list-style-type: none"> • Handgun • Long gun 	Requires victims of theft and loss of firearms to report the incident to relevant authorities
	Stolen firearms <ul style="list-style-type: none"> • Handgun • Long gun 	Requires victims of theft of firearms to report the incident to relevant authorities
Safety training required	To purchase <ul style="list-style-type: none"> • Handgun • Long gun 	Requires a safety training certificate for the purchase of a firearm (or handgun or long gun); the database excludes the safety training required prior to the issuance of a permit to carry a concealed weapon
	To purchase – semi-automatic rifles <ul style="list-style-type: none"> • Long gun 	Requires a safety training certificate for the purchase of a semi-automatic rifle
	To carry <ul style="list-style-type: none"> • Handgun 	Requires a safety training certificate to carry a firearm
Waiting period	<ul style="list-style-type: none"> • Handgun • Long gun 	Establishes the minimum amount of time sellers must wait before delivering a gun to a purchaser; includes waiting periods for permits to purchase where the permit is valid for a short period and only for a single transaction

Table 1—Continued

Gun Law Category	Specification	Definition
Waiting period (cont.)	Federal <ul style="list-style-type: none"> • Handgun 	Restates a federal law requiring a five-day waiting period, in effect from February 28, 1994, to November 30, 1998 (at the latest)
	Semi-automatic rifles <ul style="list-style-type: none"> • Long gun 	Establishes the minimum amount of time licensed dealers must wait before delivering a semi-automatic rifle to a purchaser

^a We do not code laws that restrict only purchase or carry without also restricting possession. We also do not include restrictions based on substance abuse.

The list of law types is, of course, only a subset of all possible firearm laws that could be studied. Our hope is that, over time, we or others will expand the number of law categories included in the data set. As we have developed this database, we have prioritized classes of laws that we knew had been implemented in many states during the past 40 years, which means that there is more information available to help examine the laws' effects.

In addition to classifying state laws into the categories listed in Table 1, each record in the database includes other important fields, as outlined in Table 2.

First Stage of Database Development: Secondary Sources

The initial draft of the data set relied on information provided in three secondary sources:

- *Evaluating Gun Policy: Effects on Crime and Violence*, Chapter Nine, by Jon S. Vernick and Lisa M. Hepburn (2003), which covers a subset of the state laws in Table 1 from 1979 to 1999
- the proprietary Firearm Legislation Dataset (FLD) compiled and maintained by the Giffords Law Center to Prevent Gun Violence, which lists many types of firearm bills that have been considered by state legislatures from 2008 to 2016²
- *Regulating Guns in America: An Evaluation and Comparative Analysis of Federal, State and Selected Local Gun Laws*, published by the Legal Community Against Violence (2008), which describes many types of state firearm laws in effect in 2008.

To find the effective dates for the laws, we generally relied on the notes provided by the digest at the

end of each section of code, confirmed by the effective dates in the state session law that created that section. For the state session laws that did not provide an effective date, we relied on the general rules for each state, as provided by StateScape.³

None of the secondary sources contained all the information we wanted to include in the data set. In addition, in some cases, our categorization of laws differed from those in the secondary sources. For instance, Vernick and Hepburn (2003) coded laws that restated the federal law prohibiting licensed sellers from selling a firearm “without conducting a criminal history background check in accordance with regulations promulgated by the United States Department of Justice pursuant to the National Instant Criminal Background Check System” (11 Del.C. § 1448A, for example) as “waiting period” laws and specified the waiting period length as “instant” (Vernick and Hepburn, 2003, p. 372). We coded such laws in a new category called “extra time” to refer to state laws that extend the period of time a dealer must wait before transferring a firearm without a completed background check.

Our hope is that, over time, we or others will expand the number of law categories included in the data set.

TABLE 2
Fields for Each Record in the Database

Field	Definition and Purpose
Law ID	Unique law identifier created and assigned by RAND to facilitate communication about a specific law
State	Name of state
State postal abbreviation	Abbreviation of name of state
FIPS Code	Two-digit state code used by Federal Information Processing Standards (FIPS) publications
Law class (number)	Unique identifier for each law class
Law class	Indicates the gun law category (e.g., background checks, waiting period)
Law class subtype	Indicates the specification of the gun law category (e.g., private sales, shall issue)
Handguns or long guns	Indicates the types of firearms specified by the law
Effect	Specifies whether the law had a restrictive or permissive effect relative to the legal regime prior to its implementation; categorizes how a new law differs from the law it amends or replaces or from the status quo (If the new law imposes greater restrictions on gun access or use, we categorize it as having a restrictive effect. If it eases access or use restrictions, we categorize it as having a permissive effect.)
Type of change	Specifies whether the entry is a new law being implemented, a modification of an existing law, or the repeal of a law
Effective date	Provides the date the law took effect; usually specified in the text of the law, but sometimes calculated based on state guidelines for law implementation, as outlined at StateScape (undated)
Effective date note	Notes that, for some older laws, the exact day and month the law went into effect is not known, so January 1 is used
Effective date year	Year the law took effect
Effective date month	Month the law took effect
Effective date day	Day the law took effect
Statutory citation	Citation to the specific section(s) of the statute where the law is found
Content	Excerpts from the relevant statutes
Supersession date	If the law was replaced or modified by a later law, specifies the date this occurred
Supersession date year	If the law was replaced or modified by a later law, specifies the year this occurred
Supersession date month	If the law was replaced or modified by a later law, specifies the month this occurred
Supersession date day	If the law was replaced or modified by a later law, specifies the day this occurred
Controlling law at beginning of period (1979)	Indicates the law of each law class that was in effect January 1, 1979, the beginning of the coverage period for the RAND State Firearm Law Database; when a state had no law in place in 1979 for a particular law class, we mark that law with a 1 in the database; this may be superseded by the law when it is first implemented
Age for minimum age laws	Specifies the age that a minimum age law uses to determine who can purchase or possess firearms under the statute
Length of waiting period (days, handguns)	Specifies the number of days a person must wait to purchase a handgun under handgun waiting-period laws
Additional context and notes	Provides information that illuminates peculiarities in the law or events surrounding its passage that are relevant when analyzing the effect or impact of the law
Caveats and ambiguities	Provides additional explanation when aspects of the law's content or effective date might be unclear

From the FLD, we extracted all state bills from 2008 to 2016 concerning any of our selected gun law categories. The data set includes all legislation that made minor changes to gun laws, including nonsubstantive changes (such as those changing definitions of various terms) or modifications to minor procedural elements (such as laws that change the concealed-carry permit renewal process in ways we judged to have negligible effects on gun owners). The FLD also includes types of laws that we have not yet included or chose not to include in the current version of the database, such as some prohibited possessor laws.

While the Vernick and Hepburn (2003) data cover 1979 to 1999 and the FLD covers most laws from 2008 to 2016, we had no similarly comprehensive source of state law data for 1999 to 2007. However, a report by the Legal Community Against Violence (2008) describes many state gun laws in effect in 2008, including those implemented in earlier years, and provides statutory citations to all laws.

Second Stage of Database Development: Primary Sources

Once we completed the first phase of database development, we had a large list of state laws but had not yet verified the codings we extracted from secondary sources. In addition, we were aware of two other weaknesses in our use of the secondary sources: In most cases, not all of the fields we wished to use to describe laws in the data set could be completed using just the secondary sources, and our approach to filling in laws from 1999 to 2007 could have overlooked laws that were implemented and repealed during this period. To address these concerns, we collected and reviewed the statutory language for all laws included in the database in order to complete missing field entries, and we conducted a broad search for laws that our first-stage procedures may have omitted.

To assemble a library of all laws referenced in the RAND data set, we primarily relied on Westlaw, LexisNexis, and HeinOnline. We used Westlaw and LexisNexis to find current laws, as well as legislation going back as far as 30 years or so, depending on

the state. For older laws, we used the information in Westlaw and LexisNexis, which provide “credits” or “historical notes” on the bills in which these laws were passed or amended, and then looked for these in HeinOnline’s session law library.

In some cases, we could not find online sources for laws we were investigating. In these cases, we contacted law librarians in various states, who kindly sent us PDFs of the laws we sought. In a handful of cases, we could not find the text of older laws and therefore relied on information provided in academic articles. Those secondary sources also helped us understand the *controlling laws*, or the status quo in 1979, when our data series begins. For example, we needed to understand whether, in a given state, concealed carry was allowed or prohibited prior to the passage of the first such law after 1979.

In verifying every law, we occasionally identified laws with statutory citations or effective dates that differed from those we would have ascribed to them. We discussed all such differences as a team and rendered a consensus judgment on the proper coding of the law. We note most deviations from other secondary sources in the “caveats and ambiguities” column of the database. Some of these were based on ambiguous laws and disagreement among experts about whether a certain law had a specific intention and effect. For example, Vernick and Hepburn (2003) disagree with Peters, Ludwig, and Cook (2005) about the year in which Hawaii implemented a minimum age of 18 for permits to purchase handguns. In such cases, we coded the law according to what we thought the most reasonable interpretation was, but we note the disagreement in the “additional context and notes” column. As noted earlier, this process was iterative, and during this period of checking and verifying the laws, we further refined our codes for the types of laws.

To help ensure that we were not missing current laws, an important resource we used was the gun law information provided on the Giffords Law Center to Prevent Gun Violence (undated) website. We also relied on many newspaper and journal articles,⁴ websites,⁵ and court cases and opinions⁶ to help us find laws. As part of this task, we broadened our search of laws to include those that may have been implemented many years before 1979 but that were

the controlling laws for each category of laws at the beginning of our data set. We verified that these laws were in effect in 1979 and had not been repealed. These controlling laws are entered in the database and coded as preexisting at the start of the study period. These laws are used to determine whether the first such law implemented since 1979 had a restrictive or a permissive effect on access to or use of guns in the state, relative to laws in effect at the start of the period.

Limitations of the RAND State Firearm Law Database

There are several limitations of the RAND State Firearm Law Database that its users should consider:

- Laws are typically written differently in each state and are thus subject to wide variation in their content and specifics. For research purposes, we believe that it is convenient to aggregate similar laws within categories like those used in the RAND database. Only with such aggregation is it possible to describe laws that have been implemented in multiple states, a prerequisite for many statistical analyses of the effects of such laws. However, aggregation can be subjective, both when deciding what level of aggregation to pursue and when making decisions about whether to classify individual laws that may not fit the category as well as others. We expect, therefore, that others reviewing the RAND database may disagree with the categories we selected or with some of the laws we classified as belonging to a given category.
- There are many important types of gun laws that we have not included in the database, merely because we did not have the time and

resources to undertake a more comprehensive analysis of laws. For instance, the database includes no laws specifying sentencing enhancements for firearm crimes. Each year, however, we add more types of laws to the database to make it more comprehensive.

- Even when we have included a category of laws in the database, it is possible that our procedures led us to overlook a law that is relevant to the category, making the database incomplete.
- The database contains no information on how the laws were implemented, how well information about new laws was disseminated, how the laws were enforced, or how long the state required before the law was fully implemented as designed. Such implementation details could be critically important for understanding why laws appeared to have greater or lesser effects in different states.

Despite these limitations, RAND has made the State Firearm Law Database available to the public as is, without any warranty or assurances that it is complete or fully accurate, because we believe that, even with some possible errors, it represents an important resource that has been unavailable for those interested in understanding the effects of gun laws.

Moreover, by making the database publicly available, it is our hope that others will review our work and provide us with information or feedback on how it could be improved, including suggestions for more-useful categorizations of laws, more-accurate classifications of laws within categories, citations to any laws that we may have inadvertently omitted from the database, or information on state gun laws in categories we have not yet begun to develop.

Notes

¹ Although not all guns are firearms, in this paper and database, we follow conventional use in U.S. policy discussions and treat the terms *gun* and *firearm* as interchangeable.

² This data set is not publicly available and was provided to RAND by the Giffords Law Center to Prevent Gun Violence.

³ See the bill effective dates at StateScape, undated.

⁴ See, for example, Cramer and Kopel, 1995; Holstein and Le, 2003; Gorovitz and Ferri, 1999; Nieto, 1997; McDowall, Loftin, and Wiersema, 1995; Jansen and Nugent-Borakove, undated; “Hot Guns: Are There Laws on Cheap Handguns in Your Town?”

1997; Peters, Cook, and Ludwig, 2005; MacNutt, 2015; Marso, 2013; Ayres and Donohue, 2009; Lenzen, 1995; Grossman and Lee, 2008; Luedtke, 1977–1978; Carpenter, 2003; Bash, 1996; Rosengart et al., 2005; Sheppard, 1969; Sorens, Muedini, and Ruger, 2008; Warner, 1938; and Catalfamo, 2007.

⁵ See, for example, U.S. Concealed Carry, undated; National Rifle Association, undated; National Conference of State Legislatures, undated; and Cramer, undated.

⁶ See, for example, Kelley, 1987; *People v. Ephriam*, 2001; *People v. Graves*, 1974; *People v. Williamson*, 1978; *Siccardi v. State*, 1971; *State v. Kamelo*, 1977; *State v. Graves*, 1974.

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About This Tool

The RAND Corporation launched its Gun Policy in America initiative in January 2016 with the goal of creating objective, factual resources for lawmakers and the public on the effects of gun policies. Research in this area has often consisted of cross-sectional studies examining how firearm outcomes differ in a particular year across states with different policies. Many fewer studies have used more-powerful longitudinal research designs for evaluating the effects of gun laws, partly because the longitudinal data on states' gun laws are not widely available and are difficult and time-consuming to construct. Therefore, as part of its Gun Policy in America initiative, RAND developed a longitudinal database of state firearm laws that would be made free to the public and other researchers to support improved analysis and understanding of the effects of laws. This paper documents the methods that RAND researchers used to construct the RAND State Firearm Law Database and provides definitions and other information that will facilitate its use. This document updates an earlier version with information about new laws and fields that were added to version 3.0 of the database in summer 2020.

The State Firearm Law Database is one of several research products stemming from the Gun Policy in America initiative. All of the project resources are publicly available on the project website at www.rand.org/gunpolicy.

The work should be of interest to policymakers and other stakeholders looking for information on state firearm legislation in the United States, as well as to anyone in the research community and the general public who wants to use the RAND State Firearm Database to better understand the effects of gun laws.

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