

AN EVIDENCE-BASED EVALUATION OF LEGISLATIVE
RESPONSES TO SCHOOL SHOOTINGS AT ROBB
ELEMENTARY IN UVALDE, TEXAS, AND THE COVENANT
SCHOOL IN NASHVILLE, TENNESSEE

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I. INTRODUCTION

Around 346 school shootings occurred throughout the United States in 2023.¹ This number eclipsed the previous all-time high of 308, set just one year prior.² Two incidents in these years—tragedies at Robb Elementary in Uvalde, Texas, and The Covenant School in Nashville, Tennessee—rank among the deadliest episodes of school violence in modern history.³

The unique horror associated with school shootings attracts media coverage⁴ and public concern,⁵ though gun violence outside of schools generally poses a

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¹ David Reidman, K-12 SCHOOL SHOOTING DATABASE, (Jan. 14, 2024), <https://k12ssdb.org/all-shootings> [<https://perma.cc/XG9M-4ZKY>]. (For the purpose of this statistic, a “school shooting” is any time a “a gun is brandished, is fired, or a bullet hits school property for any reason, regardless of the number of victims, time, or day of the week”)

² *Id.*

³ *Id.* (Robb Elementary is the second deadliest episode of school violence in modern history and The Covenant School is the seventh).

⁴ Jason R. Silva & Joel A. Capellan, *The Media’s Coverage of Mass Public Shootings in America: Fifty Years of Newsworthiness*, 43 INT’L J. COMP. & APPLIED CRIM. JUST. 77, 77 (2018) (finding “school shootings are more likely to receive any media coverage” than other forms of violence); Jaclyn Schildkraut, *Mass Murder and the Mass Media: Understanding the Construction of the Social Problem of Mass Shootings in the U.S.*, 4 J. QUALITATIVE CRIM. JUST. & CRIMINOLOGY 1, 2 (2016) (explaining how mass shootings become a “media spectacle” and concluding that media reports of such incidents tend to exclude context to “ground these events in the larger discourse of violence in the nation”).

⁵ See, e.g., Sophie Bethune & Elizabeth Lewan, *One-Third of US Adults Say Fear of Mass Shootings Prevents Them from Going to Certain Places or Events*, AM. PSYCHOL. ASS’N (Aug. 15, 2019), <https://www.apa.org/news/press/releases/2019/08/fear-mass-shooting> [<https://perma.cc/BHG8-L7M8>]; Nikki Graf, *A Majority of U.S. Teens Fear a Shooting Could Happen at Their School, and Most Parents Share Their Concern*, PEW RES. CTR. (Apr. 18, 2018), <https://www.pewresearch.org/short-reads/2018/04/18/a-majority-of-u-s-teens-fear-a-shooting-could-happen-at-their-school-and-most-parents-share-their-concern/> [<https://perma.cc/338B-R3WU>].

greater risk to children than school violence.⁶ Too often, this attention fails to prompt meaningful change.⁷ But in the years after the tragedies in Uvalde and Nashville, lawmakers in Texas, Tennessee, and the United States Congress proposed and implemented responsive legislation. Notably, this response included the first federal gun control law since 1994—the Bipartisan Safer Communities Act (the “BSCA”).⁸

The political processes around these policy responses drew fierce debate and protest, mirroring the fallout from similar tragedies in years past. Considering this long-standing controversy, this Article seeks to evaluate responsive laws by looking to empirical evidence around whether and to what degree policy changes affect school shootings, school crime, and other aspects of school safety.⁹

Part I of this Article identifies and discusses responsive laws implemented in Texas, Tennessee, and at the federal level shortly after tragedies in Uvalde and Nashville. Part II reviews available evidence about the efficacy and unintended consequences of these policies, and also considers the potential impacts of firearm restrictions that were proposed, but not implemented at the state level. Part III evaluates the state and federal responses against this evidence by considering how these policies might affect school shootings and gun violence generally, as well as other factors like school crime and bullying. The Article concludes with several takeaways.

II. POLICY RESPONSES TO SCHOOL SHOOTINGS IN UVALDE AND NASHVILLE

School shootings in Uvalde, Texas, and Nashville, Tennessee, prompted policy changes at the state and federal levels. Legislatures in Texas and Tennessee enacted new measures that prioritized school policing and security, and provided limited support for school-based mental health and safety preparation. Modest gun control proposals failed in both states. At the federal level, Congress enacted the BSCA shortly after the tragedy at Uvalde. This law included the first federal firearms restrictions in decades and appropriated several billion dollars to school security and student mental health priorities.

⁶ NAT'L CENT. ED. STATS., VIOLENT DEATHS AT SCHOOL AND AWAY FROM SCHOOL AND SCHOOL SHOOTINGS 2 (2023), <https://nces.ed.gov/programs/coe/indicator/a01> [<https://perma.cc/EM83-PELA>] (“The percentage of youth homicides documented as occurring at school was generally around 1 percent of the total number of youth homicides each [school] year between 1992–93 and 2019–20.”).

⁷ See generally Jaelyn Schildkraut & Colin M. Carr, *Mass Shootings, Legislative Responses, and Public Policy: An Endless Cycle of Inaction*, 69 EMORY L. J. 1043 (2020) (detailing how proven policies like an assault weapon ban and universal background checks are consistently proposed after school shootings, but fail to become law).

⁸ Bipartisan Safer Communities Act, Pub. L. No. 117-159, 136 Stat. 1313 (2022).

⁹ Fortunately, school shootings remain relatively rare, and it is therefore difficult to assess whether any particular policy change affects the incidence or severity of these tragedies. Accordingly this piece also looks to the incidence of school crime, and gun violence generally, among other factors, to assess the impact of identified policies.

A. State Policy Responses

Texas and Tennessee’s policy responses prioritized school hardening—measures that make schools physically more difficult to threaten—by expanding and funding school policing and installations like cameras and metal detectors. Responsive laws also addressed safety planning and student mental health. A law to raise the minimum age for firearm purchases failed in Texas. And a law that would allow courts to impose extreme risk protection orders disarming potentially dangerous individuals—also known as a “red flag” law—failed in Tennessee.

1. *Texas Response to the Shooting at Robb Elementary*

In 2023, the Texas Legislature responded to the shooting at Robb Elementary in Uvalde with legislation focused on school policing and safety planning. A bill that would have raised the minimum age to buy semi-automatic weapons failed to become law.

Texas House Bill 3 requires every public school in the state to host an “armed security officer.”¹⁰ Schools can meet this requirement with school police, hired security guards, or armed educational staff.¹¹ The law also requires school districts to establish and regularly audit comprehensive security plans and conduct regular emergency drills.¹² The bill further allocates school districts \$15,000 per campus and approximately \$10 per student for flexible use, including hiring required security officers, purchasing security equipment, and funding violence prevention or mental health programs.¹³ Lawmakers separately appropriated \$1.1 billion to create a funding pool for flexible “school safety” grants.¹⁴ Proposals for additional appropriations to fund new school security requirements failed in subsequent special legislative sessions.¹⁵

A modest gun control bill, proposed by the state representative from Uvalde, failed to pass the legislature. House Bill 2744 aimed to raise the minimum age to purchase a semi-automatic rifle from eighteen to twenty-one.¹⁶ The bill died before

¹⁰ H.R. 3, 88th Legis. (Tex. 2023); 2023 Tex. Sess. Law Serv. Ch. 896 § 10 (West).

¹¹ 2023 Tex. Sess. Law Serv. Ch. 896 § 10 (West).

¹² *Id.* at § 12.

¹³ *Id.* at § 23.

¹⁴ S. 30, 88th Leg. (Tex. 2023); 2023 Tex. Sess. Law Serv. Ch. 458 § 4.02 (West)

¹⁵ *See, e.g.*, S. 5, 88th Leg. 4th Spec. Sess. (Tex. 2023); H.R. 2, 88th Leg. 4th Spec. Sess. (Tex. 2023); *see also* Maia Pandey, *Texas Superintendents Say Lack of School Safety Funding May Lead to Budget Cuts*, TEX. TRIB. (Dec. 11, 2023, 5:00 AM), <https://www.texastribune.org/2023/12/11/texas-school-safety-funding/> [https://perma.cc/84V9-CBXQ] (“The fourth special legislative session this year ended without increased funding for school safety—even though public schools have complained . . . they don’t have enough money to met new safety mandates . . .”).

¹⁶ H.R. 2744, 88th Leg. (Tex. 2023).

receiving a vote of the assembled legislature,¹⁷ despite widespread support for such measures¹⁸ and advocacy from the families of children killed at Robb Elementary in Uvalde.¹⁹

2. Tennessee Response to the Shooting at The Covenant School

Tennessee lawmakers responded to the 2023 shooting at The Covenant School with legislation favoring school hardening and safety planning with some limited support for mental health programs. Despite public outcry and considerable controversy, this response did not include new gun control measures.

Tennessee's 2023 Senate Bill 315 enables private schools like The Covenant to coordinate with local law enforcement to station police on school campuses.²⁰ House Bill 322 codifies school safety requirements, including annual drills, threat assessments, and classroom locks.²¹ The state's 2023–2024 budget also includes considerable appropriations toward school hardening, including \$140 million to fund school resource officers, and \$20 million toward broadly-applicable school safety grants.²² The budget also allocates approximately \$8 million to expand K–12 school-based mental health programming.²³

With support from Governor Bill Lee, legislators proposed a “red flag” law that would allow courts to remove firearms from potentially dangerous individuals.²⁴ But despite public support and a purpose-specific special legislative session,²⁵ the bill

¹⁷ Alejandro Serrano, *Raise-the-Age Gun Bill Misses Crucial Deadline, as Uvalde Parents Protest Outside the Texas House*, TEX. TRIB. (May 9, 2023), 11:00 PM), <https://www.texastribune.org/2023/05/09/texas-ar-15-raise-the-age/> [https://perma.cc/BJX3-UXTR] (Detailing how the legislature's failure to place H.B. 2744 on the House Agenda after a key deadline “likely end[ed] the bill's chances of becoming law”).

¹⁸ Patric Svitek, *Poll Finds Solid Majority of Texans, Even Republicans, Favor Raising Age for Gun Purchases*, TEX. TRIB. (May 3, 2023, 6:00 AM), <https://www.texastribune.org/2023/05/03/ut-texas-poll-legislature-guns/> [https://perma.cc/67Y8-Y78P] (describing a survey from the University of Texas at Austin that “found 76% of voters support ‘raising the legal age to purchase any firearm from 18 years of age to 21 years of age’”).

¹⁹ Alejandro Serrano, *In Overnight Testimony, Uvalde Victims' Family Members Call on Texas Lawmakers to Raise Age to Buy Semi-Automatic Guns*, TEX. TRIB. (April 19, 2023, 2:00 PM), <https://www.texastribune.org/2023/04/19/texas-house-gun-bills-2023/> [https://perma.cc/NA4P-7JWL].

²⁰ S. 315, 113th Gen. Assemb., 2023 Reg. Sess. (Tenn. 2023); 2023 Tenn Pub. Acts Ch. No. 87.

²¹ H.R. 322, 113th Gen. Assemb., 2023 Reg. Sess. (Tenn. 2023); 2023 Tenn Pub. Acts Ch. No. 367.

²² H.R. 1545, 113th Gen. Assemb., 2023 Reg. Sess. (Tenn. 2023); 2023 Tenn Pub. Acts Ch. No. 418, § 54.

²³ *Id.*

²⁴ H.R. 1574, 113th Gen. Assemb., 2023 Reg. Sess. (Tenn. 2023); S. 1564, 113th Gen. Assemb., 2023 Reg. Sess. (Tenn. 2023).

²⁵ Tenn. Proclamation No. 2517 (2023), <https://tnsos.net/publications/proclamations/> [https://perma.cc/ZKV5-Q5C5] (calling a special legislative session for the purpose of implementing “temporary mental health orders of protection” among other priorities); Kimberlee Kreuzski, *Tennessee Governor Schedules Special Session to Address Guns*, ASSOCIATED PRESS (May 8, 2023, 5:24 PM), <https://apnews.com/article/tennessee-red-flag-republicans-guns-0cd94d15f372746ed53e85408d27af44> [https://perma.cc/P7HV-5X9W].

failed to become law.²⁶ Throughout Tennessee’s regular and special legislative sessions, citizens advocated for stricter gun laws through large demonstrations around the state.²⁷ And in a political firestorm that made national headlines, two state legislators were expelled from their positions for participating in these protests,²⁸ though they later returned to office.²⁹

B. Federal Policy Response: The Bipartisan Safer Communities Act

The BSCA—a bipartisan federal law passed shortly after the Robb Elementary shooting—imposes modest firearms restrictions and appropriates billions of dollars to provide grants supporting state-level red-flag laws, mental health programing, and school safety initiatives.

The BSCA³⁰ imposes the first new federal gun control measures since the 1994 Federal Assault Weapons Ban.³¹ It provides for more extensive background checks on firearms purchasers under age twenty-one and expands the records that may be examined in such searches.³² The Act further creates new, specific criminal penalties for firearms trafficking and “straw purchases” in which an authorized buyer purchases a firearm on behalf of someone prohibited from doing so.³³

Along with its gun control provisions, the BSCA provides resources through Medicaid and the Children’s Health Insurance Program to expand mental health

²⁶ Emily Cochrane, *Tennessee Session Ends in Chaos, With No Action on Gun Control*, NY TIMES (Aug. 29, 2023), <https://www.nytimes.com/2023/08/29/us/politics/tennessee-special-session-gun-control.html> [<https://perma.cc/Z45E-CHPA>] (“Tennessee Republicans on Tuesday ended a special session of the state legislature devoted to public safety without passing any new restrictions on firearm access . . .”).

²⁷ See e.g., *Demonstrators Protest at Capitol to Call for Gun Control Reform*, TENNESSEAN, (April 3, 2023, 10:57 AM), <https://www.tennessean.com/picture-gallery/news/2023/04/03/demonstrators-push-gun-control-reform-nashville-covenant-school-shooting/11592882002/> [<https://perma.cc/DMG8-D5HY>].

²⁸ Kimberlee Kruesi & Jonathan Mattise, *Tennessee’s House Expels 2 of 3 Democrats Over Guns Protest*, ASSOCIATED PRESS (April 7, 2023, 6:44 AM), <https://apnews.com/article/tennessee-lawmakers-expulsion-d3f40559c56a051eec49e416a7b5dade> [<https://perma.cc/NL9Q-7QQN>].

²⁹ Tim Craig & Emily Wax-Thibodeaux, *Nashville Council Reinstates Black Tennessee Lawmaker*, WASH. POST (April 10, 2023, 8:02 PM), <https://www.washingtonpost.com/nation/2023/04/10/nashville-council-justin-jones-expulsion/> [<https://perma.cc/CL63-BW3V>]; Robert Klemko & Karin Brulliard, *In Tennessee, Second Expelled Black Democratic Lawmaker is Reappointed*, WASH. POST (April 12, 2023), <https://www.washingtonpost.com/nation/2023/04/12/black-democratic-legislators-reinstated-tennessee/> [<https://perma.cc/DDJ5-JTC6>].

³⁰ Bipartisan Safer Communities Act, Pub. L. No. 117-159, 136 Stat. 1313 (2022).

³¹ Violent Crime Control and Law Enforcement Act of 1994, Pub. L. No. 103-322, § 110101–110106 108 Stat 1796, 1997–2010. See also Sarah Gray, *Here’s a Timeline of the Major Gun Control Laws in America*, TIME (April 30, 2019), <https://time.com/5169210/us-gun-control-laws-history-timeline/> [<https://perma.cc/W7RQ-A2NZ>] (detailing major firearms legislation in the United States from –1791–2019).

³² Bipartisan Safer Communities Act, § 12001, 136 Stat. at 1322–24.

³³ Stop Illegal Trafficking in Firearms Act, Pub. L. No. 117-159, § 12004, 136 Stat. 1326, 1326–1332 (2022).

support to children, especially in schools.³⁴ The balance of the bill is dedicated to wide-ranging appropriations, including:

- \$750 million to the Byrne Justice Assistance Grant Program to support states implementing “red flag” laws;³⁵
- \$300 million to fund school safety grants for purposes authorized by the 2018 STOP School Violence Act,³⁶ which include threat assessment training, coordination with law enforcement, and physical security measures, among other uses;³⁷
- Over \$1 billion to create a flexible funding pool,³⁸ dubbed the “Stronger Connections Grant Program,” which local education agencies may access to hire school police officers, install physical security equipment on campuses, and implement mental health programs, among other uses.³⁹
- Around \$1.25 billion toward mental health grants for children and schools,⁴⁰ including \$500 million toward School Based Mental Health Services Grants, which aim to increase the number of mental health service providers in schools,⁴¹ \$500 million toward Mental Health Services Professional Demonstrations, which support the training of school-based mental health professionals,⁴² and \$250 million for community health

³⁴ Bipartisan Safer Communities Act, §§ 11002, 11003, 136 Stat. at 1316–19.

³⁵ *Id.* § 12003, 136 Stat. at 1325–26.

³⁶ Bipartisan Safer Communities Supplemental Appropriations Act, Pub. L. No. 117-159, 136 Stat. 1338, 1339 (2022).

³⁷ Students, Teachers, and Officers Preventing School Violence Act of 2018, Pub. L. 115-141 §§ 501–505, 132 Stat. 1128, 1128–1131.

³⁸ Bipartisan Safer Communities Supplemental Appropriations Act, 136 Stat. at 1341 (authorizing grants under title IV, part B, and part A, subpart 1 of the Elementary and Secondary Education Act of 1965).

³⁹ Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10, §§ 4101–4111; 4201–4205; 79 Stat. 27 (1965) (initially authorizing such grants and establishing proper uses for grant funds); *see also* UNITED STATES DEPARTMENT OF EDUCATION, OFFICE OF PLANNING, EVALUATION AND POLICY DEVELOPMENT, BIPARTISAN SAFER COMMUNITIES STRONGER CONNECTION GRANT PROGRAM FREQUENTLY ASKED QUESTIONS 2023, <https://oese.ed.gov/files/2023/10/23-0083.BSCA-FAQs-approved-April-Final-Updated-October-2023.pdf> [<https://perma.cc/6KEK-55ZJ>] (outlining potential uses for Stronger Connections Grant Program).

⁴⁰ Bipartisan Safer Communities Supplemental Appropriations Act, 136 Stat. at 1342.

⁴¹ *See School-Based Mental Health Services Grant Program*, OFF. ELEMENTARY & SECONDARY EDUC., UNITED STATES DEP’T OF EDUC. (Oct. 20, 2022), <https://oese.ed.gov/offices/office-of-formula-grants/safe-supportive-schools/school-based-mental-health-services-grant-program/> [<https://perma.cc/X65C-ZRNX>].

⁴² *Mental Health Service Professional Demonstrations*, OFF. ELEMENTARY & SECONDARY EDUC., UNITED STATES DEP’T OF EDUC. (Aug. 8, 2023), <https://oese.ed.gov/offices/office-of-formula-grants/safe-supportive-schools/mental-health-service-professional-demonstration-grant-program/> [<https://perma.cc/W7MN-33N8>].

services block grants,⁴³ which allocate funds to children and adults with serious mental illness.⁴⁴

III. EVIDENCE ON THE EFFECTS OF POLICY RESPONSES

Empirical evidence yields mixed evaluations of policies like those implemented at the state and federal levels after the 2022 and 2023 school shootings. School hardening measures generally have little effect on student safety and may negatively affect other student outcomes. At the same time, student mental health initiatives may address root causes of school violence. And proactive safety planning may save lives in emergencies.

There is little conclusive evidence that any of the proposed or implemented firearms restrictions will affect school shootings or mass shootings more broadly. However, certain measures, like “red flag laws” and minimum-age laws, show the potential to do so. And other measures like universal background checks may reduce gun violence more broadly.

A. School Hardening

School hardening through policing and physical security provides little proven benefit. School policing does not improve school safety and likely detracts from other student outcomes. Physical security measures also have little proven benefit and may negatively affect student academic performance and feelings of safety at school.

1. School Policing and Armed Guards

No evidence suggests that the presence of school police or armed guards deters school shootings.⁴⁵ And school police notably failed to intervene during tragedies in

⁴³ Bipartisan Safer Communities Supplemental Appropriations Act, 136 Stat. at 1340 (authorizing grants under subpart I of part B of title XIX of the Public Health Service Act).

⁴⁴ Public Health Service Act, Pub. L. 78-410, 58 Stat. 682 (1944) (codified at 42 U.S.C. § 300x) (establishing that such funding will be used to provide services for “adults with a serious mental illness and children with a serious emotional disturbance”).

⁴⁵ JILLIAN PETERSON & JAMES DENSLEY, *THE VIOLENCE PROJECT: HOW TO STOP A MASS SHOOTING EPIDEMIC* 155 (2022) (finding that armed security officers were present in roughly twenty-four percent of school shootings, and their presence “yielded no significant reduction in rates of injuries”); *see also* John Woodrow Cox & Steven Rich, *Scarred by School Shootings*, WASH. POST (Mar. 25, 2018), <https://www.washingtonpost.com/graphics/2018/local/us-school-shootings-history/> [<https://perma.cc/22SD-CAB7>] (“The Post found that gun violence has occurred in at least 68 schools that employed a police officer or security guard [between 1999 and 2018] . . . Of the nearly 200 Post-identified incidents of school gunfire, only once . . . has a resource officer gunned down an active shooter.”).

Parkland, Florida,⁴⁶ and Uvalde, Texas.⁴⁷ In fact, shootings where armed guards were present have consistently proven deadlier than incidents with no such officials on the scene.⁴⁸

School police don't prevent other kinds of school crime or misbehavior either, and their presence contributes to adverse student outcomes. Police presence at a K–12 school is linked to *increased* school crime and behavior problems.⁴⁹ Schools with police also rely more extensively on exclusionary punishments like suspensions and expulsions.⁵⁰ And disciplinary measures of this kind are associated with an increased likelihood that affected students will eventually interact with the criminal justice system.⁵¹ The presence of school police also does not meaningfully impact school

⁴⁶ See, e.g., Audra D. S. Burch & Alan Binder, *Former Deputy Faces Charges Over Parkland*, N.Y. TIMES, June 4, 2019, at A1.

⁴⁷ See, e.g., J. David Goodman & Edgar Sandoval, *Blame is Spread to More Agencies in Uvalde Attack*, N.Y. TIMES, July 18, 2022, at A1.

⁴⁸ PETERSON & DENSLEY, *supra* note 45, at 155 (examining 133 school shootings and finding that “after controlling for other factors like the school size, the number of shooters, and the number type of firearms, the rate of deaths was nearly three times higher in schools with an armed police officer or security guard present”); Jillian Peterson, James Densley & Gina Erickson, *Presence of Armed School Officials and Fatal and Nonfatal Gunshot Injuries During Mass School Shootings, United States, 1980-2019*, JAMA OPEN NETWORK, Feb. 16, 2021, at 3 (“[C]ontrolling for the aforementioned factors of location and school characteristics, the rate of deaths was 2.83 times greater in schools with an armed guard present.”).

⁴⁹ Benjamin W. Fisher, Anthony Petrosino, Hannah Sutherland, Sarah Guckenburger, Trevor Fronius, Ivan Benitez & Kevin Earl, *School-Based Law Enforcement Strategies to Reduce Crime, Increase perceptions of Safety, and Improve Learning Outcomes in Primary and Secondary Schools: A Systematic Review*, CAMPBELL SYSTEMATIC REVIEWS, Nov. 8, 2023, at 21 (concluding from a systematic review of research in the field that school policing is “linked with an increase in school crime and behavior problems”); see also Denise C. Gottfredson, Scott Crosse, Zhiquin Tang, Erin L. Bauer, Michele A. Harmon, Carol A. Hagen & Angela D. Greene, *Effects of School Resource Officers on School Crime and Responses to School Crime*, 19 CRIM. PUB. POL'Y 905, 932 (2020) (“[Increasing school policing] does not reduce school records of any form of school crime, and results in higher counts of recorded weapon and drug-related school crimes, effects that persist for at least 20 months after the increase in [policing].”).

⁵⁰ Fisher et al., *supra* note 49, at 1 (finding “[school-based law enforcement] use was associated with increased exclusionary discipline”); Benjamin W. Fisher & Emily A. Hennessy, *School Resource Officers and Exclusionary Discipline in U.S. High Schools: A Systematic Review and Meta-Analysis*, 1 ADOLESCENT RSCH. REV. 217, 217 (2016) (concluding from a meta-analysis of relevant research that “the presence of [school resource officers] in high schools was associated with higher rates of exclusionary discipline”); see also Emily K. Weisburst, *Patrolling Public Schools: The Impact of Funding for School Police on Student Discipline and Long-Term Education Outcomes*, 38 J. POL'Y ANALYSIS & MGMT. 338, 338 (2019) (“Exploiting detailed data on over 2.5 million students in Texas, I find that federal grants for police in schools increase middle school discipline rates by 6 percent.”).

⁵¹ Julie Gerlinger, Samantha Viano, Joseph H. Gardella, Benjamin W. Fisher, F. Chris Curran & Etham M. Higgins, *Exclusionary Discipline and Delinquent Outcomes: A Meta Analysis*, 50 J. YOUTH & ADOLESCENCE 1493, 1503 (2021) (concluding from a meta-analysis of relevant literature that “exclusionary discipline is associated with a greater likelihood of future delinquency regardless of the demographic composition of the sample”); see also David M. Ramey, *The Influence of Early School Punishment and Therapy/Medication on Social Control Experiences During Young Adulthood*, 54 CRIMINOLOGY: AN INTERDISC. J. 113, 132 (2016) (“[E]arly school

violence, substance abuse, or the prevalence of weapons on campus,⁵² though students may feel safer with police at their schools.⁵³ The research on school police is thus clear. However, there exists little corresponding evidence on the effects of arming teachers and other school staff, and the outcomes of such policies are not well established.⁵⁴

2. *Physical Security*

Evidence yields mixed results regarding the benefits of physical security in schools and shows that reliance on such measures may detract from the school environment. At least one study has found that controlling for other demographic and environmental factors, schools with higher concentrations of physical security measures experience higher levels of school crime.⁵⁵ Another somewhat contradictory study found that schools using multiple visible security measures experienced reduced property crime, while schools using just one security measure experienced worse overall safety outcomes than schools with zero, or multiple physical security measures.⁵⁶ Research does not make clear whether these measures can or do affect school shootings.

Targeted studies of specific measures also show mixed effects. No evidence suggests that metal detectors improve school safety.⁵⁷ And security cameras do not

punishment is associated with higher odds of involvement in the criminal justice systems later in life . . . ”); Kathryn C. Monahan, Susan VanDerhei, Jordan Bechtold & Elizabeth Cauffman, *From the School Yard to the Squad Car: School Discipline, Truancy, and Arrest*, 43 J. YOUTH & ADOLESCENCE 1110, 1110 (2014) (“Being suspended or expelled from school increased the likelihood of arrest in the same month . . .”).

⁵² Fisher et al., *supra* note 49, at 18.

⁵³ *Id.* at 2.

⁵⁴ *The Effects of Laws Allowing Armed Staff in K–12 Schools*, RAND (Jan. 10, 2023), <https://www.rand.org/research/gun-policy/analysis/laws-allowing-armed-staff-in-K12-schools.html> [<https://perma.cc/7ADP-BX37>] (finding no high-quality studies that examine the effects of arming staff in K–12 schools).

⁵⁵ Amanda B. Nickerson & Matthew P. Martens, *School Violence: Associations with Control, Security/Enforcement, Educational/Therapeutic Approaches, and Demographic Factors*, 37 SCH. PSYCH. REV. 228, 238 (2015) (“After accounting for demographic influences on school crime . . . principals who reported use of more security and enforcement procedures . . . were also more likely to report more incidents of school crime.”).

⁵⁶ Emily E. Tanner-Smith, Benjamin W. Fisher, Lynn A. Addington & Joseph H. Gardella, *Adding Security, but Subtracting Safety? Exploring Schools’ Use of Multiple Visible Security Measures*, 43 AM. J. CRIM. JUST. 102, 102 (2017) (“[U]tilization of multiple security measures reduced the likelihood of exposure to property crime in high schools, but most other security utilization patterns were associated with poorer school safety outcomes.”).

⁵⁷ Abigail Hankin, Marci Hertz & Thomas Simon, *Impacts of Metal Detector Use in Schools: Insights from 15 Years of Research*, 81 J. SCH. HEALTH 100, 105 (2011) (Concluding from a meta-analysis of literature in the space that there exists “insufficient evidence to draw a conclusion about the potential beneficial effect of metal detector on student . . . behavior . . .”).

have any proven effect either.⁵⁸ However, security locks can and do protect students during school shootings.⁵⁹

Physical security may also prove detrimental to student performance and feelings of safety at school. Empirical studies confirm that students feel less safe in schools with metal detectors.⁶⁰ One study found that cameras and door locks do not affect perceptions of safety.⁶¹ But another study found that students feel less safe when cameras are placed inside rather than outside school buildings.⁶² Visible security measures may also slightly impair students' attendance and grades.⁶³

B. Safety Planning and Preparation

Unlike school hardening efforts, safety planning measures—including lockdown drills and threat assessments—may improve school safety with few adverse effects. One analysis of real-world school shootings found that, absent independent errors by first responders, successfully implemented lockdowns reduce casualties by nearly sixty percent and fatalities by almost eighty percent.⁶⁴ Repeated drills also improve students' and faculty members' ability to successfully implement lockdowns, implying that these exercises may provide essential practice that can

⁵⁸ Benjamin W. Fisher, Ethan M. Higgins, Emily M. Homer, *School Crime and Punishment and the Implementation of Security Cameras: Findings from a National Longitudinal Study*, 38 JUST. Q. 22, 22 (2021) (“[P]atterns of crime and punishment in schools that implemented cameras were similar to those in schools that did not.”).

⁵⁹ JACLYN SCHILDKRAUT & AMANDA B. NICKERSON, LOCKDOWN DRILLS 54 (2022) (“[S]ecuring behind a locked door has been identified as the most effective way to prevent injury or death during an active shooter situation.”).

⁶⁰ Hankin et al, *supra* note 57 (“[S]ome research suggests that the use of metal detectors in schools is associated with lower levels of students’ perceptions of security in school”); *see also*, Suzanne E. Perumean-Chaney & Lindsay M. Sutton, *Students and Perceived School Safety: The Impact of School Security Measures*, 38 AM. J. CRIM. JUST. 570, 581–82 (2013) (“Using a nationally representative sample of 13,386 students from 130 schools and 130 school administrators . . . this study found that metal detectors . . . were associated with a significant decrease in students feeling safe while in school.”).

⁶¹ Perumean-Chaney & Sutton, *supra* note 60, at 582 (“[S]ecurity guards, video cameras and bars/locked doors had no effect on student perceptions of safety.”).

⁶² Sarah Lindstrom Johnson, Jessika Bottiani, Tracy E. Waasdorp & Catherine P. Bradshaw, *Surveillance or Safekeeping? How School Security Officer and Camera Presence Influence Students’ Perceptions of Safety, Equity, and Support*, 63 J. ADOLESCENT HEALTH 732, 735 (2018) (“[A] higher number of security cameras inside the school building was negatively associated with students’ perceptions of safety, equity and support.”).

⁶³ Emily E. Tanner-Smith & Benjamin W. Fisher, *Visible School Security Measures and Student Academic Performance, Attendance, and Postsecondary Aspirations*, 45 J. YOUTH & ADOLESCENCE 195, 204 (2016) (finding that while “schools’ visible security utilization patterns had a minimal effect on adolescents’ academic performance postsecondary aspirations certain security utilization patterns may have modest detrimental effects on academic outcomes”).

⁶⁴ Jaelyn Schildkraut, Emily Greene-Colozzi, Amanda B. Nickerson & Allyson Florczykowski, *Can School Lockdowns Save Lives? An Assessment of Drills and Use in Real-World Events*, 22 J. SCH. VIOLENCE 167, 177 (2023) (“During mass shootings, schools that successfully implemented lockdowns had 60% fewer total casualties, with 79% reductions in victims pronounced dead at the scene even after controlling for other variables”).

help save lives in an emergency.⁶⁵ However, one study found no difference in casualties between shootings in schools that regularly ran lockdown drills and schools that did not.⁶⁶

Results are mixed as to the emotional impact of these drills, but convincing evidence suggests that they have little negative effect. Empirical studies incorporating live surveys of students after lockdown drills indicate that the exercises do not increase anxiety levels and may even reduce stress.⁶⁷ Studies also suggest that drills help students feel more prepared for emergencies.⁶⁸ But one study infers from social media posts after lockdown drills that the exercises increase stress, anxiety, and depression among participants.⁶⁹

Evidence also indicates that threat assessments by which school officials identify and proactively respond to troubling student conduct can effectively resolve issues before they become serious.⁷⁰ For example, the Virginia Threat Assessment

⁶⁵ Jaclyn Schildkraut & Amanda B. Nickerson, *Ready to Respond: Effects of Lockdown Drills and Training on School Emergency Preparedness*, 15 VICTIMS & OFFENDERS 619, 632 (2020) (“[F]ollowing training and with continued practice, effectiveness of the lockdowns . . . improved significantly.”).

⁶⁶ PETERSON & DENSLEY, *supra* note 45, at 108 (“[O]ur data on 133 completed and attempted school mass shootings over the past forty years show that there were no differences in the number of people killed or injured between schools that regularly ran lockdown drills and those that didn’t.”).

⁶⁷ SCHILDKRAUT & NICKERSON, *supra* note 59, at 66 (“[L]ockdown drills conducted in accordance with best practices were found not to increase anxiety levels among student participants and may even have had positive effects by empowering them with the skills necessary to respond in an emergency.”); see also Amanda B. Nickerson & Jaclyn Schildkraut, *State Anxiety Prior and After Participating in Lockdown Drills Among Students in a Rural High School* SCH. PSYCH. REV., Mar. 2021, at 6 (“Respondents who completed the survey reported stronger feelings consistent with well-being as compared to those who completed the inventory at baseline”); Elizabeth J. Zhe & Amanda B. Nickerson, *Effects of an Intruder Crisis Drill on Children’s Knowledge, Anxiety, and Perceptions of School Safety*, 36 SCH. PSYCH. REV. 501, 506 (2007) (finding students who participated in a lockdown and students who instead participated in origami, “did not differ in state anxiety or perceptions of school safety” after their respective activities).

⁶⁸ Jaclyn Schildkraut, Amanda B. Nickerson & Kristen R. Klingaman, *Reading, Writing, Responding: Educators’ Perceptions of Safety, Preparedness, and Lockdown Drills*, 36 EDUC. POL’Y 1876, 1891 (2022) (“[F]eelings of preparedness improved significantly with the introduction of [lockdown] training and continued practice.”); Jaclyn Schildkraut, Amanda B. Nickerson & Thomas Ristoff, *Locks, Lights, Out of Sight: Assessing Students’ Perceptions of Emergency Preparedness Across Multiple Lockdown Drills*, 19 J. SCH. VIOLENCE 93, 102–03 (2019) (finding that the implementation of school lockdown best practices drills increased the degree to which students felt they were prepared for an emergency).

⁶⁹ Mai ElSherief, Koustuv Saha, Pranshu Gupta, Shrija Mishra, Jordyn Seybolt, Jiajia Xie, Megan O’Toole, Sarah Burd-Sharps & Munmun De Choudhury, *Impacts of School Shooter Drills on the Psychological Well-Being of American K-12 School Communities: A Social Media Study*, HUM & SOC. STUD. COMM’C’S, Dec. 8, 2021, at 8 (finding from an analysis of social media posts that “trauma and collective worry experienced by school stakeholders increased by 42% for anxiety/stress and 39% for depression, following drills.”).

⁷⁰ Randy Borum, Dewey G. Cornell, William Modzeleski & Shane Jimerson, *What Can Be Done About School Shootings? A Review of the Evidence*, 39 EDUC. RES. 27, 32 (2010) (“[T]wo field test studies suggest that a threat assessment approach can be carried out with seemingly positive outcomes . . .”).

Model, which involves a seven-step threat response coordinated among school staff, can help school officials resolve threatening behavior without incident.⁷¹ These measures may prevent school shootings because many perpetrators of such incidents are current or former students of targeted schools,⁷² and most inform others of their plans.⁷³

C. School-Based Mental Health

School-based mental health resources and social-emotional learning programs can reduce violent tendencies among children and may also reduce environmental issues like bullying that accompany school violence.

Over several experimental trials, a school-based cognitive behavioral therapy program reduced arrests for violent crime among participants.⁷⁴ Mental health curriculums may also reduce students' reliance on violent threats and behavior.⁷⁵ And school-based violence prevention programs reduce aggressive tendencies in

⁷¹ Dewey G. Cornell, Peter L. Sheras, Sebastian Kaplan, David McConville, Julea Douglass & Andrea Elkon, *Guidelines for Student Threat Assessment: Field-Test Findings*, 33 SCH. PSYCH. REV. 527, 527 (2004) (finding from a field test of a threat assessment model that “the majority of cases (70%) were resolved quickly as transient threats” indicating “that student threat assessment is a feasible, practical approach for schools” to improve safety); Dewey Cornell, Peter Sheras, Anne Gregory & Xitao Fan, *A Retrospective Study of School Safety Conditions in High Schools Using the Virginia Threat Assessment Guidelines Versus Alternative Approaches*, 24 SCH. PSYCH. Q. 119, 119 (“Students in schools using the Virginia threat assessment guidelines reported less bullying, greater willingness to seek help, and more positive perceptions of the school climate than students [at schools that did not implement this model].”).

⁷² PETERSON & DENSLEY, *supra* note 45, at 104 (concluding from a review of school shootings that most perpetrators are “either current or former students of the school”).

⁷³ *Id.* at 79 (“[N]early half of mass shooters tell someone that they are thinking about violence before they do it” and “K–12 school shooters are most likely to leak their plans”).

⁷⁴ Sara B. Heller, Anuj K. Shah, Jonathan Guryan, Jens Ludwig, Sendhil Mullainathan & Harold A. Pollack, *Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago*, 132 Q. J. ECON. 1, 1 (2017) (finding that participation in the “Becoming a Man” counseling program that involved cognitive behavioral therapy at school “reduced violent-crime arrests by 45-50%” among participants, alongside other positive benefits).

⁷⁵ Melissa J. DuPont-Reyes, Alice P. Villatoro, Jo C. Phelan, Kris Painter, Kay Barkin & Bruce G. Link, *School Mental Health Curriculum Effects on Peer Violence Victimization and Perpetration: A Cluster-Randomized Trial*, 91 J. SCH. HEALTH 59, 65 (2021) (finding a mental health curriculum reduced “the perpetration of verbal threats among all students in the short-term, and the perpetration of physical, verbal, and social violence among students with mental health problems over two-year follow-up”).

children beginning to exhibit such behaviors.⁷⁶ School-wide anti-bullying programming may also reduce bullying and associated victimization.⁷⁷

Most perpetrators of school shootings have a history of childhood trauma.⁷⁸ Many appear to have been victims of bullying.⁷⁹ And a large majority of all mass shooters experience mental health crises shortly before their crimes.⁸⁰ Considering the prevalence of mental health issues among perpetrators, preventive mental health care in schools may address environmental factors that contribute to school violence.

D. Gun Control Measures

Evidence does not establish that any gun control measures proposed or implemented after the tragedies in Uvalde and Nashville are likely to impact school shootings. However, some measures show potential to do so, and others may reduce gun violence generally. Penalties for illegal firearms transfers will likely have little effect on school shootings because perpetrators of these tragedies typically acquire guns from relatives. Background checks may reduce gun violence generally, but have no proven effect on school shootings or other mass shootings. Minimum age laws show potential to reduce mass shootings, but this effect is not clearly established. And, while “red flag” laws show considerable promise, such measures remain unproven.

1. General Impact of Firearms Restrictions

Research suggests that restricting access to firearms and reducing the prevalence of guns reduces firearm deaths and mass shootings. Domestically, states with higher concentrations of gun ownership experience a greater rate of firearm

⁷⁶ Julie A. Mytton, Carolyn DiGuseppi, David A. Gough, Rod S. Taylor, Stuart Logan, *School-Based Violence Prevention Programs: Systematic Review of Secondary Prevention Trials*, 156 ARCHIVES OF PEDIATRIC & ADOLESCENT MEDICINE 752, 752 (2002) (concluding from a meta-analysis of literature in the space that “school-based violence prevention programs may produce reductions in aggressive and violent behaviors in children who already exhibit such behavior”).

⁷⁷ Hannah Gaffney, Maria M. Ttofi & David P. Farrington, *Evaluating the Effectiveness of School-Bullying Prevention Programs: An Updated Meta-Analytical Review*, 45 AGGRESSIVE & VIOLENT BEHAV. 111, 127 (2019) (concluding from a meta-analysis of relevant literature that anti-bullying programs in schools “are effective in reducing both school-bullying perpetration and victimization”).

⁷⁸ PETERSON & DENSLEY, *supra* note 45, at 39 (“[N]early 70 percent of school mass shooters had a known history of childhood trauma.”).

⁷⁹ Allison Paolini, *School Shootings and Student Mental Health: Role of School Counselor in Mitigating Violence* 90 VISTAS ONLINE (2015), <https://connectuprogram.com/connectu/wp-content/uploads/Paolini-A.-school-shootings-and-student-mental-health.pdf> [<https://perma.cc/8UU7-VAZJ>] (collecting sources showing that over seventy percent of perpetrators of school shootings experienced school bullying) (citing, *inter alia*, J. H. Lee, *School Shootings in U.S. Public Schools: Analysis Through the Eyes of an Educator*, 6 REV. HIGHER EDUC. & SELF-LEARNING 88 (2013)).

⁸⁰ PETERSON & DENSLEY, *supra* note 45, at 54 (“Eighty percent of all mass shooters in our database were in a state of crisis in the minutes, hours, days, or weeks prior to committing their shootings.”).

homicides than do states with lower concentrations of gun ownership, even controlling for other factors.⁸¹ And states with more permissive gun laws and higher rates of gun ownership experience more mass shootings than states with more restrictive laws and lower concentrations of gun ownership.⁸² At the international level, research suggests that a nation's introduction of firearms restrictions is associated with a subsequent reduction in firearm deaths in that country.⁸³

2. Penalties for Illegal Firearms Transfers

Penalties for illegal firearms transfers do not conclusively affect gun violence and likely will not affect school shootings. At the same time, these penalties may limit criminals' access to guns and discourage the proliferation of weapons.

Evidence does not clearly establish whether penalties for illegal transfers affect gun violence or mass shootings.⁸⁴ But illegal transfers are central to the acquisition of firearms by gang members who are most likely to use them in crimes.⁸⁵ And a study of policy changes in Maryland and Pennsylvania suggests that specific

⁸¹ Michael Siegel, Craig S. Ross & Charles King III, *The Relationship Between Gun Ownership and Firearm Homicide Rates in the United States, 1981-2010*, 103 AM. J. PUB. HEALTH 2098, 2102 (2013) ("We found a robust relationship between higher levels of gun ownership and higher homicide rates that was not explained by any . . . potential confounders . . ."); Matthew Miller, Deborah Azrael & David Hemenway, *Rates of Household Firearm Ownership and Homicide Across US Regions and States, 1988-1997*, 92 AM. J. PUB. HEALTH 1988, 1991 (2002) ("In the United States, regions and states with higher rates of firearm ownership have significantly higher homicide victimization rates.").

⁸² Paul M. Reeping, Magdalena Cerda, Bindu Kalesan, Douglas J. Wiebe, Sandro Galea & Charles C. Branas, *State Gun Laws, Gun Ownership, & Mass Shootings in the US: Cross Sectional Time Series*, 6 BRITISH MED. J. 364, 364 (2019) ("States with more permissive gun laws and greater gun ownership had higher rates of mass shootings, and a growing divide appears to be emerging between restrictive and permissive states.").

⁸³ Julian Santaella-Tenorio, Magdalena Cerdá, Andrés Villaveces & Sandro Galea, *What Do We Know About the Association Between Firearm Legislation and Firearm-Related Injuries?*, 38 EPIDEMIOLOGIC REVS. 140, 140 (2016) ("Evidence from 130 studies in 10 countries suggests that in certain nations the simultaneous implementation of laws targeting multiple firearms restrictions is associated with reductions in firearm deaths.").

⁸⁴ See, e.g., Cassandra K. Crifasi, Alexander D. McCourt, Marisa D. Booty & Daniel W. Webster, *Policies to Prevent Illegal Acquisition of Firearms: Impacts on Diversions of Guns for Criminal Use, Violence, and Suicide*, 6 CURRENT EPIDEMIOLOGICAL REPORTS 238, 245 (2019) (analyzing available studies and concluding that studies regarding laws intended to deter illegal acquisition are not conclusive, except with respect to Permit-to-Purchase restrictions on handguns, which are effective).

⁸⁵ See Phillip J. Cook, Richard J. Harris, Jens Ludwig & Harold A. Pollack, *Some Sources of Crime Guns in Chicago: Dirty Dealers, Straw Purchasers, and Traffickers*, 104 J. CRIM. L. & CRIMINOLOGY 717, 752-54 (2015) (analyzing available data from the Bureau of Alcohol, Tobacco, and Firearms to conclude that straw purchases and illegal trafficking likely provide a significant source of guns for gang members who ultimately use the guns in criminal activity).

penalties for straw purchases and trafficking may encourage prosecution and thereby deter such offenses.⁸⁶

These measures will likely have little effect on school shootings, however. In around eighty percent of such tragedies, perpetrators obtained firearms from their homes, including from family members.⁸⁷ So, while new penalties may limit other criminals' access to weapons, such measures are unlikely to affect prospective school shooters.

3. *Background Checks*

Background checks likely reduce gun violence and gun homicides generally, but do not affect mass shootings or school shootings. Background checks conducted by gun dealers at the point of sale may decrease firearm homicides.⁸⁸ Universal background checks likely also reduce total homicides, and firearm homicides in particular.⁸⁹ But no conclusive evidence suggests a connection between background

⁸⁶ Cassandra K. Crifasi, Molly Merrill-Francis, Daniel W. Webster, Garen J. Wintermute & Jon S. Vernick, *Changes in the Legal Environment and the Enforcement of Firearm Transfer Laws in Pennsylvania and Maryland*, 25 INJURY PREVENTION 2 (2019).

⁸⁷ PETERSON & DENSLEY, *supra* note 45, at 165 (“Our data show that 80% of school shooters get their weapons from family members.”).

⁸⁸ Amanda Charbonneau, *Effects of Background Checks on Violent Crime*, RAND, (Jan. 10, 2023), <https://www.rand.org/research/gun-policy/analysis/background-checks/violent-crime.html> [<https://perma.cc/CT2B-FYQ9>] (concluding from a meta-analysis of high-quality literature in the space that there exists “moderate evidence that dealer background checks may reduce firearm homicides”) (citing, *inter alia* Mark Gius, *The Effects of State and Federal Background Checks on State-Level Gun-Related Murder Rates*, 45 APPLIED ECON. 4090, 4090 (2015)) (examining large data set to find that dealer background checks reduce firearm homicides); Bisakha Sen & Anantachai Panjamapirom, *State Background Checks for Gun Purchases and Firearm Deaths: An Exploratory Study*, 55 PREVENTATIVE MED. 346, 348 (2012) (finding that dealer background checks reduce firearm homicides); E.R. Vigdor & J.A. Mercy, *Do Laws Restricting Access to Firearms by Domestic Violence Offenders Prevent Intimate Partner Homicide*, 30 EVALUATION REV. 313, 341 (2006) (finding that states with a strong system for checking restraining orders saw significantly fewer intimate partner homicides)

⁸⁹ Charbonneau, *supra* note 88 (finding “moderate evidence that universal background check laws reduce total homicides” and “limited evidence that universal background checks reduce firearm homicides”) (citing, *inter alia*, Elinore J. Kaufman, Christopher N. Morrison, Erik J. Olson, David K. Humphreys, Douglas J. Wiebe, Niels D. Martin, Carrie A. Sims, Mark H. Hoofnagle, C. William Schwab, Patrick M. Reilly & Mark J. Seamon, *Universal Background Checks for Handgun Purchases Can Reduce Homicide Rates of African Americans*, 88 J. TRAUMA AND ACUTE CARE SURGERY 825, 826 (2020) (finding significant reductions in firearm homicides for Black populations after the introduction of universal background checks); Michael Siegel, Benjamin Solomon, Anita Knopov, Emily F. Rothman, Shea W. Cronin, Ziming Xuan, and David Hemenway, *The Impact of State Firearm Laws on Homicide Rates in Suburban and Rural Areas Compared to Large Cities in the United States 1991-2016*, 36 J. RURAL HEALTH 255, 255 (2020); Anita Knopov, Michael Siegel, Ziming Xuan, Emily F. Rothman, Shea W. Cronin & David Hemenway, *The Impact of State Firearm Laws on Homicide Rates Among Black and White Populations in the United States 1991-2016*, 44 HEALTH & SOCIAL WORK 232, 236 (2019) (finding universal background checks associated with an eleven percent reduction in total homicides);

checks and mass shootings or school shootings.⁹⁰ And again, because most school shooters obtain their guns from their homes, background checks may not limit access to firearms by prospective perpetrators.

4. *Minimum-Age Laws*

Studies suggest, but do not conclusively prove, that laws raising the minimum age to buy firearms may reduce mass shootings. Few high-quality studies have considered the issue and insufficient research is available to establish a clear effect.⁹¹ Notably, however, one high-quality study found that raising the minimum age to buy a firearm to twenty-one may reduce the likelihood of mass shootings.⁹² Other research yields unclear results as to whether minimum-age laws affect firearm crimes more generally.⁹³

5. *“Red Flag” Laws*

Research also yields inconclusive results as to the effects of “red flag” laws that provide for the confiscation of guns from potentially dangerous people.⁹⁴ Anecdotally, however, most perpetrators of school shootings inform someone of

Michael Siegel, Molly Pahn, Ziming Xuan, Eric Fleegler & David Hemenway, *The Impact of State Firearm Laws on Homicide and Suicide Deaths in the USA, 1991–2016: A Panel Study*, 34 J. GEN. INTERNAL MED. 2021, 2021 (2019) (finding that universal background check laws reduced firearm deaths at the state level).

⁹⁰ Terry L. Schell, *Effects of Background Checks on Mass Shootings*, RAND (2023), <https://www.rand.org/research/gun-policy/analysis/background-checks/mass-shootings.html> [<https://perma.cc/87ZJ-4NMC>] (concluding from a meta-analysis of literature in the space that “evidence for the effect of background checks on mass shootings is inconclusive”).

⁹¹ Rosanna Smart, *Effects of Minimum Age Requirements on Mass Shootings*, RAND (January 10, 2023), <https://www.rand.org/research/gun-policy/analysis/minimum-age/mass-shootings.html>, [<https://perma.cc/HTJ5-W7X6>] (“We identified two qualifying studies that examined how minimum age requirements for purchasing a firearm affect the incidence of mass shootings or school shootings. . . . On the basis of these studies, we find inconclusive evidence for how minimum age requirements for purchasing a firearm affect mass shootings.”).

⁹² *Id.* (citing Daniel Hamlin, *Are Gun Ownership Rates and Regulations Associated with Firearm Incidents in American Schools? A Forty-Year Analysis (1980-2019)*, 76 J. CRIM. JUST. 1, 7 (2021) (finding as a secondary conclusion that states with a minimum age of 21 for firearm purchases may have a reduced likelihood of mass shootings)).

⁹³ Andrew R. Morral, *Effects of Minimum Age Requirements on Violent Crime*, RAND (Jan. 10, 2023), <https://rand.org/research/gun-policy/analysis/minimum-age/violent-crime.html> [<https://perma.cc/6ZG9-LRRT>] (concluding that available high-quality studies on the subject yield “inconclusive evidence for how minimum age requirements for purchasing a firearm affect total and firearm homicides” and “inconclusive evidence for how minimum age requirements for possessing a firearm affect total homicides, firearm homicides, and other violent crime”) (emphasis added).

⁹⁴ See *The Effects of Extreme Risk Protection Orders*, RAND (Jan. 10, 2023), <https://www.rand.org/research/gun-policy/analysis/extreme-risk-protection-orders.html> [<https://perma.cc/U7G2-2PVS>] (finding inconclusive results as to how the implementation of “red flag” laws affects any identified outcome, including violent crime and mass shootings).

their plans.⁹⁵ And most mass shooters experience some kind of mental health or personal crisis before their crimes.⁹⁶ These findings suggest that most perpetrators provide enough warning that “red flag” laws could be deployed to prevent many tragedies. Descriptive studies also identify many instances in which these measures were successfully deployed to confiscate firearms from people threatening mass shootings, which bolsters this conclusion.⁹⁷

IV. EVALUATING THE STATE AND FEDERAL POLICY RESPONSES

Evidence does not clearly show that any state or federal legislative response to school shootings in 2022 and 2023 will have a meaningful effect on school shootings. State policies include some minor appropriations that may modestly improve school safety. And the BSCA also includes potentially beneficial appropriations. The federal law’s firearms restriction may also help to reduce gun violence generally.

A. State Policies

Lawmakers in both Texas and Tennessee responded to the shootings in their states with measures prioritizing harmful school hardening practices and school policing in particular. The states also dedicated some limited resources toward

⁹⁵ PETERSON & DENSLEY, *supra* note 45, at 79 (finding that “nearly half of all mass shooters tell someone that they are thinking about violence before they do it” and “K–12 school shooters are most likely to leak their plans”); *see also* UNITED STATES SECRET SERVICE, PROTECTING AMERICA’S SCHOOLS: A U.S. SECRET SERVICE ANALYSIS OF TARGETED SCHOOL VIOLENCE 43 (2019) (explaining that most perpetrators of school shootings from 2007–2018 “elicited concern from bystanders regarding the safety of the attacker or those around them” prior to their attacks).

⁹⁶ PETERSON & DENSLEY, *supra* note 45, at 54 (“Eighty percent of all mass shooters in our database were in a state of crisis in the minutes, hours, days, or weeks prior to committing their shootings.”).

⁹⁷ *See* April M. Zeoli, Shanno Frattaroli, Leslie Barnard, Andrew Bowen, Annette Christy, Michele Easter, Reena Kapoor, Christopher Knopke, Wejuan Ma, Amy Locznik, Michael Norko, Elise Omaki, Jennifer K. Paruk, Veronica A. Pear, Ali Rowhani-Rahbar, Julia P. Scleimer, Jeffrey W. Swanson, Garen J. Wintemute, *Extreme Risk Protection Orders in Response to Threats of Multiple Victim/Mass Shooting in Six U.S. States: A Descriptive Study*, PREVENTATIVE MED. Dec. 2022, 4, 4 (identifying numerous instances in which red-flag laws were deployed in response to threats of mass shootings); Garen J. Wintemute, Veronica A. Pear, Julia P. Schleimer, Rocco Pallin, Sydney Sohl, Nicole Kravitz-Wirtz, & Elizabeth A. Tomish, *Extreme Risk Protection Orders Intended to Prevent Mass Shootings*, 171 ANNALS OF INTERNAL MED. 655, 655 (2019) (identifying twenty-one cases in which California’s red flag law was used in response to threats of mass shootings and concluding “the cases suggest that this urgent individualized intervention can play a role in efforts to prevent mass shootings . . .”).

potentially beneficial safety planning and mental health programs. But modest gun control measures with the potential to reduce mass shootings failed in both places.

1. Texas

Texas's policy response to the tragedy at Robb Elementary is unlikely to prevent school shootings or otherwise improve school safety and will likely undermine other outcomes for students.

Texas House Bill 3 requires that all public schools host an armed guard.⁹⁸ As described above, school police provide little proven benefit to school safety, and their presence may make school shootings deadlier.⁹⁹ Research also shows the presence of police in schools increases the rates at which students experience exclusionary discipline—punishments that, in turn, increase students' likelihood of eventual interaction with the criminal justice system.¹⁰⁰ To the extent schools opt to rely on armed guards who are not police—such as armed staff members—available research shows no clear safety benefits from this practice.¹⁰¹ Texas's primary response to the Uvalde shooting is thus unlikely to impact school safety and will instead negatively affect students by increasing schools' reliance on harmful disciplinary practices.

The bill's safety planning requirements and general appropriations may provide some limited benefits to school safety. House Bill 3 codifies a requirement that schools regularly conduct lockdown drills,¹⁰² and exercises of this kind can effectively prepare students for emergencies.¹⁰³ Lawmakers also appropriated some funds that may provide grants for mental health programming,¹⁰⁴ which can reduce violent tendencies in students and address environmental factors that accompany

⁹⁸ 2023 Tex. Sess. Law Serv. Ch. 896 § 10 (West).

⁹⁹ PETERSON & DENSLEY, *supra* note 45, at 155; Cox et al., *supra* note 45, at 20; Burch & Binder, *supra* note 46, at A1; Goodman & Sandoval, *supra* note 47, at A1; Peterson et al., *supra* note 48, at 5; Fisher et al., *supra* note 49, at 21; Gottfredson et al., *supra* note 49, at 930.

¹⁰⁰ Fisher et al., *supra* note 49, at 21; Fisher & Hennessy, *supra* note 50, at 217; Weisburst, *supra* note 50, at 338; Gerlinger, et al., *supra* note 51, at 1503; Ramey, *supra* note 51, at 132; Monahan et al., *supra* note 51, at 1110.

¹⁰¹ RAND, *supra* note 54, at 2.

¹⁰² 2023 Tex. Sess. Law Serv. Ch. 896 § 12 (West).

¹⁰³ Schildkraut et al., *supra* note 64, at 170; Schildkraut and Nickerson, *supra* note 65, at 632; PETERSON & DENSLEY, *supra* note 45, at 108.

¹⁰⁴ 2023 Tex. Sess. Law Serv. Ch. 458 § 4.02 (West); 2023 Tex. Sess. Law Serv. Ch. 896 § 23 (West).

school violence.¹⁰⁵ But because the state’s armed guard mandate is otherwise unfunded, schools may instead use these grant funds to hire police or other guards.¹⁰⁶

Texas’s failure to pass a minimum age law represents a missed opportunity.¹⁰⁷ At least one study suggests that laws of this kind may help prevent mass shootings, though this finding is not conclusive.¹⁰⁸ Anecdotally, the eighteen-year-old perpetrator of the shooting at Robb Elementary legally bought a semi-automatic weapon several days before the tragedy, indicating that a minimum-age law could have prevented the incident.¹⁰⁹ By contrast, police stationed at Robb Elementary failed to intervene for well over an hour—a clear failure, according to the Department of Justice.¹¹⁰ Texas policymakers in the 2023 legislative session thus failed to implement a measure that could have prevented violence at Robb Elementary and instead doubled down on a policy that manifestly failed to do so.

2. *Tennessee*

Tennessee’s policy response to the shooting at The Covenant School prioritized similar ineffective policies, though it may also include some modestly beneficial elements.

Like their counterparts in Texas, Tennessee lawmakers prioritized school policing and school hardening during the state’s 2023 legislative session. The state’s policy response extends school policing to private schools and allocates \$140 million to fund the placement of police in schools throughout the state.¹¹¹ Again, this practice provides little proven benefit to student safety and contributes to harmful student discipline practices.¹¹² The state’s school safety bill also provides more than

¹⁰⁵ Heller et al., *supra* note 74, at 2; DuPont-Reyes et al., *supra* note 75, at 66–67; Mytton et al., *supra* note 76, at 752; Gaffeny et al., *supra* note 77, at 112; PETERSON AND DENSLEY, *supra* note 45, at 39, 54; Paolini et al., *supra* note 79, at 3.

¹⁰⁶ S. 5, 88th Leg. 4th Spec. Sess. § 2 (Tex. 2023); H.R. 2, 88th Leg. 4th Spec. Sess. § 1(b-1) (Tex. 2023); Pandey, *supra* note 15, (“The fourth special legislative session this year ended without increased funding for school safety—even though public schools have complained . . . they don’t have enough money to met new safety mandates . . .”).

¹⁰⁷ H.R. 2744, 88th Leg. § 1(a)(2)(B) (Tex. 2023); Serrano, *supra* note 17 (detailing how the legislature’s failure to place H.B. 2744 on the House Agenda after a key deadline “likely end[ed] the bill’s chances of becoming law”); Svitek, *supra* note 18 (describing a survey from the University of Texas at Austin that “found 76% of voters support ‘raising the legal age to purchase any firearm from 18 years of age to 21 years of age.’”); Serrano, *supra* note 19.

¹⁰⁸ Smart, *supra* note 91, at 2–3; Smart, *supra* note 92, at 2; Morral, *supra* note 93, at 5–6.

¹⁰⁹ Reese Oxner, *Uvalde Gunman Legally Bought AR Rifles Days Before Shooting, Law Enforcement Says*, TEX. TRIB. (May 25, 2022) <https://www.texastribune.org/2022/05/25/uvalde-shooter-bought-gun-legally/> [<https://perma.cc/72JH-YE2K>].

¹¹⁰ DOJ, CRITICAL INCIDENT REVIEW: ACTIVE SHOOTER AT ROBB ELEMENTARY 9–16, 90, 409 (2024).

¹¹¹ S. 315, 113th Gen. Assemb., 2023 Reg. Sess. § 1(a) (Tenn. 2023); 2023 Tenn Pub. Acts Ch. No. 87; H.R. 1545, 113th Gen. Assemb., 2023 Reg. Sess. § 54 (Tenn. 2023).

¹¹² PETERSON & DENSLEY, *supra* note 45, at 155; Burch & Binder, *supra* note 46, at A1; Goodman & Sandoval, *supra* note 47, at A1; Peterson et al., *supra* note 48, at 5; Fisher et al., *supra* note 49,

\$20 million that can be applied toward physical security.¹¹³ Measures like video cameras and metal detectors provide little proven benefit to school safety and may undermine other student outcomes.¹¹⁴ Door locks, however, can help during emergencies.¹¹⁵ Tennessee's prioritization of school policing and physical security is thus unlikely to improve school safety and may be counterproductive.

Tennessee's codification of lockdown drills and threat assessments may improve school safety.¹¹⁶ Lockdowns may help to save lives during emergencies.¹¹⁷ And threat assessments can help to identify and address potential issues before they materialize, particularly because most school shooting perpetrators inform others of their plans.¹¹⁸

Tennessee also provided modest funding for mental health supports.¹¹⁹ School-based mental health programming can reduce violent tendencies in children and address environmental factors that contribute to school violence, like bullying and mental illness.¹²⁰ But, the state's low level of funding—just \$8 million—provides only minimal support and is thus unlikely to have much effect.

The failure of a proposed “red flag” law in Tennessee represents a missed opportunity to implement a potentially beneficial intervention. Laws of this kind remain unproven.¹²¹ But, most school shooters—including the perpetrator of the shooting at The Covenant School—display warning signs before their crimes.¹²²

at 18; Gottfredson et al., *supra* note 49, at 930; Fisher et al., *supra* note 50, at 217; Weisburst, *supra* note 50, at 338; Gerlinger et al., *supra* note 51, at 1503; Ramey, *supra* note 51, at 132; Monahan et al., *supra* note 51, at 1110; Fisher et al., *supra* note 52, at 18; Fisher et al., *supra* note 53, at 2.

¹¹³ H.R. 1545, 113th Gen. Assemb., 2023 Reg. Sess. § 60 (Tenn. 2023).

¹¹⁴ Nickerson & Martens, *supra* note 55, at 238; Tanner-Smith et al., *supra* note 56, at 102; Hankin et al., *supra* note 57, at 105; Fisher et al., *supra* note 58, at 22; SCHILDKRAUT & NICKERSON, *supra* note 59, at 54; Perumean-Chaney & Sutton, *supra* note 60, at 581–582; Johnson et al., *supra* note 62, at 735; Tanner-Smith & Fisher, *supra* note 63, at 204.

¹¹⁵ SCHILDKRAUT & NICKERSON, *supra* note 59, at 54.

¹¹⁶ H.R. 322, 113th Gen. Assemb., 2023 Reg. Sess. §§ 5(a), 5(d), 7(a), 10(a) (Tenn. 2023); 2023 Tenn Pub. Acts Ch. No. 367 at §§ 5(a), 7(a).

¹¹⁷ Schildkraut et al., *supra* note 64, at 170; Schildkraut & Nickerson, *supra* note 65, at 632; PETERSON & DENSLEY, *supra* note 45, at 108; SCHILDKRAUT & NICKERSON, *supra* note 59, at 66; Nickerson & Zhe, *supra* note 67, at 506; Schildkraut et al., *supra* note 68, at 1891; Schildkraut et al., *supra* note 68, at 102–03; ElSherief et al., *supra* note 69, at 8–9.

¹¹⁸ Borum et al., *supra* note 70, at 31; Cornell et al., *supra* note 71, at 527; Cornell et al., *supra* 71, at 119–21; PETERSON & DENSLEY, *supra* note 45, at 104; PETERSON & DENSLEY, *supra* note 45, at 79.

¹¹⁹ H.R. 1545, 113th Gen. Assemb., 2023 Reg. Sess. § 54 (Tenn. 2023).

¹²⁰ Heller et al., *supra* note 74, at 1–2; DuPont-Reyes et al., *supra* note 75, at 66–67; Mytton et al., *supra* note 76, at 752; Gaffney et al., *supra* note 77, at 111.

¹²¹ RAND, *supra* note 94, at 2.

¹²² PETERSON & DENSLEY, *supra* note 45, at 79; PETERSON & DENSLEY, *supra* note 45, at 54.

And some descriptive research indicates that “red flag” laws can effectively disarm people threatening mass shootings.¹²³

B. Federal Policy: The Bipartisan Safer Communities Act

The BSCA shows more potential to reduce gun violence than do state policy responses. The legislation’s funding for state-level “red flag” laws shows promise for the reasons above, though again, such measures remain unproven.¹²⁴ These appropriations also rely on state legislatures implementing such laws, which—as Tennessee demonstrated in 2022—is far from guaranteed.

The law’s background check expansions are similarly unproven with respect to mass shootings, though they may help to reduce gun violence. The Act modestly expands the records that may be reviewed in background checks for gun buyers under age twenty-one.¹²⁵ Evidence suggests that background checks reduce gun violence.¹²⁶ But the effects of the BSCA’s narrow expansion are uncertain and will likely be limited only to the targeted, under-twenty-one population. Evidence also does not clearly show whether background checks affect mass shootings or school shootings in particular, meaning these provisions are not certain to affect such tragedies.¹²⁷

The Act’s new penalties for illegal gun transfers may reduce the flow of firearms to criminals, but evidence does not clearly show that these measures will reduce gun violence or mass shootings.¹²⁸ This is because most perpetrators of school shootings obtain the firearms used in their attacks from home and not via illicit means.¹²⁹ Even so, descriptive studies infer that firearms trafficking and straw purchases are central to the transfer of firearms for other criminal purposes, and new penalties for these offenses may contribute to broader efforts to reduce the proliferation of firearms.¹³⁰

The law’s sprawling appropriations are also likely to have a mixed impact. Between several grant programs, including the Community Mental Health Block Grant Program and School-Based Mental Health Services Grants, the BSCA appropriates well over \$1 billion toward mental health programming for students and children.¹³¹ Evidence shows that such programming reduces violent tendencies

¹²³ Zeoli et al., *supra* 97, at 4.

¹²⁴ RAND, *supra* 94, at 2.

¹²⁵ See Bipartisan Safer Communities Act, § 12001, 136 Stat. at 1322–24.

¹²⁶ Charbonneau, *supra* note 88, at 15; Sen & Panjamapirom, *supra* note 88, at 348–49; Vigdor & Mercy, *supra* note 88, at 337; Siegel et al., *supra* note 89, at 255; Knopov et al., *supra* note 89, at 237–38; Siegel et al., *supra* note 89, at 2021; Schell, *supra* note 90, at 2–3.

¹²⁷ Charbonneau, *supra* note 88, at 15; Sen & Panjamapirom, *supra* note 88, at 348–49; Vigdor & Mercy, *supra* note 88, at 323.

¹²⁸ Cook et al., *supra* 85, at 752–54; Crifasi et al., *supra* note 86, at 2; PETERSON & DENSLEY, *supra* note 45, at 155.

¹²⁹ PETERSON & DENSLEY, *supra* note 45, at 165.

¹³⁰ Cook et al., *supra* 85, at 752–54; Crifasi et al., *supra* note 86, at 2.

¹³¹ See Bipartisan Safer Communities Act, § 12001, 136 Stat. at 1324; OFF. ELEMENTARY & SECONDARY EDUC., U.S. DEP’T EDUC., *supra* note 41; OFF. ELEMENTARY & SECONDARY EDUC.,

among students and addresses environmental issues like bullying that often accompany school violence.¹³² The BSCA's considerable appropriations toward this purpose are thus likely to have a meaningful impact.

That said, the BSCA also makes funding available for harmful school hardening measures, including school policing and physical security, through its funding for STOP School Violence Act purposes and the Stronger Connection Grant Program.¹³³ This same pool of money can also be used for more productive purposes, including mental health programming and school discipline reform.¹³⁴ But given the size of the grant program, it is likely that some of this funding will flow toward counterproductive school hardening measures.

V. CONCLUSIONS

Evidence suggests that the legislative responses to major school shootings in 2022 and 2023 will yield mixed results. State-level policies enacted after these tragedies will likely have little effect on school violence and may result in harmful outcomes for students. Neither Texas nor Tennessee enacted new firearms restrictions despite potentially beneficial proposals. Instead, legislators in both jurisdictions doubled down on harmful school policing policies and security measures proven to negatively affect students.

The Bipartisan Safer Communities Act shows more promise. It is the first major firearms restriction passed in decades, and it cleared Congress on a bipartisan basis, showing the possibility of consensus around gun control. The law also provides enormous funding for mental health programming and state-level red-flag laws that may help protect children. However, the Act's modest firearms restrictions are not necessarily proven to prevent tragedies like those at Robb Elementary and The Covenant School, and some of its appropriations—including those toward school policing—may be harmful.

Lawmakers can build on this progress and implement additional, meaningful reform. However, if policymakers wish to prevent these tragedies in the future, they must look to the evidence.

U.S. DEP'T EDUC., *supra* note 42; Bipartisan Safer Communities Supplemental Appropriations Act, 136 Stat. at 1340; Pub. Health Service Act, *supra* note 44, at § 300 x-1.

¹³² Heller et al., *supra* note 74, at 2; DuPont-Reyes et al., *supra* note 75, at 72; Mytton et al., *supra* note 76, at 752; Gaffeny et al., *supra* note 77, at 112.

¹³³ Bipartisan Safer Communities Supplemental Appropriations Act, 136 Stat. at 1338-39, 1341; Students, Teachers, and Officers Preventing School Violence Act of 2018, Pub. L. 115-141 §§ 501-505; Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10, §§ 4101-4111.

¹³⁴ Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10, §§ 4101-4111.