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The Origins of Gun Policy in U.S. States

Geoff Dancy, Mirya Holman and Kayden McKenzie*

INTRODUCTION

In 2015, the U.N. Human Rights Council’s (“HRC”) periodic review of the United States confronted the country’s gun violence problem. Among other things, Iceland’s delegation recommended that the U.S. government “take necessary measures to reduce gun violence,” as the delegation was “concerned at the large number of gun-related deaths and injuries, which disproportionately affect members of racial and ethnic minorities.”¹ This proposal is nice in theory. In reality, large-scale national action on gun violence has always been unusual in America, and Congress remains in a decades-long stalemate on gun regulations. Furthermore, federal efforts like the National Criminal History Improvement Program—meant to improve electronic records related to criminal backgrounds of purchasers—have undergone gradual defunding.² If the HRC is calling on the U.S. federal government to act, it is looking in the wrong place. Though gun violence is a problem of national concern, gun policy decisions have mostly devolved to state and local governments.³

In fact, American states are amid a gun legislation bonanza. Between 1991 and 2016, state legislatures made 609 changes to existing firearms law provisions, an average of 23.4 per year. In 2015 alone, state legislatures introduced 795 pieces of gun-related legislation for consideration.⁴ Within this supercharged policy environment, state legislatures end up enacting laws that pull in different directions. In thirty-three states, there was a net increase in restrictive laws meant to prevent firearms injuries since 1991; sixteen other states in the same time period

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1. Hum. Rights Council, Rep. Working Grp. on Universal Periodic Rev., U.N. Doc. A/HRC/30/12 at 27 (2015).

2. WILLIAM J. KROUSE, CONG. RESEARCH SERV., RL32842, GUN CONTROL LEGISLATION 30-31 (2012).

3. See Michael P. O’Shea, *Federalism and the Implementation of the Right to Arms*, 59 SYRACUSE L. REV. 201, 203 (2008).

4. Michael Siegel et al, *Firearm-Related Laws in All 50 US States, 1991–2016*, 107 AM. J. PUB. HEALTH 1122 (2017). See also *infra* Table 1.

experienced a net change toward laws expanding gun possession and use.⁵ This result is a national patchwork of firearms regulations that varies dramatically across time and space.

Because most legislative action in the United States occurs at the state level,⁶ mastery of state lawmaking is key to lessening gun violence and its racialized components, as the HRC suggests. However, the scholarly community currently knows very little about the determinants of state firearms legislation. Commentators often simplify by attributing patterns in firearms policy to competing conceptions of rights. Some Americans, “gun grabbers,” think of firearms primarily as threats to their rights to life and personal security.⁷ Others, “gun nuts,” treat the right to bear arms itself as a fundamental human right.⁸ Conventional wisdom holds that these groups sort neatly across the country: gun grabbers in blue states push gun control, and gun nuts in red states promote gun rights.

The idea that political attitudes about firearms vary by place in predictable ways is intuitive and may be called “political geography.” Political geography is a promising approach to addressing the complexities of state gun regulations because it allows us to both examine the two separate dimensions of gun policy (pro-control and pro-rights), while also acknowledging the highly spatial nature of gun views and use. For example, demand for gun rights is concentrated in some areas, as there is intense geographic variation in where people own guns⁹ and where gun

5. Siegel et al., *supra* note 4, at 1125-26 tbl.2.

6. For discussions of why Congress fails to legislate on firearms, see Camilo Montoya-Galvez, *As New Zealand Eyes Weapons Ban, U.S. Gun Control Advocates Decry “Heartbreaking” Lack of Action*, CBS NEWS (Mar. 28, 2019), <https://www.cbsnews.com/news/as-new-zealand-eyes-assault-weapons-ban-gun-control-advocates-decry-heartbreaking-lack-of-action/>; Harry L. Wilson, *Parkland Shooting: One Year Later, Congress Still Avoids Action on Gun Control*, THE CONVERSATION (Mar., 7 2019), <http://theconversation.com/parkland-shooting-one-year-later-congress-still-avoids-action-on-gun-control-111796>.

7. See generally ADAM WINKLER, GUNFIGHT: THE BATTLE OVER THE RIGHT TO BEAR ARMS IN AMERICA 15-43 (2011) (introducing the term “gun grabbers” and discussing their concerns).

8. See generally *id.* at 45-92 (introducing the term “gun nuts” and discussing their concerns).

9. Ruth Igielnik, *Rural and Urban Gun Owners Have Different Experiences, Views on Gun Policy*, PEW RES. CTR. (July 10, 2017), <http://www.pewresearch.org/fact-tank/2017/07/10/rural-and-urban-gun-owners-have-different-experiences-views-on-gun-policy/>; Kellie R. Lynch et al., “*People Will Bury Their Guns before They Surrender Them*”: Implementing Domestic Violence Gun Control in Rural, Appalachian Versus Urban Communities, 83 RURAL SOC. 315 (2018).

sellers are located.¹⁰ Similarly, not all Americans are equally likely to fear or suffer from gun violence, which is highly concentrated in certain spaces.¹¹

However, current efforts to evaluate gun policy from a geographic perspective fall short. First, most approaches treat each U.S. state as a black box. Some states, like Missouri and Florida, are treated as uniformly pro-gun,¹² while other states like California or Connecticut are seen as wholly in favor of greater gun control.¹³ This glosses over the fact that some states enact pro-gun laws alongside other gun control regulations. Pennsylvania, for example, enacted nineteen restrictive firearms provisions since 1991,¹⁴ but also passed a stand-your-ground (“SYG”) law in 2011.¹⁵ Political interests also vary widely inside states. Some areas within a single state favor gun control, while others favor gun rights. For instance, urban-dwellers in New York City might lean toward gun control, while upstate New Yorkers might prefer looser restrictions. So far, social science research has provided very few tools for considering these specifics when discussing gun policy. A second problem is that scholarship focuses only on the outcomes, like bills that become law, and ignores the legislative process itself. A great deal of research focuses on

10. See *infra* Part III.

11. For example, race and ethnicity are correlated to attitudes about gun rights. David Fortunato, Matthew Hayes & Matthew V. Hibbing, RACE, SEX, AND GUNS: THE CONTEXTUAL NATURE OF AMERICANS’ POLICY POSITIONS (2018); Alexandra Filindra & Noah J. Kaplan, *Racial Resentment and Whites’ Gun Policy Preferences in Contemporary America*, 38 POL. BEHAV. 255 (2016).

12. Steve Contorno, *NRA Sway: For Florida Officials, It’s Always Hammer Time*, TAMPA BAY TIMES (Sept. 21, 2018), <https://www.tampabay.com/florida-politics/buzz/2018/09/21/nra-sway-for-florida-officials-its-always-hammer-time/>; Eugenio Weigend Vargas & Jiyeon Kim, *Weak Gun Laws and Public Safety Concerns in the State of Missouri*, CTR. AM. PROGRESS (Oct. 29, 2018, 9:01 AM), <https://www.americanprogress.org/issues/guns-crime/reports/2018/10/29/460008/weak-gun-laws-public-safety-concerns-state-missouri/>.

13. Lisa W. Foderaro & Kristin Hussey, *In Wake of Florida Massacre, Gun Control Advocates Look to Connecticut*, N.Y. TIMES (Feb. 17, 2018), <https://www.nytimes.com/2018/02/17/nyregion/florida-shooting-parkland-gun-control-connecticut.html>; Ian Urbina, *A Look at California Gun Laws, Among the Toughest in the Nation*, N.Y. TIMES (Nov. 8, 2018), <https://www.nytimes.com/2018/11/08/us/california-gun-laws.html>.

14. Siegel et al., *supra* note 4, at 1125 tbl.2.

15. Crimes and Offenses—Omnibus Amendments, 2001 Pa. Legis. Serv. Act 2011-10 (West) (codified at 18 PA. STAT. AND CONS. STAT. ANN § 505(2.3) (Westlaw through 2018 Reg. Sess.).

the impact of various state-wide statutes like assault weapons bans or SYG laws.¹⁶ Yet we possess little knowledge of all the work that goes on behind the scenes to change state legislation—including lobbying, drafting, bill introduction, and bill sponsorship. Observers often claim that legislatures are out of step with the majority opinion on guns, which supports stricter regulation.¹⁷ Hard-to-observe details of the legislative process may be partly to blame.

In this article, we first review the current state of knowledge about state gun policy. We then use a dataset of over 4,700 introduced state bills to investigate the political and geographic origins of different types of firearms legislation. Each of these bills, initiated between 2011 and 2015, has at least one sponsor, and many have a number of co-sponsors. A very small percentage of these proposed bills passed into law, but data on bill introductions and sponsorships are informative.¹⁸ They can tell us who are the legislators setting the gun rights and gun control agendas in different states. They can also tell us what districts these legislators come from, which is enormously useful for answering certain questions: Are lawmakers from certain districts more likely than others to bring firearms legislation? Are there recognizable patterns in legislator activity that might be attributed to the characteristics of their home districts? In short, what are the political and geographic origins of gun policy? In what follows,

16. See, e.g., Mark Gius, *The Effects of State and Federal Gun Control Laws on School Shootings*, 25 APPL. ECON. LETT. 317–320 (2018); David K. Humphreys, Antonio Gasparrini & Douglas J. Wiebe, *Evaluating the Impact of Florida's "Stand Your Ground" Self-defense Law on Homicide and Suicide by Firearm: An Interrupted Time Series Study*, 177 [J]AMA INTERN. MED. 44–50 (2017).

17. See Quoctrung Bui & Margot Sanger-Katz, *How to Prevent Gun Deaths? Where Experts and the Public Agree*, N.Y. TIMES (Jan. 10, 2017), <http://www.nytimes.com/interactive/2017/01/10/upshot/How-to-Prevent-Gun-Deaths-The-Views-of-Experts-and-the-Public.html>.

18. For information on the importance of bill introductions and sponsorships as informative of legislative intent and behavior, see TIFFANY D. BARNES, *GENDERING LEGISLATIVE BEHAVIOR: INSTITUTIONAL CONSTRAINTS AND COLLABORATION IN ARGENTINA* (2016); Justin H. Kirkland & Justin H. Gross, *Measurement and Theory in Legislative Networks: The Evolving Topology of Congressional Collaboration*, 36 SOC. NETWORKS 97 (2014); Mirya R. Holman & Anna Mitchell Mahoney, *Stop, Collaborate, and Listen: Women's Collaboration in US State Legislatures*, 43 LEGIS. STUD. Q. 179 (2018) (online first); Mirya R. Holman & Anna Mitchell Mahoney, *The Choice Is Yours: Caucus Typologies and Collaboration in U.S. State Legislatures*, 55 REPRESENTATION (forthcoming 2019).

we offer some answers to these questions. Among other things, we discover that gun rights legislation has more partisan roots than gun control legislation. We also find that that gun rights legislation is not prevalent in districts with higher crime rates, but is more prevalent in those that have larger rural populations, have a higher percentage of white occupants, and have greater gun commerce. Where gun control legislation is driven by a desire decrease violence, gun rights legislation is driven by political, economic, and cultural impulses.

I. WHAT DO WE KNOW ABOUT GUN POLICY?

A. The Impact of Gun Policy

A common refrain among journalists is that little research on gun policy exists because the National Rifle Association (“NRA”) blocks it.¹⁹ While it is true that the NRA was instrumental in lobbying for the 1996 Dickey Amendment,²⁰ which makes it more difficult for the Centers for Disease Control and Prevention (“CDC”) to examine gun violence,²¹ it is not accurate that research is lacking in general. In fact, a database collected by GVPedia counts 780 total studies of firearms policy between 1968 and 2018.²²

Figure 1 uses the GVPedia data to provide counts of gun policy research by year and by academic discipline. The left panel shows that the vast majority of studies were conducted in the last twenty years, though more were published in the 1990s than in the decades following. The right panel shows the dominance of public health in gun policy research: 410 of 780 (52.6%) articles on the topic feature in public health journals. Criminology

19. Samantha Raphelson, *How the NRA Worked to Stifle Gun Violence Research*, NPR (Apr. 5, 2018, 3:01 PM), <https://www.npr.org/2018/04/05/599773911/how-the-nra-worked-to-stifle-gun-violence-research>.

20. *Id.*

21. See Omnibus Consolidated Appropriations Act of 1997, Pub. L. No. 104-208, 110 Stat. 3009, 3009-244 (1996).

22. *Study Database*, GVPEDIA, <https://www.gvpedia.org/study-database/> (last visited Apr. 7, 2019).

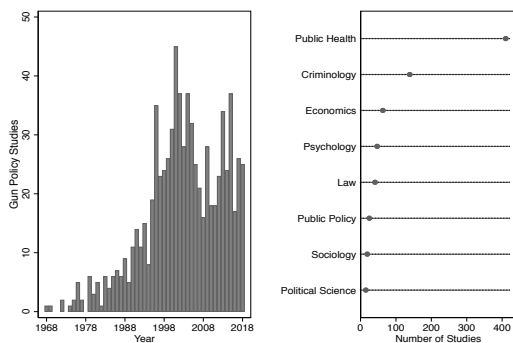
and economics also have a great deal of influence, accounting for a total of 25% of all studies. Together, these three fields account for nearly four of every five gun studies. This matters because it shapes the nature of knowledge about firearms in the United States.

The lion's share of research examines the impact, rather than the origins, of gun policy. The public health approach focuses almost universally on the lethality of firearms proliferation and availability. To public health researchers, guns are an independent cause of epidemic levels of death, whether it is through suicide, homicide, or accidental shootings.²³ Therefore, policies that decrease gun availability lower the risk of fatalities, and those policies that expand firearm possession will result in higher rates of injury, soaring hospital costs, and reduced life expectancy.²⁴

23. DAVID HEMENWAY, PRIVATE GUNS, PUBLIC HEALTH 18 (2006); David Hemenway & Matthew Miller, *Public Health Approach to the Prevention of Gun Violence*, 368 NEW ENG. J. MED. 2033, 2034 (2013); David Hemenway & Sara J. Solnick, *The Epidemiology of Self-Defense Gun Use: Evidence from the National Crime Victimization Surveys 2007–2011*, 79 PREVENTATIVE MED. 22, 24–26 (2015); Rebecca S. Spicer & Ted R. Miller, *Suicide Acts in 8 States: Incidence and Case Fatality Rates by Demographics and Method*, 90 AM. J. PUB. HEALTH 1885, 1889 (2000).

24. See Andrew Anglemeyer et al., *The Accessibility of Firearms and Risk for Suicide and Homicide Victimization Among Household Members*, 160 ANNALS INTERNAL MED. 101, 105 (2014) (discussing recent studies); Bindu Kalesan et al., *Firearm Legislation and Firearm Mortality in the USA: A Cross-Sectional, State-Level Study*, 387 LANCET 1847, 1847, 1853 (2016); Jean Lemaire, *The Cost of Firearm Deaths in the United States: Reduced Life Expectancies and Increased Insurance Costs*, 72 J. RISK INS. 359, 363–64 (2005); Ellicott C. Matthay et al., *In-State and Interstate Associations Between Gun Shows and Firearm Deaths and Injuries: A Quasi-Experimental Study*, 167 ANNALS INTERNAL MED. 837, 839, 845 (2017); Corinne Peek-Asa et al., *Cost of Hospitalization for Firearm Injuries by Firearm Type, Intent, and Payer in the United States*, 4 INJ. EPIDEMIOLOGY 20 (2017); Michael Siegel, Craig S. Ross & Charles King, *Examining the Relationship Between the Prevalence of Guns and Homicide Rates in the USA Using a New and Improved State-level Gun Ownership Proxy*, 20 INJ. PREVENTION 424, 424–426 (2014); Michael Siegel et al., *The Relationship Between Gun Ownership and Firearm Homicide Rates in the United States, 1981–2010*, 103 AM. J. PUB. HEALTH 2098, 2102–03 (2013); Joseph A. Simonetti et al., *Psychiatric Comorbidity, Suicidality, and In-Home Firearm Access Among a Nationally Representative Sample of Adolescents*, 72 [J]AMA PSYCHIATRY 152, 153 (2015); Jun Tashiro et al., *The Effect of Gun Control Laws on Hospital Admissions for Children in the United States*, 81 J. TRAUMA & ACUTE CARE SURGERY S54, S56 (2016).

Figure 1. Academic articles on gun policy by year and field



Rather than firearm availability and epidemic lethality, criminologists focus on the relationship between firearms and crime. Criminological research attempts to sort out which diametrically opposed causal claims about firearms in the United States is correct: that gun prevalence induces crime or deters criminal activity. Take robbery, for example. Areas saturated with guns may have a higher risk of robbery because criminals possess more coercive power, but they may also show a lower risk of robbery because criminals fear armed victims.²⁵ That stolen guns sell well on the black market may also incentivize burglary.²⁶ The debate over guns and robbery can easily slip into a discussion of violent crime writ large. Does gun prevalence encourage or prevent homicide and other violent crime? This question has spawned intense criminological debates over the last three decades.²⁷ One concerns the “more guns, more crime”

25. PHILIP J COOK & JENS LUDWIG, THE EFFECTS OF GUN PREVALENCE ON BURGLARY: DETERRENCE VS INDUCEMENT (2002), <http://www.nber.org/papers/w8926> (last visited Dec 15, 2018); Richard W. Harding, *Rational-choice Gun Use in Armed Robbery: The Likely Deterrent Effect on Gun Use of Mandatory Additional Imprisonment*, 1 CRIM. LAW FORUM 427–450 (1990); Ling Ren, Yan Zhang & Jihong Solomon Zhao, *The Deterrent Effect of the Castle Doctrine Law on Burglary in Texas: A Tale of Outcomes in Houston and Dallas*, 61 CRIME DELINQUENCY 1127–1151 (2015).

26. David Hemenway, Deborah Azrael & Matthew Miller, *Whose Guns Are Stolen? The Epidemiology of Gun Theft Victims*, 4 INJ. EPIDEMIOL. 11 (2017).

27. See Gary S. Green, *Citizen Gun Ownership and Criminal Deterrence: Theory, Research, and Policy*, 25 CRIMINOLOGY 63, 64–65 (1987) (discussing an early study). NATIONAL RESEARCH

hypothesis, which simply holds that greater gun ownership leads to higher levels of violent victimization.²⁸ This is countered by the “more guns, less crime” hypothesis,²⁹ which advances two expectations: that a well-armed society (1) specifically deters violent death through defensive gun uses (“DGU”), and (2) generally deters violent crime by changing violent criminals’ rational calculations of risk.³⁰

These are competing hypotheses about guns and crime, not consumption of goods and services. Still, economists are attracted to the gun debate by the need for complex quantitative methodologies. One modeling challenge is estimating difficult-to-measure variables like gun ownership and defensive gun uses, data for which are not consistently collected by any single organization.³¹ Another modeling challenge is that, no matter which hypothesis one advances, guns and violent crime exist in a circular relationship: fear of crime encourages gun ownership for self-defense,³² and higher rates of gun ownership then feed back into crime rates, either positively or negatively. Economists call this *simultaneity*,³³ and they must employ sophisticated techniques to control for it.³⁴ The work of public health experts, criminologists, and economists converges around measuring the impact of specific gun policies. Work in the 1990s focused on the now-infamous Washington, D.C., handgun ban, finding that it had

COUNCIL, FIREARMS AND VIOLENCE: A CRITICAL REVIEW (2005).

28. Mark Duggan, *More Guns, More Crime*, 109 J. POL. ECON. 1086, 1088 (2001).

29. JOHN R. LOTT, *MORE GUNS, LESS CRIME: UNDERSTANDING CRIME AND GUN CONTROL LAWS* 3 (2d. ed. 2013).

30. John R. Lott Jr. & David B. Mustard, *Crime, Deterrence, and Right-to-Carry Concealed Handguns*, 26 J. LEGAL STUD. 1, 11 (1997).

31. See, e.g., Deborah Azrael, Philip J. Cook & Matthew Miller, *State and Local Prevalence of Firearms Ownership Measurement, Structure, and Trends*, 20 J. QUANTITATIVE CRIMINOLOGY 42, 43–62 (2004); Gary Kleck, *The Impact of Gun Ownership Rates on Crime Rates: A Methodological Review of the Evidence*, 43 J. CRIM. JUSTICE 40, 40–48 (2015); Robert A. Martin & Richard L. Legault, *Systematic Measurement Error with State-Level Crime Data: Evidence from the “More Guns, Less Crime” Debate*, 42 J. RES. CRIME & DELINQ. 187, 187–210 (2005).

32. Will Hauser & Gary Kleck, *Guns and Fear: A One-Way Street?*, 59 CRIME & DELINQ. 271, 286 (2013); Gary D. Hill et al., *Gender, Fear, and Protective Handgun Ownership*, 23 CRIMINOLOGY 541, 542 (1985).

33. Carlisle E. Moody & Thomas B. Marvell, *Guns and Crime*, 71 SOUTH. ECON. J. 720–736 (2005).

34. Lawrence Southwick, Jr., *Do Guns Cause Crime? Does Crime Cause Guns? A Granger Test*, 25 ATLANTIC ECON. J. 256 (1997).

few measurable effects on crime.³⁵

Other research starting in the late 1990s turned on the impact of right-to-carry laws, which allowed more individuals to carry concealed weapons legally. While some early studies found that these decreased violent crime,³⁶ others forcefully contend that the best evidence shows no such relationship.³⁷ More recently, intervention studies, which estimate the impact of policy changes using time series regressions, have tried to answer questions about current policy trends. For instance, does the spread of gun shows and informal gun markets increase firearms-related mortality?³⁸ Thus far, little evidence suggests that it does.³⁹ Or, do background checks and other purchasing restrictions decrease gun crimes? Ample statistical evidence suggests that these laws are effective in states like Connecticut and California,⁴⁰ and that removing them, as Missouri did in 2007, appreciably increases gun deaths.⁴¹ Finally, do SYG laws, enacted in Florida and over twenty other states, increase the number of unjustified homicides in states that pass them? Thus far, the consensus in evidence-based research is SYG laws do in fact cause more lethal violence.⁴²

35. Chester L. Britt et al., *A Reassessment of the D.C. Gun Law: Some Cautionary Notes on the Use of Interrupted Time Series Designs for Policy Impact Assessment*, 30 L. SOC'Y REV. 361, 370 (1996).

36. Lott & Mustard, *supra* note 30, at 2; Florenz Plassmann & T. Nicolaus Tideman, *Does the Right to Carry Concealed Handguns Deter Countable Crimes? Only a Count Analysis Can Say*, 44 J.L. & ECON. 771, 771–72 (2001).

37. Abhay Aneja et al., *The Impact of Right-to-Carry Laws and the NRC Report: Lessons for the Empirical Evaluation of Law and Policy*, 13 AM. L. ECON. REV. 565, 565 (2011); Dan A. Black & Daniel S. Nagin, *Do Right-to-Carry Laws Deter Violent Crime?*, 27 J. LEGAL STUD. 209, 218 (1998); John J. Donohue, *Guns, Crime, and the Impact of State Right-to-Carry Laws*, 73 FORDHAM L. REV. 623, 638 (2004).

38. Garen J. Wintemute, *Gun Shows Across a Multistate American Gun Market: Observational Evidence of the Effects of Regulatory Policies*, 13 INJ. PREVENTION 150, 154 (2007).

39. Mark Duggan et al., *The Short-Term and Localized Effect of Gun Shows: Evidence from California and Texas*, 93 REV. ECON. STAT. 786, 787 (2010); *contra* Garen J. Wintemute et al., *Gun Shows and Gun Violence: Fatally Flawed Study Yields Misleading Results*, 100 AM. J. PUB. HEALTH 1856, 1859 (2010).

40. Daniel W. Webster & Garen J. Wintemute, *Effects of Policies Designed to Keep Firearms from High-Risk Individuals*, 36 ANN. REV. PUB. HEALTH 21, 34 (2015).

41. Daniel Webster et al., *Effects of the Repeal of Missouri's Handgun Purchaser Licensing Law on Homicides*, 91 J. URB. HEALTH 293, 297 (2014).

42. David K. Humphreys et al., *Association Between Enactment of a "Stand Your Ground" Self-*

The objective for the vast majority of research on gun policy—from the fields of public health, criminology, and economics—is to measure the effect of new firearms regulations, or de-regulations, on outcomes like crime and gun violence. Presumably, one assumption researchers make is that lawmakers might be swayed by empirical evidence. If a consensus can emerge that some firearms laws are effective at reducing deaths, then perhaps legislators will take note and act accordingly. However, we are not aware of any data to support this assumption. Generally speaking, we lack knowledge about what influences lawmakers. What inspires legislators to alter gun regulations?

B. Gun Policy Determinants

There are two prevailing perspectives on what inspires gun policy: the legal and political perspectives. The legal perspective is that legislators are likely influenced by recent court cases. The Supreme Court's recent gun rights cases blew open the question of how firearms can be regulated. In *District of Columbia v. Heller*, the Court ruled that the Second Amendment confers an individual right to possess common-use weapons for the purpose of self-defense.⁴³ However, Justice Antonin Scalia's majority decision explicitly states, "nothing in our opinion should be taken to cast doubt on longstanding prohibitions."⁴⁴ Such prohibitions include "presumptively lawful regulatory measures" like rules against carrying guns in "sensitive places" or "conditions and qualifications on the

Defense Law and Unlawful Homicides in Florida, 177 [J]AMA INTERNAL MED. 1523, 1523 (2017); Cheng Cheng & Mark Hoekstra, *Does Strengthening Self-Defense Law Deter Crime or Escalate Violence? Evidence from Castle Doctrine* 1–41 (Nat'l Bureau Econ. Res., Working Paper No. 18134, 2012), <http://www.nber.org/papers/w18134>; Mark Gius, *The Relationship Between Stand-Your-Ground Laws and Crime: A State-Level Analysis*, 53 SOC. SCI. J. 329, 337 (2016); David K. Humphreys et al., *Evaluating the Impact of Florida's "Stand Your Ground" Self-Defense Law on Homicide and Suicide by Firearm: An Interrupted Time Series Study*, 177 [J]AMA INTERNAL MED. 44, 44 (2016); Chandler B. McClellan & Erdal Tekin, *Stand Your Ground Laws, Homicides, and Injuries* 1–55 (Nat'l Bureau Econ. Res., Working Paper No. 18187, 2012), <http://www.nber.org/papers/w18187>.

43. *D.C. v. Heller*, 554 U.S. 570, 627 (2008).

44. *Id.*

commercial sale of arms.”⁴⁵ The effect of this vague language is to burden lower courts with deciding which regulations fall under the “safe harbor” of *Heller*.⁴⁶ The Court’s ruling in *McDonald v. City of Chicago*⁴⁷ fully incorporated the Second Amendment against the states,⁴⁸ but introduced further ambiguity. It failed to rule what standard—strict scrutiny or intermediate scrutiny—should be applied to judge the constitutionality of state or municipal firearms laws.⁴⁹ Faced with imprecise guideposts, or what one author called “an intriguing stew of different signals,”⁵⁰ lower courts have effectively deferred to state government on the question of what firearm regulations are best for the public.⁵¹ Knowing that state laws are unlikely to be ruled unconstitutional in court, state legislators may redouble their efforts to regulate—or deregulate—firearms. If this is the case, we should observe more expansive efforts to legislate firearms in the last decade.

The legal perspective emphasizes the permissiveness of the current opportunity structure: fewer checks on the legislative branch would mean more laws. However, it tells us little about variation in legislation across jurisdictions. Presumably, all states operate in the same legal milieu, at least as it pertains to federal courts. Yet the gun policy landscape is radically different across states. Why do certain state legislators choose to bring firearms bills, and how do they choose which bills to introduce? To answer this question, we have to look to a second, political perspective.

Political scientists predicted two decades ago that views on gun control

45. *Id.* at 626–27 n. 26.

46. Tina Mehr & Adam Winkler, *The Standardless Second Amendment*, AM. CONST. SOC’Y L. & POL’Y (Oct. 2010), <https://www.acslaw.org/wp-content/uploads/2010/10/Mehr-and-Winkler-Standardless-Second-Amendment.pdf>; Stephen Kiehl, *In Search of a Standard: Gun Regulations After Heller and McDonald*, 70 MD. L. REV. 1131, 1170 (2011).

47. *McDonald v. Chicago*, 561 U.S. 742 (2010).

48. *Id.* at 791.

49. Allen Rostron, *Justice Breyer’s Triumph in the Third Battle over the Second Amendment*, 80 GEO. WASH. L. REV. 703, 724 (2011).

50. *Id.* at 737.

51. *Id.* at 706–07. Some deference has been given to local governments, but given that municipal laws are subservient to state laws, the primary deference has been to state legislative and executive action.

would become far more polarized.⁵² Today, it is conventional wisdom among pundits and journalists that gun policy is a function of partisanship.⁵³ Gun control is a core issue for Democrats,⁵⁴ whereas gun rights are a key plank in the Republican Party platform.⁵⁵ Furthermore, these positions are now so hardened that they alter individuals' thinking. One pair of researchers, for example, demonstrated that perceptions of gun crime are drastically altered by one's party identification.⁵⁶ It is unquestionably the case that gun policy is fiercely partisan, but this fact may obscure as much as it reveals. For one thing, political representatives do not propose and vote on firearms legislation in ways that are predicted 100% by party affiliation. Though the abstract idea of gun control is very unpopular among Republicans, specific regulations like background checks or mental health qualifications do not excite extreme negative partisan attitudes.⁵⁷ For another thing, knowing a legislator's party is not enough to determine whether she will introduce gun rights or gun control legislation. There are many Republicans who do not sponsor gun rights

52. Kara Lindaman & Donald P. Haider-Markel, *Issue Evolution, Political Parties, and the Culture Wars*, 55 POL. RES. Q. 91, 91 (2002); THE CHANGING POLITICS OF GUN CONTROL (John M. Bruce & Clyde Wilcox eds., 1998).

53. See, e.g., Dylan Matthews, *How Gun Ownership Became a Powerful Political Identity*, VOX (Mar. 3, 2018, 7:30 PM), <https://www.vox.com/2018/2/27/17029680/gun-owner-nra-mass-shooting-political-identity-political-science>; see also Alex Casendino, *Missing the Mark: How the Intense Partisan Divide over Gun Control Impedes Solutions*, BERKELEY POL. REV. (Nov. 29, 2017), <https://bpr.berkeley.edu/2017/11/29/missing-the-mark-how-the-intense-partisan-divide-over-gun-control-impedes-solutions/>.

54. *What We Believe*, DEMOCRATIC NATIONAL COMMITTEE, <https://democrats.org/about/what-we-believe/> (last visited Apr. 9, 2019) (listing "common-sense gun reforms" in a list of highlights of the party's platform).

55. REPUBLICAN PLATFORM 2016 12 (Republican National Committee 2016), available at <https://prod-cdn-static.gop.com/static/home/data/platform.pdf> ("We uphold the right of individuals to keep and bear arms...").

56. Shanna Pearson-Merkowitz & Joshua J. Dyck, *Crime and Partisanship: How Party ID Muddles Reality, Perception, and Policy Attitudes on Crime and Guns*, 98 SOC. SCI. Q. 443, 452 (2017).

57. Kristin A. Goss, *Defying the Odds on Gun Regulation: The Passage of Bipartisan Mental Health Laws Across the States.*, 85 AM. J. ORTHOPSYCHIATRY 203, 204 (2015); *id.* at 207; Steven V. Miller, *Lots of Republicans Actually Support Gun Control*, WASH. POST (Oct. 3, 2017), <https://www.washingtonpost.com/news/monkey-cage/wp/2017/10/03/lots-of-republicans-actually-support-gun-control/>; Pew Res. Ctr., *Gun Policy Remains Divisive, but Several Proposals Still Draw Bipartisan Support*, PEW RES. CTR. (Oct. 18, 2018), <http://www.people-press.org/2018/10/18/gun-policy-remains-divisive-but-several-proposals-still-draw-bipartisan-support/>.

bills, just as there are many Democrats who avoid the gun policy debate.⁵⁸

For these reasons, political observers point to interest groups and lobbyists to further explain patterns in gun policy. One interest group in particular, the NRA, attracts an outsized amount of attention. The NRA is often credited or blamed for efforts to loosen firearms restrictions, or to block meaningful regulations.⁵⁹ Some claims about the NRA border on the conspiratorial, but it is now commonplace to attribute the actions of lawmakers to NRA lobbying, especially in states such as Florida.⁶⁰ However, the all-powerful NRA narrative does not always line up well against data. For example, only one in five gun owners belongs to the NRA,⁶¹ and the organization contributes far less to campaigns than is often assumed;⁶² for example, according to the National Institute on Money in Politics, the NRA donated a total of \$280,148 in 2016 to candidates for state-level office.⁶³ While figures may vary, one estimate places the total amount of NRA political spending since 1998 at around \$200 million, relatively little of which goes directly to campaign coffers.⁶⁴ This number

58. More than 40% of all legislators – evenly divided between Republicans and Democrats – sponsored zero bills relating to gun rights or gun control in our data.

59. Cf. Christopher Kenny et al., *The Impact of Political Interests in the 1994 and 1996 Congressional Elections: The Role of the National Rifle Association*, 34 BRIT. J. POL. SCI. 331 (2004); ROBERT J. SPITZER, *POLITICS OF GUN CONTROL* 137 (7th ed. 2015).

60. See Mike Spies, *The N.R.A. Lobbyist Behind Florida's Pro-Gun Policies*, THE NEW YORKER (Mar. 5, 2018), <https://www.newyorker.com/magazine/2018/03/05/the-nra-lobbyist-behind-floridas-pro-gun-policies>.

61. Ruth Igielnik & Anna Brown, *Key Takeaways on Americans' Views of Gun and Gun Ownership*, PEW RES. CTR. (June 22, 2017), <http://www.pewresearch.org/fact-tank/2017/06/22/key-takeaways-on-americans-views-of-guns-and-gun-ownership/>.

62. In the 2018 election cycle, the NRA donated a total of \$862,034 to specific campaigns. This ranked 580 of over 19,276 contributors. See <https://www.opensecrets.org/orgs/summary.php?id=d000000082>

See also Jake Novak, *Stop Blaming the NRA for Failed Gun Control Efforts*, CNBC (Feb. 16, 2018, 1:26 PM), <https://www.cnbc.com/2018/02/16/nra-money-isnt-why-gun-control-efforts-are-failing-commentary.html>.

63. National Rifle Association for Contributions to State Candidates in 2008, 2012, and 2016, NATIONAL INSTITUTE ON MONEY IN POLITICS, <https://www.followthemoney.org/show-me?dt=1&y=2016,2012,2008&f-fc=2&c-exi=1&d-eid=1854> (last visited Apr. 10, 2019). Donations to state-level candidates in 2008 (\$385,193) and 2012 (\$332,455) look similar. *Id.*

64. Novak, *supra* note 62.

is dwarfed by the lobbying activities of other industries, such as finance.⁶⁵

Still, it is undeniable that for the last few decades the gun control movement has lacked a group as focal as the NRA.⁶⁶ While the NRA is the figurehead gun rights organization, the gun control side has a number of players—such as the Brady Campaign, the Coalition to Stop Gun Violence, the Giffords Law Center, and Everytown for Gun Safety—that compete for attention.⁶⁷ Though evidence suggests that financial mismanagement is now weakening the NRA,⁶⁸ the group is still perceived as powerful. That the NRA, in spite of its problems, maintains an air of invincibility alone lends credibility to the interest group theory of gun policy. In essence, the group uses information to manage its own image and influence political expectations. One informational technique the NRA uses is publication of legislator grades, which reward politicians for voting with the gun rights movement and punishes them for any dissent.⁶⁹ This may be as robust a source of influence on gun policy as any campaign contributions.⁷⁰ Indeed, scholars have shown that those legislators receiving a positive grade from the NRA provide support for NRA-related policies and credit-claim to constituents about their work on gun-rights related policy; this is distinct from the behavior of legislators who belong to the Brady Campaign to Prevent Gun Violence.⁷¹

Accounts of the determinants of gun policy are over-simplified and

65. *Id.*

66. KRISTIN A. GOSS, *DISARMED: THE MISSING MOVEMENT FOR GUN CONTROL IN AMERICA* 73–74 (2006).

67. Justine McDaniel, Alison Griner & Natalie Krebs, *Gun Control Groups Galvanized, But Progress Is Slow*, USA TODAY (Aug. 18, 2014), <https://www.usatoday.com/story/news/nation/2014/08/18/gun-legislation-battle/14080953/>.

68. Mike Spies, *Secrecy, Self-Dealing, and Greed at the N.R.A.*, NEW YORKER (Apr. 7, 2019), <https://www.newyorker.com/news/news-desk/secrecy-self-dealing-and-greed-at-the-nra>.

69. *See generally Grades and Endorsements*, NATIONAL RIFLE ASSOCIATION POLITICAL VICTORY FUND, <https://www.nrapvf.org/grades/> (last visited Apr. 10, 2019).

70. R.J. Maratea, *Online Claims-Making: The NRA and Gun Advocacy in Cyberspace*, 11 QUAL. SOCIOLOG. REV. 144 (2015).

71. Aaron Smith-Walter et al., *Gun Stories: How Evidence Shapes Firearm Policy in the United States*, 44 POL. POL'Y 1053 (2016). Disidentification with the NRA is also important, often as evidenced by a failing grade from the organization. Kimberly D. Elsbach & C. B. Bhattacharya, *Defining Who You Are By What You're Not: Organizational Disidentification and The National Rifle Association*, 12 ORGAN. SCI. 393–413 (2001). For more detail on the NRA's organizational techniques, see GOSS, *supra* note 66; Goss, *supra* note 57.

under-examined, especially in comparison to research on the impact of gun laws. Upon review, we are left with three hypotheses: (1) gun regulations should have increased following recent Supreme Court rulings, (2) Democrats are more likely to promote gun control, while Republicans are more likely to push gun rights, and (3) NRA legislator grades are responsible for shaping bill introductions and sponsorships. Each expectation is plausible, though largely untested. Moreover, prevailing theories create an incomplete picture of gun policy's origins, approaching gun laws as if they are determined wholly by elites in top-down fashion. These theories overlook that, when considering how to regulate firearms, legislators represent the demands of their local political constituents.

C. Toward a Political Geography of Gun Policy

There are many reasons to think that local attitudes about guns are a significant factor shaping legislative activity. After all, the American political system was designed so that democratically elected representatives would neither advance their own interests, nor be controlled entirely by national parties or widespread social movements. Elected officials are meant to represent a particular geographic space.⁷² Responsive state lawmakers should thus behave differently based on those interests that are clearly defined in their home districts.

We have no way of directly measuring gun policy attitudes in the nearly 4,500 state voting districts in the United States. However, we have reason to suspect that these attitudes are shaped by political geographies, which includes local population characteristics, collective identities, and shared cultures. The first of these characteristics is the proportion of the district that is rural. Gun ownership and use is increasingly a "country" phenomenon, with 46% of rural residents reporting a gun in the household, compared to just 19% of urban residents.⁷³ These geographic differences

72. Bernard Grofman & Lisa Handley, *Black Representation: Making Sense of Electoral Geography at Different Levels of Government*, 14 LEGIS. STUD. Q. 265, 267 (1989).

73. Kim Parker, et al., *The Demographics of Gun Ownership*, PEW RES. CTR. (June 22, 2017), <http://www.pewsocialtrends.org/2017/06/22/the-demographics-of-gun-ownership/>.

figure into opinions about firearms: for example, 82% of rural gun owners consider the right to own guns as essential to their sense of freedom, compared to 59% of urban gun owners.⁷⁴ Politicians who hope to succeed in predominantly rural areas can therefore mobilize support by rallying around a defense of the Second Amendment. On the opposite side, this kind of symbolic politics could also be used by politicians representing urban districts with negative stereotypes about gun owners.⁷⁵

The urban-rural divide lies alongside three related but cross-cutting factors: race, exposure to crime, and the gun economy. Research demonstrates that racial resentment is closely associated with individual support for gun rights.⁷⁶ Indeed, gun rights rhetoric often involves thinly veiled language about criminal minorities and white men protectors.⁷⁷ We expect that those voting districts with a higher number of whites who are suspicious of outsiders will more likely support gun rights. While it may seem counterintuitive, intergroup contact theory holds that more interaction with diverse groups inspires positive attitudes towards differences; suspicion is often bred in racially homogenous areas.⁷⁸

With regard to crime patterns, it is probably the case that areas riddled with violent crime—which often involves attacks with guns—will show more skepticism toward laws making firearms more available. Exposure to gun violence likely breeds more animosity to weapons. Therefore, higher levels of violent crime should inspire positive attitudes toward gun

74. Igielnik, *supra* note 9.

75. Gary Kleck et al., *Why Do People Support Gun Control?: Alternative Explanations of Support for Handgun Bans*, 37 J. CRIM. JUST. 496, 497 (2009).

76. See generally Alexandra Filindra & Noah J. Kaplan, *Racial Resentment and Whites' Gun Policy Preferences in Contemporary America*, 38 POL. BEHAV. 255, 255 (2016) (arguing "that the gun rights narrative is color-coded and evocative of racial resentment"); Kerry O'Brien et al., *Racism, Gun Ownership and Gun Control: Biased Attitudes in US Whites May Influence Policy Decisions*, 8 PLOS ONE, Oct. 2013, at 1, <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0077552> (arguing that "[s]ymbolic racism was related to having a gun in the home and opposition to gun control policies in US whites").

77. Christopher Ingraham, *White Resentment Is Fueling Opposition to Gun Control*, *Researchers Say*, WASH. POST (April 4, 2016), <https://www.washingtonpost.com/news/wonk/wp/2016/04/04/white-resentment-is-fueling-opposition-to-gun-control-researchers-say/>; O'Brien et al., *supra* note 76; Jeremy Adam Smith, *Why Are White Men Stockpiling Guns?*, SCIENTIFIC AMERICAN BLOG NETWORK, <https://blogs.scientificamerican.com/observations/why-are-white-men-stockpiling-guns/> (last visited Mar. 15, 2018).

78. Thomas F. Pettigrew, *Intergroup Contact Theory*, 49 ANN. REV. PSYCHOL. 65, 66–67 (1998).

control.⁷⁹ Exposure to criminal violence is different from fear of crime. The latter can manifest in remote areas that actually have very low crime rates. For example, aggregate Google search data from 2018 shows that citizens in Green Bay, Wisconsin and Billings, Montana—cities with relatively low crime rates—scored in the top five in searches for the word “crime.”⁸⁰ Depending on location, fear of crime could inspire support for gun rights or gun control. For this reason, we limit our expectations to actual experience of violent crime.

Finally, the contours of the local firearms economy should influence legislators. A widely reported ATF statistic is that there are over 60,000 gun dealers in the United States.⁸¹ Many of these gun dealers are individual proprietors who rely at least in part on income from firearms sales for their livelihood. Though under-examined, firearms commerce is quite pervasive in some localities, especially in suburban and rural areas.⁸² One would expect that the more dealers there are in a voting district, the more likely that district’s representative will support legislation protecting the right to bear arms.

II. DATA ON STATE GUN LAWS

To examine gun policy’s origins, we assembled a comprehensive data

79. Anthony K. Fleming et al., *When the Smoke Clears: Focusing Events, Issue Definition, Strategic Framing, and the Politics of Gun Control*, 97 SOC. SCI. Q. 1153, 1153 (2016).

80. See Crime Search Term, GOOGLE TRENDS, <https://trends.google.com/trends/explore?q=crime&geo=US> (last visited Dec. 29, 2018).

81. Leanna Garfield, *There Are 50,000 More Gun Shops than McDonald’s in the US*, BUS. INSIDER (Oct. 6, 2017, 11:43 AM), <https://www.businessinsider.com/gun-dealers-stores-mcdonalds-las-vegas-shooting-2017-10>.

82. Deborah Azrael et al., *State and Local Prevalence of Firearms Ownership Measurement, Structure, and Trends*, 20 J. QUANTITATIVE CRIMINOLOGY 43, 52 (2004); Michael Siegel, *How the Firearms Industry Influences US Gun Culture, in 6 Charts*, THE CONVERSATION (Feb. 23, 2018, 11:57 AM), <https://theconversation.com/how-the-firearms-industry-influences-us-gun-culture-in-6-charts-92142>; Trent Steidley et al., *Gun Shops as Local Institutions: Federal Firearms Licensees, Social Disorganization, and Neighborhood Violent Crime*, 96 SOC. FORCES 265, 265 (2017); Garen J. Wintemute, *Where the Guns Come from: The Gun Industry and Gun Commerce*, 12 FUTURE CHILD 54, 55 (2002).

set of all state legislation addressing firearms between 2011 and 2015.⁸³ Departing from previous work, our study examines all bills that are *introduced*, not only those that are passed into law. We chose the period 2011-2015 because complete listings of state legislation dating back to 2010 are now available from an online database called LegiScan. Only a fraction of the 573,000 state bills introduced in this period address guns. To find these, we performed a systematic content search that identified 5,042 possible pieces of firearms legislation.⁸⁴

Our main objective was to distinguish between “gun control” and “gun rights” legislation. We define *gun control* as any piece of legislation that appeared to restrict access to or use of any guns, firearms, ammunition, or firearm parts, including reversing or limiting any previous gun rights legislation. This could include creating or increasing penalties for gun-related crimes, prohibiting the carrying of guns in public spaces, requiring gun owners to practice safe gun storage and shooting, making the process of obtaining a weapon more difficult, or requiring additional scrutiny for people acquiring weapons. *Gun rights bills* are any pieces of legislation that appear to expand access to or use of any guns, firearms, ammunition, or firearm parts, including rolling back previous legislation that restricted access or use. This could include reducing penalties for using or owning or using a gun, making it easier for certain people to access weapons, making it cheaper to own a gun or gun-related materials, or expanding where people can bring guns. Though it is rare, some bills do both. They might, for example, make licenses more expensive, while also expanding the number of public places where a licensed owner can carry a firearm.⁸⁵

The accessibility and clarity of legislation differs widely across states. Deciding whether a bill is oriented toward gun control, gun rights, or both is a difficult task that requires close reading and interpretation. To

83. At the time of collection, in the summer of 2017, these data were only available through 2015.

84. Our search keywords included *gun, firearm, ammunition, open carry, openly carry, rifle, shooting, pistol, revolver, and assault weapon*.

85. See, e.g., TENN. CODE ANN. § 49-50-803 (2018) (codifying a 2015 act that authorizes “the board or governing entity of each private K-12 school, or the chief administrative officer...of a private k-12 school or private institution of higher education to implement a handgun carry policy...[that] may... *prohibit...or permit* the carrying of a handgun [on the grounds or buildings of a private k-12 school or private university by a person who has a handgun carry permit].”) (emphasis added).

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categorize all firearms legislation, we subjected our list of 5,042 bills to elite coding by graduate research assistants, cloud-based coding by paid anonymous readers on the internet, and undergraduate student coding. These stages produced a more concentrated list of 4,725 total bills directly pertaining to firearms, of which 2,454 relate to gun control, and 2,312 relate to gun rights.⁸⁶

Table 1. Summary Data on All Gun Bills Introduced in U.S. States, 2011-15

Year	Gun Rights Bills	Gun Control Bills	Total Gun Bills	Total Bills	Gun Bills as % of Total Bills
2011	425	471	896	154,809	0.58%
2012	183	182	365	47,908	0.76%
2013	610	637	1247	153,485	0.81%
2014	293	271	564	58,376	0.97%
2015	801	891	1692	158,925	1.06%

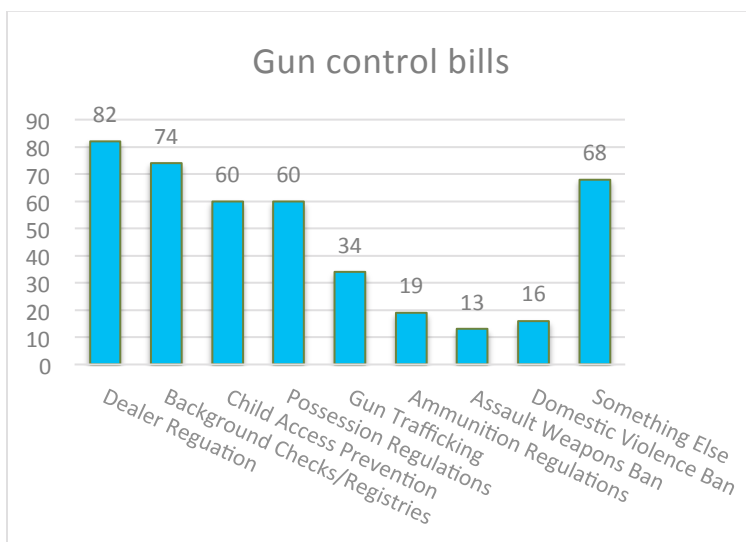
Table 1 presents a yearly breakdown of firearms legislation across all U.S. states. From this data, one can draw two inferences. First, gun bills make up nearly 1% of all state legislative activity, and this activity is split roughly 50-50 between gun rights and gun control efforts. This perhaps reflects that the gun control movement is, despite media depictions, just as active as the gun rights movement in pushing legislation. Second, as legal academics might predict based on the current environment of judicial deference, the amount of legislation aimed at guns appears to be trending upward with time. State legislators are working hard to establish the boundaries for firearms regulations.

The pieces of legislation introduced in each legislative session vary widely in their intent, scope, and impact. Figure 2 presents a snapshot of bills introduced in 2015, the most active year in our dataset. Of the 1,691

86. These numbers sum to 4,766 because some bipartisan firearms bills both expand gun rights and regulate guns at the same time.

bills identified as firearms legislation, 795 were directed toward clear and substantial regulatory changes. The remainder made more nuanced edits to administrative requirements, or slightly altered language in existing statutes. Among the 795 “substantial” bills, a total of 570 were gun control bills and 225 were gun rights bills. Out of the gun control bills introduced, the most prevalent forms of proposed legislation were regulations on dealers and background checks. Gun control bills often spanned multiple categories. For example, one bill might include universal background checks, buyer regulations, and dealer regulations—in these instances, they count in each category. The most common types of gun rights legislation loosen ownership restrictions (e.g., by relaxing licensing requirements) or decrease possession limitations (allowing owners to carry in more public places). In this period, preemption laws were also very popular. These laws aim to prevent municipal governments from passing regulations more stringent than those that exist at the state level.

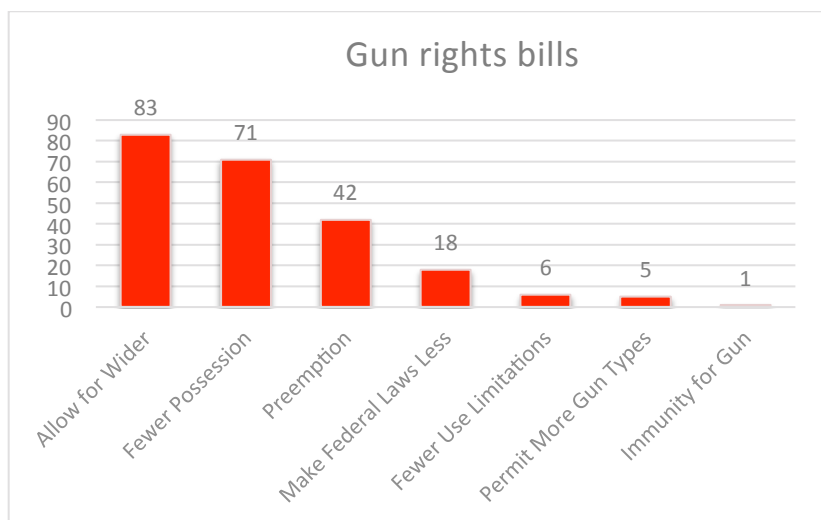
Figure 2. Gun Bills in 2015 by Type



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Many of these bills were introduced multiple times throughout the year. Sometimes, the language was changed slightly, but the purpose was the same; we treat each bill introduction as unique, regardless of whether the content has been previously introduced. For many gun control bills, it appears that the legislators who introduced them made repeated attempts to push new rules through the legislature. Still, the vast majority of the bills of all types did not pass. Although there was over double the number of gun control bills introduced compared to gun rights bills, a disproportionate number of gun rights bills passed relative to gun control bills. Out of the 225 gun rights bills, twenty-two passed. Out of the 570 gun control bills, twenty-five passed.⁸⁷ Finally, in the time period studied, there was a great deal of clustering by state. Of the twenty-five gun control bills that passed, eleven were in California, and four more gun control bills passed in Delaware. A similar story played out on the other side. Out of the twenty-two gun rights bills, five bills passed in Michigan, and five

87. Currently, we only possess data on passage from 2015, though we are collected this information for the full data set.

bills passed in Tennessee.

III. ASSESSING THE ORIGINS OF GUN POLICY

Our aim for collecting this data extends beyond describing the current regulatory landscape. We also want to know who introduces these laws, which districts those lawmakers come from, and what are the properties of those districts. This requires that data on bill sponsors, also retrieved from LegiScan, be merged with additional information. This includes (1) data on all state legislators' elections returns, donations, and party orientations;⁸⁸ (2) legislators' NRA grades;⁸⁹ (3) the percent of each voting district that is rural;⁹⁰ (4) the 2010 racial composition of each voting district;⁹¹ and (5) the number of firearm sellers in each voting district; and (6) the violent crime rate of each voting district.

The latter two measures required extra work to produce. Data on firearms sellers was obtained via a Freedom of Information Act⁹² request from the Bureau of Alcohol, Tobacco, Firearms and Explosives ("ATF"). ATF provided a list of all federally licensed gun dealers, along with their addresses. We geographically coded these dealers, matched them to state voting districts, and calculated the number of dealers per 100,000 district residents. Violent crime rates by district posed unique difficulties because while the data is publicly available, it is aggregated by county, and not by state voting districts. Counties and voting districts overlap but do not match, like squares and circles filling out the map of each state. We forced county-level crime rate data to fit into voting districts using a sophisticated technique in Geographical Information Systems ("GIS") called Empirical

88. Carl Klarner, *State Legislative Election Returns Data, 2011-2012*, HARVARD DATAVERSE (2013), <https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/21549> (last visited Jan. 2, 2019); Carl Klarner et al., *State Legislative Election Returns (1967-2010) Codebook*, INTER-U. CONSORTIUM POL. & SOC. RES. (2012), <https://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/34297>.

89. We converted these from a letter grade into a 5-point numeric grade ranging from -2 to 2.

90. These were obtained from the 2010 Census and American Community Survey (ACS). AM. COMMUNITY SURV., <https://www.census.gov/programs-surveys/acs/> (last visited Jan. 2, 2019).

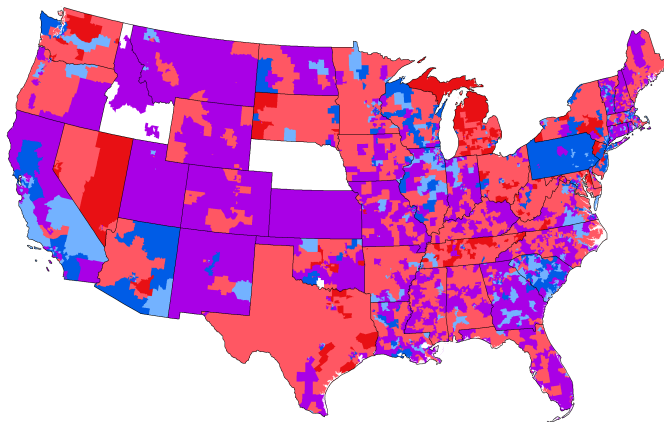
91. U.S. CENSUS BUREAU, <https://www.census.gov/programs-surveys/decennial-census/data/datasets.2010.html> (last visited Jan. 2, 2019).

92. 5 U.S.C. § 552 (2018).

Bayesian Kriging (“EBK”)⁹³. In our case, EBK involves using digital map files to break county units into sub-unit pixels, and re-aggregating these pixels into blocks that match voting districts.

In the end, our dataset is arrayed in rows by legislator-years, meaning that it has a listing for every state legislator who was active in any year between 2010 and 2015. This produces 25,243 legislator-years in our data. Of these, 8,793 legislators sponsored or co-sponsored at least one piece of firearms legislation in any year. That is 34.8% of all legislator-years. Figure 3 presents data on gun bills mapped by state voting district. The darkest red districts are those with legislators who introduce, on balance, the most gun rights bills. Violet districts introduce both gun rights and gun control bills, and blue districts are represented by politicians who, on balance, push gun control more than gun rights. This map complicates the typical story of red states and blue states. Even the most persistent gun control states like California possess some districts that favor gun rights. Likewise, some red states, Louisiana for instance, have quite a few blue districts despite their overall orientation toward gun rights.

93. Gribov and Krivoruchko explain how the three steps of EBK work: First, a semivariogram model is estimated from the data. Next, using this semivariogram, a new value is simulated at each of the input data locations. Finally, a new semivariogram model is estimated from the simulated data. A weight for this semivariogram is then calculated using Bayes' rule, which shows how likely it is that the observed data can be generated from the semivariogram. Empirical Bayesian Kriging (EBK) function is available in ArcGIS software package 10.5. The modelling strategy is specific to the type of data observed. Alexander Gribov & Konstantin Krivoruchko, *New Flexible Non-parametric Data Transformation for Trans-Gaussian Kriging*, in GEOSTATISTICS OSLO 2012 51 (Petter Abrahamsen, Ragnar Hauge, & Odd Kolbjørnsen eds., 2012), Research in political science and demographics uses EBK to interpolate the data from one geographic unit to another Rebecca Bromley-Trujillo, Mirya R. Holman & Andres Sandoval, *Hot Districts, Cool Legislation: Climate Change Legislation Sponsorship in the US States*, STATE POLIT. POLICY Q. (forthcoming); James E. Monogan & Jeff Gill, *Measuring State and District Ideology with Spatial Realignment*, 4 POLIT. SCI. RES. METHODS 97 (2016); Gerard Rushton & Panos Lolonis, *Exploratory Spatial Analysis of Birth Defect Rates in an Urban Population*, 15 STAT. MED. 717 (1996).

Figure 3. Introduced State Gun Bills by State Voting Districts⁹⁴

D. Findings

What best predicts these patterns? Which districts' legislators are most likely to propose each kind of firearms legislation? As explained above, there are two prevailing accounts for the origins of gun policy. Conventional wisdom holds that Republicans and NRA-backed politicians are the main drivers behind most gun policy. We have argued that we must also consider additional factors like the urban-rural divide, race, violent crime, and gun commerce. Our dataset allows us to evaluate these ideas directly using sophisticated statistics.

While a full statistical analysis is beyond the scope of this article, we construct two models to gauge the plausibility of various theories: one model predicts the determinants of gun rights legislation, and the other the

94. Parts of Idaho and Nebraska are missing from our data because of their irregular state legislative composition and meeting schedules. We also leave Alaska and Hawaii off this particular map because of their distance from the mainland.

determinants of gun control legislation.⁹⁵ As to gun rights bills, party membership indeed makes a difference. Belonging to the Republican Party increases the probability that any given legislator will introduce or sponsor a gun rights bill in a legislative session by 18%. This is in line with popular media portrayals of the hyper-partisan debate over firearms. However, other findings challenge the usual story. First, Democratic Party membership is not associated with an increased likelihood of sponsoring gun control legislation, or of any significant aversion to gun rights. In short, being a Democrat is not a predictor of willingness to bring gun bills of any kind. Second, and perhaps most surprisingly, NRA support is not reliably associated with support for gun rights legislation. Those lawmakers who receive higher grades from the NRA are no more likely to bring gun rights bills than those with poorer scores.

95 Specifically, these are multi-level, mixed effects logits. The dependent variable is whether a legislator sponsored a piece of gun legislation in any given year. We include control variables for the professionalism of the legislature from a standard index commonly used, which party controls the statehouse from the National Center for State Legislatures, and the vote share for Obama in 2008. See Daniel C. Bowen & Zachary Greene, *Should We Measure Professionalism with an Index?*, 14 STATE POL. & POL'Y QUARTERLY 277 (2014).

Figure 4. Party Membership, NRA Support, and Gun Bills Across States, 2011-15

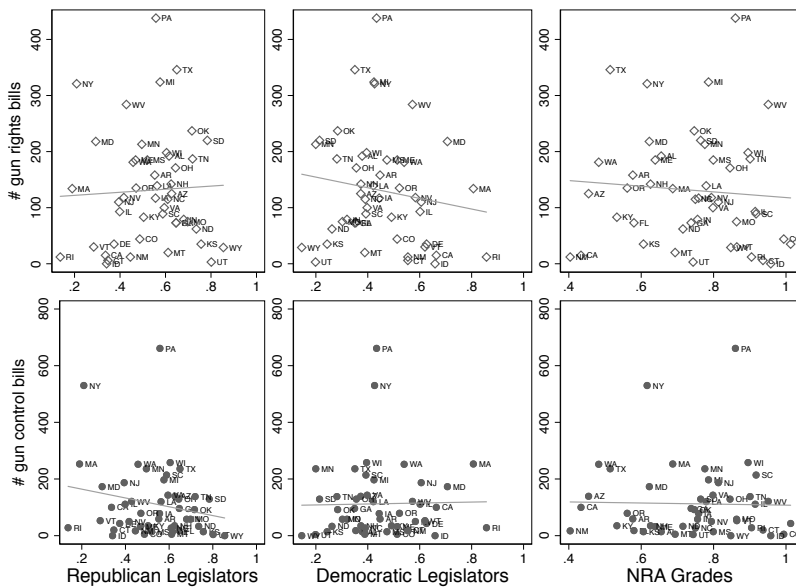


Figure 4 depicts a crude but illustrative set of charts that plot the total number of bills by each U.S. state against three other measures: average number of Republican legislators, average number of Democratic legislators, and average NRA grade for all legislators in the state. One can see that states with more Republicans lawmakers lean toward more gun rights bills, and fewer gun control bills. But this does not appear to be a direct function of NRA lobbying. A higher NRA grade across a whole state legislature has no relationship to the number of gun bills it considers. Instead, gun rights bills are very much an extension of Republican politics. While the NRA may set the agenda, it does not necessarily spur legislators to act.

Gun control is not equally partisan. While more states with a higher

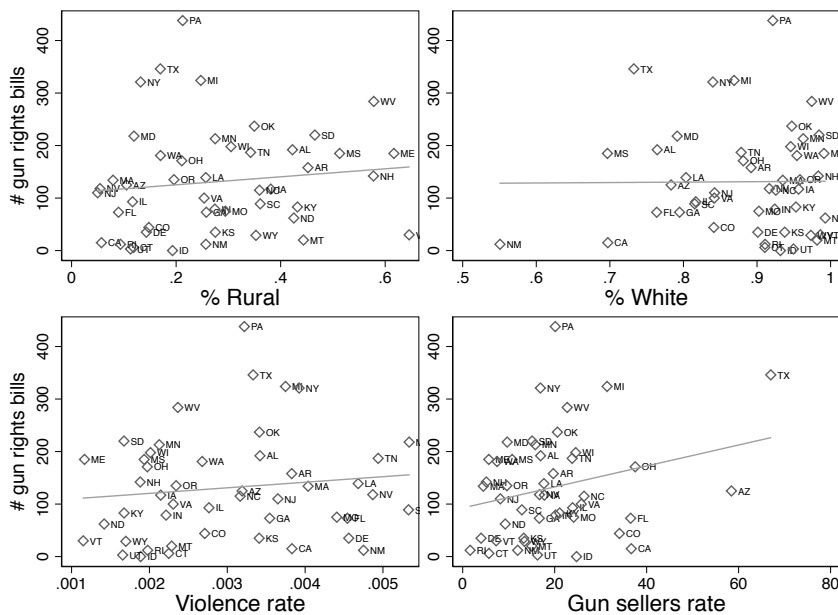
proportion of Democratic legislators appear less likely to feature gun rights bills, this is not a statistically significant relationship ($p=.504$). Furthermore, the line representing the relationship of Democratic legislators to gun control bills is flat, meaning that a greater number of Democratic lawmakers does not translate into more gun bills in general. Together, these findings suggest that the Republican Party is more unified than the Democratic Party in its efforts to legislate firearms in a particular direction. As Grossman and Hopkins argue, the Republican Party is a “vehicle of an ideological movement” while the Democratic Party is a “coalition of social groups.”⁹⁶ This could explain why Republican leaders and followers appear less inclined to deviate from the gun rights values shared by their group.

How do factors other than party and interest groups—including district rurality, race, violence, and gun commerce—alter the direction of gun policy? Beginning again with gun rights, one feature of state voting districts is even more powerfully associated with bill sponsorship than membership in the Republican Party: the number of licensed firearms dealers. For every one standard deviation increase in the number of gun sellers in a particular district, the probability that the district’s representative supports a gun rights bill increases by 23%. Even if NRA-backed legislators do not necessarily do its bidding, representatives appear attentive to the general business of guns back home. Other factors matter as well, though not as much as gun commerce. As the percent of a district that is white increases by one standard deviation, for example, the probability its legislator sponsors at least one gun rights bill increases by 9%. This is slightly more powerful than the rurality of a given district. As rurality increases one standard deviation, the likelihood of support for a gun rights bill goes up by 4%. Finally, while gun owners and gun rights supporters often claim that they seek looser restrictions in response to violent crime—so that they can use their weapons to deter future violence—there is no evidence that higher crime rates are associated with desire to sponsor gun legislation.

96. MATT GROSSMAN & DAVID A. HOPKINS, *ASYMMETRIC POLITICS: IDEOLOGICAL REPUBLICANS AND GROUP INTEREST DEMOCRATS* 3 (2016).

Figure 5 visualizes the correlations discussed in the preceding paragraph, but again aggregated to the state level. What is interesting about the four charts is that they mute the relationships we see when studying district-by-district correlations. Though it is easy to see that the average number of gun sellers is clearly associated with more gun rights legislation, the other relationships between rurality, race, and gun rights legislation are difficult to observe when all of the data are aggregated by state. This goes to show that some of the relationships discovered with our new dataset might remain invisible if analyses focused on states as a whole, rather than individual voting districts.

Figure 5. Political Geography of State Gun Rights Legislation, 2011-15



As shown in Figure 6, the determinants of gun control legislation are different from those of gun rights legislation in ways that are theoretically meaningful. For example, the more rural the district, the less

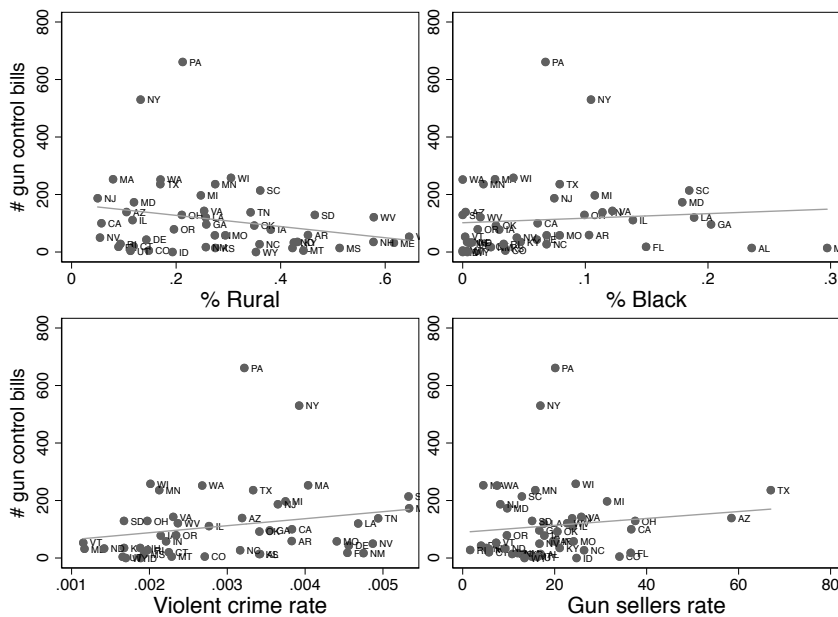
likely its representative will introduce gun control bills. A one standard deviation increase in rurality translates into a 3% decrease in the likelihood of gun control support. Proximity to violent crime is associated with a greater probability of gun control support; a one standard deviation increase in violent crime is associated with a 5% increase in gun control bill introductions. Race is also a factor. The higher the percentage of black residents in a voting district, the higher the probability of gun control sponsorship; a one standard deviation increase means gun control is 6% more likely. It is hard to know exactly why this is the case. One explanation is based on government responsiveness: because black people and other minority groups experience a great deal more gun violence, they put more pressure on their representatives to act in a way that curbs that violence.⁹⁷ Another explanation is based on institutionalized racism: because black people are often stereotyped as violent criminals, lawmakers from areas with more blacks will introduce gun control out of fear of armed minority groups.⁹⁸ Further research is required to sort out which is the most plausible explanation.

Despite these differences between gun rights and gun control, one major similarity stands out: a higher proportion of gun sellers in a district also means more gun control legislation. The effect is not as large for gun control. A one standard deviation change equates to an 11% higher probability of gun control bills, whereas the increase for gun rights bills is 23%. Still, this speaks to the importance of gun commerce in providing the impulse behind state policy. While some representatives from districts with more licensed firearms dealers seek looser restrictions, other representatives from these districts seek greater regulation. This makes sense. In places with more trade in firearms, some lawmakers will attempt to expand business, while others will seek to apply restrictions for the purpose of public health and safety.

97. See O'Brien, *supra* note 76, at 1.

98. See *id.* at 2, 7.

Figure 6. Political Geography of State Gun Control Legislation, 2011-15



CONCLUSION

Nearly every time a mass shooting occurs in the United States, or American police officers appear too willing to use their sidearms, there are calls for the national government to take action. Internationally, human rights institutions contend that the U.S. government is not doing its due diligence in ensuring that its citizens enjoy their right to life and security. Amid these calls for national action, which is hardly ever in the offing, state governments are busy bringing new firearms legislation and churning out new rules. While scholars have started to track these policy changes, and study some of their impacts, they still do not know where gun policy

comes from. In this article, we use new data to examine from where gun bills emanate, and why.

Among other things, we find that gun rights is far more partisan than gun control, that rural districts' representatives favor gun rights and shy away from gun control, and that representatives of districts with greater gun commerce are far more likely to bring gun bills of all kinds. These findings have a few implications. First, it is not accurate to label gun control an ideological extension of the Democratic Party. Legislators of all stripes appear willing to consider certain regulations when their find it in their interest. Descriptions of blue-state liberals sweeping in to pass gun bans appear mostly the stuff of myth. Second, the narrative of the NRA as an all-powerful interest group pulling the strings of state politicians is probably overblown; it is difficult to find any relationship whatsoever between NRA grades or NRA funds and gun rights legislation. Third, if progressives seek to alter the regulatory landscape in favor of greater limitations on gun availability and use, they may need to do more to sell these ideas to denizens of rural areas. Voting districts out in the country are the ones who advance the gun rights agenda. Fourth and finally, the places most fertile for regulatory change in all directions are those with a large number of individuals and firms that sell firearms. If activists and lobbyists seek sweeping change, it may behoove them to concentrate their efforts in places saturated with gun commerce.