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CITY OF GLENDALE, GLENDALE CHIEF OF
6 POLICE CARL POVILAITIS; and GLENDALE
CITY CLERK SUZIE ABAJIAN
7

8 **UNITED STATES DISTRICT COURT**
9 **CENTRAL DISTRICT OF CALIFORNIA**

10
11 CALIFORNIA RIFLE & PISTOL)
ASSOCIATION, INCORPORATED;)
12 SECOND AMENDMENT)
FOUNDATION; GUN OWNERS OF)
13 CALIFORNIA, INC.,)

14 Plaintiffs,)

15 vs.)

16 CITY OF GLENDALE; GLENDALE)
CHIEF OF POLICE CARL)
17 POVILAITIS, in his official capacity;)
GLENDALE CITY CLERK SUZIE)
18 ABAJIAN, in her official capacity; and)
DOES 1-10,)

19 Defendants.)
20)
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Case No.: 2:22-cv-07346-SB-JC

**REQUEST FOR JUDICIAL NOTICE IN
SUPPORT OF DEFENDANTS'
OPPOSITION TO PLAINTIFFS'
MOTION FOR PRELIMINARY
INJUNCTION**

Date: December 2, 2022

Time: 8:30 a.m.

Courtroom: 6C

Judge: Hon. Stanley Blumenfeld Jr.

1 In accordance with Federal Rule of Evidence 201, Defendants City of Glendale,
 2 Glendale Chief of Police Carl Povilaitis and Glendale City Clerk Suzie Abajian
 3 (collectively “Defendants”) respectfully requests that this Court, in its consideration of
 4 Defendants Opposition to Plaintiff’s Motion for Preliminary Injunction filed herewith,
 5 take judicial notice of the information contained in the exhibits attached hereto.

6 The Court may take judicial notice of facts that are “not subject to reasonable
 7 dispute” that “can be accurately and readily determined from sources whose accuracy
 8 cannot reasonably be questioned.” (Rule 201(b).) Where judicial notice is requested and
 9 the Court receives sufficient information, judicial notice is mandatory. (Rule 201(c)(2).)
 10 Defendants’ request for judicial notice should be granted for at least three reasons.

11 First, the “[the] court may take judicial notice of ‘matters of public record[.]’” (*Lee*
 12 *v. City of Los Angeles*, 250 F.3d 668, 689 (9th Cir. 2001).) Judicially noticeable public
 13 records include, without limitation, historical statutes records published on government
 14 websites. (See, e.g., *Daniels–Hall v. Nat’l Educ. Ass’n*, 629 F.3d 992, 998–99 (9th Cir.
 15 2010) (noting the Court may take judicial notice of information publicly available on
 16 government websites where authenticity of the information was not in dispute); *Disabled*
 17 *Rights Action Comm. v. Las Vegas Events, Inc.*, 375 F.3d 861, 866, n.1 (9th Cir. 2004)
 18 (taking judicial notice of state university licensing agreement as a public record); accord
 19 *L’Garde, Inc. v. Raytheon Space & Airborne Sys.*, 805 F. Supp. 2d 932, 937-38 (C.D.
 20 Cal. 2011) (public records available from reliable sources on the internet are generally
 21 considered “not [] subject to reasonable dispute”).)

22 Second, Courts may also take judicial notice of public records reflecting the
 23 official acts, statements or positions that state and federal government entities have taken
 24 in their letters, orders, bulletins and other publications. (See, e.g., *14.02 Acres of Land*,
 25 547 F.3d at 955 (affirming district court’s judicial notice of public reports of
 26 administrative bodies); *Interstate Natural Gas Co. v. S. Cal. Gas Co.*, 209 F.2d 380, 385
 27 (9th Cir. 1953) (taking judicial notice of Federal Power Commission report); *Tilted Kilt*
 28 *Franchise Operating, LLC v. Helper*, No. CV-101951-PHX-DGC, 2011 WL 1526951, at

*1 (D. Ariz. Apr. 22, 2011) (taking judicial notice of order issued by Center for Disease Control); *In re Amgen Inc. Sec. Litig.*, 544 F. Supp. 2d 1009, 1023 (C.D. Cal. 2008) (taking judicial notice of drug labels taken from the Food and Drug Administration’s website); *Cnty. of Santa Clara v. Astra USA, Inc.*, 401 F. Supp. 2d 1022, 1024 (N.D. Cal. 2005) (taking judicial notice of price control regime posted on a Department of Health and Human Services website and drug-pricing contract between the government and pharmaceutical manufacturers); *Cactus Corner, LLC v. U.S. Dep’t of Agric.*, 346 F. Supp. 2d 1075, 1096-1100 (E.D. Cal. 2004), *aff’d*, 450 F.3d 428 (9th Cir. 2006) (granting request for judicial notice of the authenticity and existence of published government letter issued by the Department of Agriculture); *Sierra Club v. Morton*, 400 F. Supp. 610, 633 (N.D. Cal. 1975), *rev’d in part on other grounds*, 610 F.2d 581 (9th Cir. 1979), *rev’d on other grounds*, 451 U.S. 287 (1981) (taking judicial notice, sua sponte, of letter from Secretary of War to Secretary of the Interior, which the court located at a public library).

Third, the Court may take judicial notice of the contents of publications. “Courts may take judicial notice of publications introduced to indicate what was in the public realm at the time, not whether the contents of those articles were in fact true.” (*Von Saher v. Norton Simon Museum of Art*, 592 F.3d 954, 960 (9th Cir. 2009).) Here, the articles and studies submitted concurrently herewith are not being necessarily proffered to demonstrate that their contents are true, but rather to show that despite Plaintiffs’ arguments otherwise, there exists substantial disagreement about the effect of guns in the community.

Accordingly, Defendants respectfully request that the Court take judicial notice of the following Exhibits to this Request:

REQUEST FOR JUDICIAL NOTICE

1. **Delaware:** Del. Const. of 1776, art. XXVIII. A true and correct copy of this document is attached hereto as Exhibit 1.

2. **Texas:** 1870 Tex. Gen. Laws 63, ch. 46, § 1. A true and correct copy of this document is attached hereto as Exhibit 2.

1 3. **Tennessee:** 1869-70 Tenn. Pub. Acts 23-24, ch. 22, § 2. A true and correct
2 copy of this document is attached hereto as Exhibit 3.

3 4. **Georgia:** R. H. Clark, *The Code of the State of Georgia* 818 (1873) (§
4 4528). A true and correct copy of this document is attached hereto as Exhibit 4.

5 5. **Virginia:** 1877 Va. Acts 305, § 21. A true and correct copy of this document
6 is attached hereto as Exhibit 5.

7 6. **Mississippi:** 1878 Miss. Laws 176, ch. 46, § 4. A true and correct copy of
8 this document is attached hereto as Exhibit 6.

9 7. **Missouri:** an excerpt from the 1883 Session Laws of Missouri, containing
10 an act concerning “Concealed Weapons.” A true and correct copy of this document is
11 attached hereto as Exhibit 7.

12 8. **New Mexico:** Chief Justice LeBaron Bradford Prince, *The General Laws of*
13 *New Mexico: Including All the Unrepealed General Laws from the Promulgation of the*
14 *“Kearney Code” in 1846, to the End of the Legislative Session of 1880, with Supplement,*
15 *Including the Session of 1882*, at 313. A true and correct copy of this document is
16 attached hereto as Exhibit 8.

17 9. **Oklahoma:** 1890 Statutes of Oklahoma (art. 45, § 7). A true and correct
18 copy of this document is attached hereto as Exhibit 9.

19 10. **Arizona:** 1889 Session Laws of the Fifteenth Legislative Assembly of the
20 Territory of Arizona (§ 3). A true and correct copy of this document is attached hereto as
21 Exhibit 10.

22 11. **Montana:** 1903 Mont. Laws 49, § 3. A true and correct copy of this
23 document is attached hereto as Exhibit 11.

24 12. **New York, New York:** *Fourth Annual Report of the Board of*
25 *Commissioners of the Central Park* 106 (1861). A true and correct copy of this document
26 is attached hereto as Exhibit 12.

27 13. **Philadelphia, Pennsylvania:** *Acts of Assembly Relating to Fairmount Park*
28 (1869). A true and correct copy of this document is attached hereto as Exhibit 13.

1 14. **St. Louis, Missouri:** Michael John Sullivan, *The Revised Ordinance of the*
2 *City of St. Louis, Together with the Constitution of the United States, Constitution of the*
3 *State of Missouri, the Scheme for the Separation of the Governments of the City and*
4 *County of St. Louis, the Charter of the City, and a Digest of the Laws Applicable to the*
5 *City* 635 (1881) (§ 3). A true and correct copy of this document is attached hereto as
6 Exhibit 14.

7 15. **Idaho in 1889:** Penal Code of the State of Idaho § 4781 (1901) (reprinting
8 1889 statute), TD Ex. 45. A true and correct copy of this document is attached hereto as
9 Exhibit 15.

10 16. **Saint Paul, Minnesota:** *Annual Reports of the City Officers and City*
11 *Boards of the City of Saint Paul* 689 (1889). A true and correct copy of this document is
12 attached hereto as Exhibit 16.

13 17. **Chicago, Illinois:** *Amendments to the Revised Municipal Code of Chicago*
14 *of 1905 and New General Ordinances* 40 (1905). A true and correct copy of this
15 document is attached hereto as Exhibit 17.

16 18. **Los Angeles, CA:** 1906 (in 1922 publication). A true and correct copy of
17 this document is attached hereto as Exhibit 18.

18 19. **Phoenixville, Pennsylvania:** *A Digest of the Ordinances of Town Council of*
19 *the Borough of Phoenixville* 135 (1906). A true and correct copy of this document is
20 attached hereto as Exhibit 19.

21 20. **Oakland, California:** *General Municipal Ordinances of the City of*
22 *Oakland, Cal.*, Addendum at 15 (1909). A true and correct copy of this document is
23 attached hereto as Exhibit 20.

24 21. **Staunton, Virginia:** *The Code of the City of Staunton, Virginia* 115 (1910).
25 A true and correct copy of this document is attached hereto as Exhibit 21.

26 22. **New York City:** *Ordinances, Rules and Regulations of the Department of*
27 *Parks of the City of New York* 7 (1916). A true and correct copy of this document is
28 attached hereto as Exhibit 22.

1 23. **Birmingham, Alabama:** *The Code of City of Birmingham, Alabama* 662
2 (1917). A true and correct copy of this document is attached hereto as Exhibit 23.

3 24. **Federal:** 1 Fed. Reg. 668, 674 (June 27, 1936). A true and correct copy of
4 this document is attached hereto as Exhibit 24.

5 25. **Federal:** “Firearms Regulations in the National Parks, 1897–1936” (May 13,
6 2008). A true and correct copy of this document is attached hereto as Exhibit 25.

7 26. “A Year in Review: 2020 Gun Deaths in the U.S.” (Baltimore: Johns
8 Hopkins Center for Gun Violence Solutions, 2022), available at
9 [https://publichealth.jhu.edu/sites/default/files/2022-05/2020-gun-deaths-in-the-us-4-28-](https://publichealth.jhu.edu/sites/default/files/2022-05/2020-gun-deaths-in-the-us-4-28-2022-b.pdf)
10 [2022-b.pdf](https://publichealth.jhu.edu/sites/default/files/2022-05/2020-gun-deaths-in-the-us-4-28-2022-b.pdf) Accessed on November 2, 2022. A true and correct copy of this document is
11 attached hereto as Exhibit 26.

12 27. “Trends and Patterns in Firearm Violence, 1993 – 2018” available at
13 [https://bjs.ojp.gov/library/publications/trends-and-patterns-firearm-violence-1993-](https://bjs.ojp.gov/library/publications/trends-and-patterns-firearm-violence-1993-2018#additional-details-0)
14 [2018#additional-details-0](https://bjs.ojp.gov/library/publications/trends-and-patterns-firearm-violence-1993-2018#additional-details-0) Accessed on November 2, 2022. A true and correct copy of this
15 document is attached hereto as Exhibit 27.

16 28. “Right-To-Carry Laws and Violent Crime: A Comprehensive Assessment
17 Using Panel Data and a State-Level Synthetic Control Analysis”. *National Bureau of*
18 *Economic Research*. (2018) by Donohue J., Aneja A., and Weber K available at
19 <https://www.nber.org/papers/w23510.pdf> Accessed on November 12, 2022. A true and
20 correct copy of this document is attached hereto as Exhibit 28.

21 29. “California: Strong Gun Laws Save Lives” available at
22 <https://drive.google.com/file/d/1BZISs-iUfXnzUwKRTHr4a0NA-SWsXa4a/view> from
23 Brad United Against Gun Violence California’s website
24 [https://ca.bradyunited.org/news/report-trends-in-california-firearm-mortality-compared-](https://ca.bradyunited.org/news/report-trends-in-california-firearm-mortality-compared-to-the-rest-of-the-u-s)
25 [to-the-rest-of-the-u-s](https://ca.bradyunited.org/news/report-trends-in-california-firearm-mortality-compared-to-the-rest-of-the-u-s) Accessed on November 12, 2022. A true and correct copy of this
26 document is attached hereto as Exhibit 29.

27 30. John Donahue and others, “More Guns, More Unintended Consequences:
28 The Effects Of Right-To-Carry On Criminal Behavior And Policing In Us Cities,”

(Cambridge, MA: National Bureau of Economic Research, 2022), available at https://www.nber.org/system/files/working_papers/w30190/w30190.pdf Accessed on November 2, 2022. A true and correct copy of this document is attached hereto as Exhibit 30.

31. Johns Hopkins Bloomberg School of Public Health, “Study Finds Significant Increase in Firearm Assaults in States that Relaxed Conceal Carry Permit Restrictions,” September 20, 2022, available at <https://publichealth.jhu.edu/2022/study-finds-significant-increase-in-firearm-assaults-in-states-that-relaxed-conceal-carry-permit-restrictions>. Accessed on November 2, 2022. A true and correct copy of this document is attached hereto as Exhibit 31.

32. “State gun laws, gun ownership, and mass shootings in the US: cross sectional time series,” BMJ 364 (2019): 1542 Paul M. Reeping and others available at <https://www.bmj.com/content/364/bmj.1542> Accessed on November 2, 2022. A true and correct copy of this document is attached hereto as Exhibit 32.

33. Centers for Disease Control and Prevention, “Firearm Mortality by State,” available at https://www.cdc.gov/nchs/pressroom/sosmap/firearm_mortality/firearm.htm. Accessed on November 2, 2022. A true and correct copy of this document is attached hereto as Exhibit 33.

34. “Gun Safety Policies Save Lives” available at <https://everytownresearch.org/rankings/> from Everytown Research & Policy’s website. Accessed on November 12, 2022. A true and correct copy of this document is attached hereto as Exhibit 34.

35. “Annual Gun Law Scorecard,” available at <https://giffords.org/lawcenter/resources/scorecard/> from Gifford’s Law Center to Prevent Gun Violence’s website. Accessed on November 2, 2022. A true and correct copy (snip) of this document is attached hereto as Exhibit 35.

36. “Fact Sheet: Weak Gun Laws Are Driving Increases in Violent Crime” dated August 18, 2022, available at <https://www.americanprogress.org/article/fact-sheet-weak->

1 [gun-laws-are-driving-increases-in-violent-crime/](#) from American Progress' website.
2 Accessed on November 2, 2022. A true and correct copy of this document is attached
3 hereto as Exhibit 36.

4 37. "Fact Sheet: Weakening Requirements to Carry a Concealed Firearm
5 Increases Violent Crime" dated October 4, 2022, available at
6 [https://www.americanprogress.org/article/fact-sheet-weakening-requirements-to-carry-a-](https://www.americanprogress.org/article/fact-sheet-weakening-requirements-to-carry-a-concealed-firearm-increases-violent-crime/)
7 [concealed-firearm-increases-violent-crime/](https://www.americanprogress.org/article/fact-sheet-weakening-requirements-to-carry-a-concealed-firearm-increases-violent-crime/) from American Progress' website. Accessed
8 on November 2, 2022. A true and correct copy of this document is attached hereto as
9 Exhibit 37.

10 For the foregoing reasons, Defendants respectfully requests that the Court take
11 judicial notice of each of the Exhibits accompanying this Request for Judicial Notice.
12

13 DATED: November 3, 2022

MICHAEL J. GARCIA, CITY ATTORNEY

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15 By:  _____

16 EDWARD B. KANG
17 Attorneys for Defendants
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A P P E N D I X.

A. D.
1776.

and meeting of
the Legislature
under this con-
stitution.

chosen to that office until the first day of October in the year of our Lord One Thousand Seven Hundred and Seventy-eight, provided the freemen think proper to re-elect them at every general election; and the present Sheriffs and Coroners respectively shall continue to exercise their offices as heretofore until the Sheriffs and Coroners to be elected on the said twenty-first day of October shall be commissioned and sworn into office. The Members of the Legislative Council and Assembly shall meet for transacting the business of the state on the twenty-eighth day of October next, and continue in office until the first day of October which will be in the year One Thousand Seven Hundred and Seventy-seven; on which day, and on the first day of October in each year forever after, the Legislative Council, Assembly, Sheriffs and Coroners, shall be chosen by ballot in manner directed by the several laws of this state for regulating elections of Members of Assembly and Sheriffs and Coroners; and the General Assembly shall meet on the twentieth day of the same month for the transacting the business of the state; and if any of the said first and twentieth days of October should be Sunday, then and in such case the elections shall be held and the General Assembly meet the next day following.

Of the freedom
of election.

ART. 28. To prevent any violence or force being used at the said elections, no persons shall come armed to any of them; and no muster of the militia shall be made on that day, nor shall any battalion or company give in their votes immediately succeeding each other, if any other voter who offers to vote objects thereto; nor shall any battalion or company in the pay of the Continent, or of this or any other state, be suffered to remain at the time and place of holding the said elections, nor within one mile of the said places respectively for twenty-four hours before the opening said elections, nor within twenty-four hours after the same are closed, so as in any manner to impede the freely and conveniently; carrying on the said election: *Provided always*, That every elector may in a peaceable and orderly manner give in his vote on the said day of election.

ART. 29. There shall be no establishment of any
one

GENERAL LAWS
OF THE
TWELFTH LEGISLATURE,
OF THE
STATE OF TEXAS.

CALLED SESSION.

BY AUTHORITY.



AUSTIN:
PRINTED BY TRACY, SIEMERING & CO.
1870.

GENERAL LAWS.

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CHAPTER XLVI.

AN ACT REGULATING THE RIGHT TO KEEP AND BEAR ARMS.

SECTION 1. *Be it enacted by the Legislature of the State of Texas,* That if any person shall go into any church or religious assembly, any school room or other place where persons are assembled for educational, literary or scientific purposes, or into a ball room, social party or other social gathering composed of ladies and gentlemen, or to any election precinct on the day or days of any election, where any portion of the people of this State are collected to vote at any election, or to any other place where people may be assembled to muster or to perform any other public duty, or any other public assembly, and shall have about his person a bowie-knife, dirk or butcher-knife, or fire-arms, whether known as a six shooter, gun or pistol of any kind, such person so offending shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in a sum not less than fifty or more than five hundred dollars, at the discretion of the court or jury trying the same; provided, that nothing contained in this section shall apply to locations subject to Indian depredations; and provided further, that this act shall not apply to any person or persons whose duty it is to bear arms on such occasions in discharge of duties imposed by law.

SEC. 2. That this act take effect and be in force in sixty days from the passage thereof.

Approved August 12, 1870.

CHAPTER XLVII.

AN ACT AUTHORIZING THE GOVERNOR TO ORDER AN ELECTION TO BE HELD IN HILL COUNTY FOR THE PERMANENT LOCATION OF THEIR COUNTY SEAT.

SECTION 1. *Be it enacted by the Legislature of the State of Texas,* That the Governor of the State of Texas be, and is hereby authorized to order an election to be held in the county of Hill, on the second Monday in September, A. D. 1870, (or as soon thereafter as possible), for the permanent location of the county seat of the

GENERAL LAWS.

county of Hill; said election shall be held at such places and under such rules and regulations as the Governor may prescribe.

SEC. 2. That the returns of said election shall be made to the Secretary of State, within twenty days after said election shall have been held, and the town receiving two-thirds of the votes cast shall be the permanent county seat of the county of Hill, but should no place receive two-thirds of the votes cast, the present county seat shall remain the permanent one.

SEC. 3. That the Governor shall, within twenty days after the returns of said election shall have been received, notify the Police Court of the county of Hill of the result of said election.

SEC. 4. That this act be in force from and after passage.

Approved August 12, 1870.

CHAPTER XLVIII.

AN ACT MAKING APPROPRIATIONS FOR THE PAYMENT OF THE EXPENSES OF MAINTAINING RANGING COMPANIES ON THE FRONTIER.

SECTION 1. *Be it enacted by the Legislature of the State of Texas,* That the sum of seven hundred and fifty thousand dollars, or so much thereof as may be necessary, be and the same is hereby appropriated, out of any moneys in the State Treasury (derived from the sale or hypothecation of the bonds of the State issued for frontier protection), for the purpose of paying all expenses connected with the organization, arming and maintenance of the ranging companies on the frontier, called into service under the provisions of the act approved June 18, 1870.

SEC. 2. That this appropriation shall be expended under the direction of the Governor; and the Comptroller of Public Accounts shall, under the special direction of the Governor, audit all claims and accounts incurred for the purposes hereinbefore mentioned, and shall draw his warrant on the Treasurer for the payment of the same.

SEC. 3. That this act shall take effect from and after its passage.

Approved August 12, 1870.

A C T S

OF THE

STATE OF TENNESSEE,

PASSED BY THE FIRST SESSION OF

THE THIRTY-SIXTH GENERAL ASSEMBLY

FOR THE YEARS 1869-70.

PUBLISHED BY AUTHORITY.

NASHVILLE, TENN.:
JONES, PURVIS & CO., PRINTERS TO THE STATE.
1870.

CHAPTER XXI.

AN ACT to Amend An Act, passed on the 13th of March, 1868,
entitled "An Act to amend the revenue laws of the State."

SECTION 1. *Be it enacted by the General Assembly of the State of Tennessee*, That An Act to amend the revenue laws of the State, passed on the 13th day of March, 1868, be so amended as to impose a tax of fifty cents on each ^{Hotels and} Livery Stable room except two in a hotel or tavern, and a tax of fifty cents on each stall in a livery stable, or stable kept by hotel or tavern keepers, instead of one dollar, as now imposed by law.

SEC. 2. *Be it further enacted*, That this Act take effect from and after its passage.

W. O'N. PERKINS,
Speaker of the House of Representatives.
D. B. THOMAS,
Speaker of the Senate.

Passed November 27, 1869.

CHAPTER XXII.

AN ACT to Amend the Criminal Laws of the State.

SECTION 1. *Be it enacted by the General Assembly of the State of Tennessee*, That all voters in this State shall be ^{To vote in} required to vote in the civil district or ward in which they ^{Civil District} may reside. Any person violating this Act shall be guilty or Ward. of a misdemeanor, and upon conviction thereof shall not be fined less than twenty nor more than fifty dollars; *Provided*, that sheriffs and other officers holding elections shall be permitted to vote at any ward or precinct in which they may hold an election.

SEC. 2. *Be it further enacted*, That it shall not be lawful for any qualified voter or other person attending any election in this State, or for any person attending any fair, ^{Deadly} race course, or other public assembly of the people, to carry ^{Weapons.} about his person, concealed or otherwise, any pistol, dirk, bowie-knife, Arkansas tooth-pick, or weapon in form, shape

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or size, resembling a bowie-knife, or Arkansas tooth-pick, or other deadly or dangerous weapon.

Penalty. SEC. 3. *Be it further enacted*, That all persons convicted under the second section of this Act shall be punished by fine of not less than fifty dollars, and by imprisonment, or both, at the discretion of the Court.

Liquor Shops. SEC. 4. *Be it further enacted*, That no liquor shop in this State, shall be kept open on election days, nor shall any person, on said days, give or sell intoxicating liquors to any person for any purpose at or near an election ground.

Grand Juries. SEC. 5. *Be it further enacted*, That the grand juries of this State shall have inquisitorial powers concerning the commission of the offenses created by these Acts, and may send for witnesses, as in cases of gaming, illegal voting, tippling and offenses now prescribed by law.

Judges. SEC. 6. *Be it further enacted*, That it shall be the duty of the Circuit and Criminal Judges of this State to give the above in special charge to the several grand juries of the courts.

Proviso. SEC. 7. *Be it further enacted*, That there shall be no property exempt from execution for fines and costs for this offense; *Provided*, That, if from any cause, there should be a failure to hold an election in any civil district or ward, then nothing in this Act shall be so construed as to prevent any voter from voting in any other civil district or ward in his county or town, for State or county officers, at the time prescribed by law.

SEC. 8. *Be it further enacted*, That this Act shall take effect from and after its passage.

W. O'N. PERKINS.

Speaker of the House of Representatives.

D. B. THOMAS,

Speaker of the Senate.

Passed December 1, 1869.

Offenses against the public morality, health, police, etc.

(a) Acts of 1870,
p. 421.

§4528. *Deadly weapons not to be carried to public places.* [No person in this State is permitted or allowed to carry about his or her person, any dirk, bowie knife, pistol or revolver, or any kind of deadly weapon, to any Court of justice, or any election ground, or precinct, or any place of public worship, or any other public gathering in this State, except militia muster grounds; and if any person or persons shall violate any portion of this section, he, she or they shall be guilty of a misdemeanor, and upon conviction, shall be punished by a fine of not less than twenty nor more than fifty dollars for each and every such offense, or imprisonment in the common jail of the county not less than ten nor more than twenty days, or both, at the discretion of the Court.] (a.)

(a) Acts of 1865-
'66, p. 233.

§4529. (4455.) *Other offenses against public peace.* All other offenses against the public peace, not provided for in this Code, shall be prosecuted and indicted as heretofore, and the punishment in every such case, shall be [as prescribed in section 4310 of this Code.] (a.)

TENTH DIVISION.

OFFENSES AGAINST THE PUBLIC MORALITY, HEALTH, POLICE, ETC.

SECTION.

4530. Bigamy.
4531. Punishment on married person.
4532. On unmarried person.
4533. Incest.
4534. Adultery.
4535. Lewdness.
4536. Lewd houses.
4537. Disorderly houses.
4538. Gaming houses.
4539. Gaming in liquor shops.
4540. Gaming tables.
4541. Gambling.
4542. Gaming with minors.
4543. Minors not to play billiards.
4544. Gaming with clerks and bank officers.
4545. Players—witnesses.
4546. Judge's charge.
4547. Suspected houses.
4548. Sale of lottery tickets forbidden.
4549. Tickets in gift enterprises.
4550. Unwholesome provisions.
4551. Unwholesome bread, etc.
4552. Unlawful sale of kerosene.
4553. Test of kerosene.
4554. Other illegal oils.
4555. Sale of naphtha.
4556. Sale of uninspected oils.
4557. Kerosene defined.
4558. Spreading small pox.

SECTION.

4559. Violating quarantine.
4560. Vagrants.
4561. Common rogues.
4562. Nuisances.
4563. Disinterring bodies.
4564. Bastardy.
4565. Retailing without license.
4566. Illegal marrying.
4567. Marrying white and colored.
4568. Illegal voting.
4569. Buying or selling votes.
4570. Sale of liquor on election days.
4571. Minors voting.
4572. Adultery with negroes.
4573. Whipping wife.
4574. Interfering with religious worship.
4575. Retailing near church.
4576. Vending near camp grounds.
4577. Police at places of worship.
4578. Running freight trains on Sunday.
4579. Violating Sabbath.
4580. Hunting on Sunday.
4581. Illegal bathing.
4582. Fines from Sabbath-breakers.
4583. Bonds in case of vagrancy.
4584. Attorney or Solicitor—duty in such case.
4585. Water and light on railroads.
4586. Equal accommodation of races.

4530. (4456.) *Polygamy and bigamy.* Polygamy, or bigamy, shall consist in knowingly having a plurality of husbands or wives at the same time.

Indictment for bigamy must set forth what—admissions of defendant as to marriage: 11 Ga., 53. Definition of bigamy: 20 Ga., 703. Principal in first and second degree: 34 Ga., 275. Bigamy under 1667: 40 Ga., 244. "Legitimate:" 20 Ga., 702; 34 Ga., 407.

4531. (4457.) *Punishment—if before marriage.* If any person or persons within this State, being married, do or shall at any time hereafter marry any person or persons, the lawful husband or wife being alive, and knowing that such lawful husband or wife is living, such person or persons so offending shall, on conviction, be punished by confinement at labor in the penitentiary, for any time not less than two years nor longer than four years, and the second marriage shall be void; but five years' absence of the husband or wife, and no information of the fate of such husband or wife, shall be sufficient cause of acquittal of the person indicted;

ACTS

AND

JOINT RESOLUTIONS

PASSED BY

THE GENERAL ASSEMBLY

OF THE

STATE OF VIRGINIA

DURING THE

SESSION OF 1877-78.

RICHMOND:

R. F. WALKER, SUPERINTENDENT PUBLIC PRINTING.

1878.

Penalty ished by a fine not exceeding one hundred dollars, or by imprisonment in jail not exceeding six months.

Cruelty to animals; profanity and drunkenness.

Cruelty to animals 15. If a person cruelly beat or torture any horse, animal or other beast, whether his own or that of another, he shall be fined not exceeding fifty dollars.

Profanity and drunkenness 16. If any person, arrived at the age of discretion, profanely curse or swear, or get drunk, he shall be fined by a justice one dollar for each offence.

Violation of the Sabbath.

Violation of Sabbath 17. If a person, on a Sabbath day, be found laboring at any trade or calling, or employ his apprentices or servants in labor or other business, except in household or other work of necessity or charity, he shall forfeit two dollars for each offence; every day any servant or apprentice is so employed constituting a distinct offence.

Exceptions as to the mail, and as to certain persons.

Transportation of mail excepted 18. No forfeiture shall be incurred under the preceding section for the transportation on Sunday of the mail, or of passengers and their baggage. And the said forfeiture shall not be incurred by any person who conscientiously believes that the seventh day of the week ought to be observed as a Sabbath, and actually refrains from all secular business and labor on that day: provided he does not compel an apprentice or servant, not of his belief, to do secular work or business on Sunday, and does not on that day disturb any other person.

Proviso 19. No bar-room, saloon, or other place for the sale of intoxicating liquors, shall be opened, and no intoxicating bitters or other drink shall be sold in any bar-room, restaurant, saloon, store, or other place, from twelve o'clock on each and every Saturday night of the week, until sunrise of the succeeding Monday morning; and any person violating the provisions of this section, shall be deemed guilty of a misdemeanor, and, if convicted, shall be punished by fine not less than ten nor more than five hundred dollars; and shall, moreover, at the discretion of the court, forfeit his license: provided that this law shall not apply to any city having police regulations on this subject, and an ordinance inflicting a penalty equal to the penalty inflicted by this section.

Sale of intoxicating liquors prohibited between certain hours 20. If a person willfully interrupt or disturb any assembly met for the worship of God, or being intoxicated, if he disturb the same, whether willfully or not, he shall be confined in jail not more than six months, and fined not exceeding one hundred dollars, and a justice may put him under restraint during religious worship, and bind him for not more than one year to be of good behavior.

ACTS OF ASSEMBLY.

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21. If any person carrying any gun, pistol, bowie-knife, dagger, or other dangerous weapon, to any place of worship while a meeting for religious purposes is being held at such place, or without good and sufficient cause therefor, shall carry any such weapon on Sunday at any place other than his own premises, shall be fined not less than twenty dollars. Carrying dangerous weapons at a place of worship or on Sunday

If any offence under this section be committed at a place of religious worship, the offender may be arrested on the order of a conservator of the peace, without warrant, and hold until warrant can be obtained, but not exceeding three hours. Penalty

It shall be the duty of justices of the peace, upon their own knowledge, or upon the affidavit of any person, that an offence under this section has been committed, to issue a warrant for the arrest of the offender. Offenders subject to arrest without warrant

Duty of justice where he knows of offence under this section

Protection of religious assemblies; prohibition against sale of liquors or other things near such meetings; proviso.

22. If any person shall erect, place, or have any booth, stall, tent, carriage, boat, vessel, vehicle, or other contrivance whatever, for the purpose or use of selling, giving, or otherwise disposing of any kind of spirituous and fermented liquors, or any other articles of traffic; or shall sell, give, barter, or otherwise dispose of any spirituous or fermented liquors, or any other articles of traffic within three miles of any camp-meeting, or other place of religious worship, during the time of holding any meeting for religious worship at such place, such person, on conviction before a justice of the peace, for the first offence, shall be fined not less than ten dollars, nor more than twenty dollars, and stand committed to jail until the fine and costs are paid; and for the second offence, shall be fined as aforesaid, and be imprisoned not less than ten nor more than thirty days. Sale of liquors, &c., prohibited

Penalty

Penalty for second offence

23. If any person shall commit any offence against the provisions of the preceding section, he shall, in addition to the penalties therein mentioned, forfeit all such spirituous or fermented liquors, and other articles of traffic, and all the chests and other things containing the same, belonging to and in the possession of the person so offending, together with such booth, stall, tent, carriage, boat, vessel, vehicle, or other contrivance or thing prepared and used in violation of said section; and it shall be the duty of any sheriff, deputy sheriff, or constable, if he sees any person violating the preceding section, to arrest the offender and carry him before a justice of the peace. The sheriff, deputy sheriff, or constable, when he arrests the offender, shall seize the property hereby declared to be forfeited, or shall seize the same on a warrant against the offender, if such offender cannot be found; and the justice of the peace before whom such offender is convicted, or before whom the warrant is returned that the offender cannot be found, shall enter judgment of condemnation against such property, and issue a fieri facias for the Additional penalty

Duty of sheriffs, &c., to arrest offender and seize the property

Judgment of condemnation

Fl. sn. to issue
Proviso sale thereof: provided the person who has been returned not found, and whose property has been condemned in his absence, may appear at any time before the sale of the property and have the case tried as if he had appeared at the return of the warrant.

To whom provisions not to apply 24. The provisions of the two preceding sections shall not apply to any licensed tavern-keeper, merchant, shop-keeper, farmer, or other person in the usual and lawful transaction of his ordinary business, in the usual place of transacting such business, or to any person having permission, in writing from the superintendent of such meeting, to sell such articles as may be named in such permission: provided this permission shall not extend to the sale of any spirituous or fermented liquors.

Proviso

Right of appeal.

Right of appeal preserved 25. Nothing in this chapter shall prevent the courts of record from exercising their common law or statutory jurisdiction in all cases for disturbing public worship: provided that the party convicted under the twenty-second or twenty-third sections of this chapter shall have the right to appeal to the next county court for the county where the conviction is had, upon giving bail for his appearance at court, and upon such appeal shall be entitled to a trial by jury: and provided further, that when any person or persons are proceeded against under the twenty-second or twenty-third sections of this chapter, he or they shall not be held to answer for the same offence before any grand jury or court of record, except as herein provided.

Proviso

Persons proceeded against not subject to answer before grand jury

Temporary police force for religious meetings.

Temporary police authorized 26. The supervisor, or any justice of the magisterial district where the meeting is held, shall have power to appoint a temporary police to enforce the provisions of this chapter.

CHAPTER VIII.

OF OFFENCES AGAINST PUBLIC HEALTH.

Selling unsound provisions.

Sale of unsound provisions 1. If a person knowingly sell any diseased, corrupted, or unwholesome provisions, whether meat or drink, without making the same known to the buyer, he shall be confined in jail not more than six months, and fined not exceeding one hundred dollars.

Penalty

L A W S .
OF THE
STATE OF MISSISSIPPI,
PASSED AT A REGULAR SESSION
OF THE
MISSISSIPPI LEGISLATURE,
HELD IN THE
CITY OF JACKSON,

Commencing Jan. 8th, 1878, and Ending March 5th, 1878.

PRINTED BY AUTHORITY.

JACKSON, MISS.:
POWER & BARKSDALE, STATE PRINTERS.
1878.

STATE OF MISSISSIPPI.

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CHAPTER XLVI.

AN ACT to prevent the carrying of concealed weapons,
and for other purposes.

SECTION 1. *Be it enacted by the Legislature of the State of Mississippi*, That any person, not being threatened with, or having good and sufficient reason to apprehend an attack, or traveling (not being a tramp) or setting out on a journey, or peace officers, or deputies in discharge of their duties, who carries concealed, in whole or in part, any bowie knife, pistol, brass knuckles, slung shot or other deadly weapon of like kind or description, shall be deemed guilty of a misdemeanor, and on conviction, shall be punished for the first offence by a fine of not less than five dollars nor more than one hundred dollars, and in the event the fine and cost are not paid shall be required to work at hard labor under the direction of the board of supervisors or of the court, not exceeding two months, and for the second or any subsequent offence, shall, on conviction, be fined not less than fifty nor more than two hundred dollars, and if the fine and costs are not paid, be condemned to hard labor not exceeding six months under the direction of the board of supervisors, or of the court. That in any proceeding under this section, it shall not be necessary for the State to allege or prove any of the exceptions herein contained, but the burden of proving such exception shall be on the accused.

When concealed weapons may be carried.

Penalty for carrying weapons.

Burden of proof on accused.

SEC. 2. *Be it further enacted*, That it shall not be lawful for any person to sell to any minor or person intoxicated, knowing him to be a minor or in a state of intoxication, any weapon of the kind or description in the first section of this Act described, or any pistol cartridge, and on conviction shall be punished by a fine not exceeding two hundred dollars, and if the fine and costs are not paid, be condemned to hard labor under the direction of the board of supervisors or of the court, not exceeding six months.

Minors, or persons intoxicated.

SEC. 3. *Be it further enacted*, That any father, who shall knowingly suffer or permit any minor son under the age of sixteen years to carry concealed, in whole or in part, any weapon of the kind or description in the first section of this Act described, shall be deemed guilty of a misdemeanor, and on conviction, shall be fined not less than twenty dollars, nor more than two hundred dollars, and if the fine and costs are not paid, shall be condemned to hard labor under the direction of the board of supervisors or of the court.

Minor under
16 years.

SEC. 4. *Be it further enacted*, That any student of any university, college or school, who shall carry concealed, in whole or in part, any weapon of the kind or description in the first section of this Act described, or any teacher, instructor, or professor who shall, knowingly, suffer or permit any such weapon to be carried by any student or pupil, shall be deemed guilty of a misdemeanor, and, on conviction, be fined not exceeding three hundred dollars, and if the fine and costs are not paid, condemned to hard labor under the direction of the board of supervisors or of the court.

Students.

SEC. 5. *Be it further enacted*, That each justice of the peace before whom a conviction is had, shall, in addition to the costs now allowed by law, be entitled to a tax fee of two dollars and a half.

Tax fee of
justice.

SEC. 6. *Be it further enacted*, That immediately after the passage of this Act, the Secretary of State shall transmit a copy to each circuit judge in the State, who shall cause the same to be read in open court on the day for the calling of the State docket of the court.

Act to be
read in courts

SEC. 7. *Be it further enacted*, That this Act take effect from and after its passage.

APPROVED, February 28, 1878.

LAWS OF MISSOURI,

PASSED AT THE SESSION OF THE

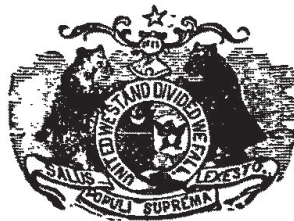
THIRTY-SECOND GENERAL ASSEMBLY,

BEGUN AND HELD AT THE CITY OF JEFFERSON,

WEDNESDAY, JANUARY 3, 1883.

(REGULAR SESSION.)

BY AUTHORITY.



JEFFERSON CITY:
STATE JOURNAL COMPANY, STATE PRINTERS.
1883.

Be it enacted by the General Assembly of the State of Missouri, as follows:

SECTION 1. Any person or persons doing a commission business in this state who shall receive cattle, hogs, sheep, grain, cotton or other commodities consigned or shipped to him or them for sale on commission, and who shall wilfully make a false return to his or their consignor or shipper, in an account of sale or sales of any such cattle, hogs, sheep, grain, cotton or other commodities made and rendered by such person or persons for and to such consignor or shipper, either as to weights or prices, shall be guilty of a misdemeanor and shall, on conviction, be punished by imprisonment in the county jail not exceeding one year, or by a fine not exceeding five hundred dollars nor less than two hundred dollars, or by fine not less than one hundred dollars and imprisonment in the county jail not less than three months.

Approved April 2, 1883.

CRIMES AND CRIMINAL PROCEDURE: CONCEALED WEAPONS.

AN ACT to amend section 1274, article 2, chapter 24 of the Revised Statutes of Missouri, entitled "Of Crimes and Criminal Procedure."

SECTION 1. Carrying concealed weapon, etc., penalty for increased.

Be it enacted by the General Assembly of the State of Missouri, as follows:

SECTION 1. That section 1274 of the Revised Statutes of Missouri be and the same is hereby amended by inserting the word "twenty" before the word "five" in the sixteenth line of said section, and by striking out the word "one" in the same line and inserting in lieu thereof the word "two," and by striking out the word "three" in the seventeenth line of said section and inserting in lieu thereof the word "six," so that said section, as amended, shall read as follows: Section 1274. If any person shall carry concealed, upon or about his person, any deadly or dangerous weapon, or shall go into any church or place where people have assembled for religious worship, or into any school room or place where people are assembled for educational, literary or social purposes, or to any election precinct on any election day, or into any court room during the sitting of court, or into any other public assemblage of persons met for any lawful purpose other than for militia drill or meetings called under the militia law of this state, having upon or about his person any kind of fire arms, bowie knife, dirk, dagger, slung-shot or other deadly weapon, or shall in the presence of one or more persons exhibit any such weapon in a rude, angry or threatening manner, or shall have or carry any such weapon upon or about his person when intoxicated or under the influence of intoxicating drinks, or shall directly or indirectly sell or deliver, loan or barter to any minor any such weapon, without the consent of the parent or guardian of such minor, he shall, upon conviction, be punished by a fine of not less than twenty-five nor more than two hundred dollars, or by imprisonment in the county jail not exceeding six months, or by both such fine and imprisonment.

Approved March 5, 1883.

MISCELLANEOUS.

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whether the same be a revolver, derringer, repeater, or any other kind or class of pistol ; any and all kinds of bowie knives, daggers, poniards, butcher knives, dirk knives and all such weapons with which cuts can be given or by which wounds can be inflicted by thrusting, including sword canes and such sharp-pointed canes with which deadly thrusts can be given, and all kinds of slung-shots, and any other kinds of deadly weapon, by whatever name it may be called, by which a dangerous wound can be inflicted.

§ 3. The penalty for the violation of the preceding sections of this act shall not be less than ten dollars nor more than fifty dollars for each offense, or not less than ten days' imprisonment nor more than fifty days' imprisonment in the county jail, or both ; such fine and imprisonment in the discretion of the jury trying the case.

§ 4. Any person who shall draw a deadly weapon on another, or who shall handle a deadly weapon in a threatening manner at or towards another, in any part of this Territory, except in the lawful defense of himself, his family, or his property, or by order of legal authority, upon conviction thereof before the proper tribunal, shall, for each offense, be fined in a sum not less than twenty-five dollars nor more than seventy-five dollars, or by imprisonment in the county jail for a term of not less than twenty days or more than sixty days, or be punished by both such fine and imprisonment, in the discretion of the jury trying the cause.

§ 5. Any person who shall draw or use any deadly weapon in any ball, dance, or other public gathering of the people, or near where any election authorized by law is being held in any part of the Territory, except it be in the lawful defense of himself, his family, or his property, or in obedience to legal authority, shall, upon conviction before the proper tribunal, be punished by a fine not less than fifty dollars nor more than one hundred dollars for each offense, or by imprisonment in the county jail for a term of not less than one month nor more than three months for each offense, or by both such fine and imprisonment, in the discretion of the jury trying the cause.

§ 6. Justices of the peace, as well as the District Court, shall have jurisdiction of all offenses under the preceding sections of this act ; and in all cases of prosecution under this act, in which a plea of guilty shall be entered, the court shall proceed to hear and determine the case, and

THE
STATUTES OF OKLAHOMA

1890.

Compiled under the supervision and direction of Robert Martin,
Secretary of the Territory,

—BY—

WILL T. LITTLE, L. G. PITMAN and R. J. BARKER,

—FROM—

The Laws Passed by the First Legislative Assembly of the Territory.

~~~~~

GUTHRIE, OKLAHOMA:  
THE STATE CAPITAL PRINTING CO.,  
PUBLISHERS.  
1891.



(2430) § 6. Every person who, with intent to extort any money or other property from another, sends to any person any letter or other writing, whether subscribed or not, expressing or implying, or adapted to imply, any threat, such as is specified in the second section of this article, is punishable in the same manner as if such money or property were actually obtained by means of such threat. Chap. 25.  
Sending threatening letter.

(2431) § 7. Every person who unsuccessfully attempts by means of any verbal threat such as is specified in the second section of this article, to extort money or other property from another is guilty of a misdemeanor. Attempting to export money.

#### ARTICLE 47.—CONCEALED WEAPONS.

##### SECTION.

1. Prohibited weapons enumerated.
2. Same.
3. Minors.
4. Public officials, when privileged.
5. Arms, when lawful to carry.

##### SECTION.

6. Degree of punishment.
7. Public buildings and gatherings.
8. Intent of persons carrying weapons.
9. Pointing weapon at another.
10. Violation of certain sections.

(2432) § 1. It shall be unlawful for any person in the Territory of Oklahoma to carry concealed on or about his person, saddle, or saddle bags, any pistol, revolver, bowie knife, dirk, dagger, slung-shot, sword cane, spear, metal knuckles, or any other kind of knife or instrument manufactured or sold for the purpose of defense except as in this article provided. Prohibited weapons enumerated.

(2433) § 2. It shall be unlawful for any person in the Territory of Oklahoma, to carry upon or about his person any pistol, revolver, bowie knife, dirk knife, loaded cane, billy, metal knuckles, or any other offensive or defensive weapon, except as in this article provided. Same.

(2434) § 3. It shall be unlawful for any person within this Territory, to sell or give to any minor any of the arms or weapons designated in sections one and two of this article. Minors.

(2435) § 4. Public officers while in the discharge of their duties or while going from their homes to their place of duty, or returning therefrom, shall be permitted to carry arms, but at no other time and under no other circumstances: *Provided, however,* That if any public officer be found carrying such arms while under the influence of intoxicating drinks, he shall be deemed guilty of a violation of this article as though he were a private person. Public officials, when privileged.

(2436) § 5. Persons shall be permitted to carry shot-guns or rifles for the purpose of hunting, having them repaired, or for killing animals, or for the purpose of using the same in public muster or military drills, or while travelling or removing from one place to another, and not otherwise. Arms, when lawful to carry.

(2437) § 6. Any person violating the provisions of any one of the foregoing sections, shall on the first conviction be adjudged guilty of a misdemeanor and be punished by a fine of not less than twenty-five dollars nor more than fifty dollars, or by imprisonment in the county jail not to exceed thirty days or both at the discretion of the court. On the second and every subsequent con- Degree of punishment.

Chap. 25. viction, the party offending shall on conviction be fined<sup>1</sup> not less than fifty dollars nor more than two hundred and fifty dollars or be imprisoned in the county jail not less than thirty days nor more than three months or both, at the discretion of the court.

Public build-  
ings and gather-  
ings.

(2438) § 7. It shall be unlawful for any person, except a peace officer, to carry into any church or religious assembly, any school room or other place where persons are assembled for public worship, for amusement, or for educational or scientific purposes, or into any circus, show or public exhibition of any kind, or into any ball room, or to any social party or social gathering, or to any election, or to any place where intoxicating liquors are sold, or to any political convention, or to any other public assembly, any of the weapons designated in sections one and two of this article.

Intent of per-  
sons carrying  
weapons.

(2439) § 8. It shall be unlawful for any person in this Territory to carry or wear any deadly weapons or dangerous instrument whatsoever, openly or secretly, with the intent or for the avowed purpose of injuring his fellow man.

Pointing  
weapons at an-  
other.

(2440) § 9. It shall be unlawful for any person to point any pistol or any other deadly weapon whether loaded or not, at any other person or persons either in anger or otherwise.

Violation of  
section seven.

(2441) § 10. Any person violating the provisions of section seven, eight or nine of this article; shall on conviction, be punished by a fine of not less than fifty dollars, nor more than five hundred and shall be imprisoned in the county jail for not less than three not more than twelve months.

#### ARTICLE 48.—FALSE PERSONATION AND CHEATS.

##### SECTION.

1. False impersonation, punishment for.
2. False impersonation and receiving money.
3. Personating officers and others.
4. Unlawful wearing of grand army badge.
5. Fines, how paid.
6. Obtaining property under false pretenses.

##### SECTION.

7. False representation of charitable purposes.
8. Falsely representing banking corporations.
9. Using false check.
10. Holding mock auction.

Punishment  
for false imper-  
sonation.

(2442) § 1. Every person who falsely personates another, and in such assumed character, either:

First. Marries or pretends to marry, or to sustain the marriage relation toward another, with or without the connivance of such other person; or,

Second. Becomes bail or surety for any party, in any proceeding whatever, before any court or officer authorized to take such bail or surety; or,

Third. Subscribes, verifies, publishes, acknowledges or proves, in the name of another person, any written instrument, with intent that the same may be delivered or used as true; or,

Fourth. Does any other act whereby, if it were done by the person falsely personated, he might in any event become liable to any suit or prosecution, or to pay any sum of money, or to incur any charge, forfeiture or penalty, or whereby any benefit might accrue to the party personating, or to any other person.

SESSION LAWS

OF THE

FIFTEENTH

LEGISLATIVE ASSEMBLY

OF THE

TERRITORY OF ARIZONA.

---

SESSION BEGUN ON THE TWENTY-FIRST DAY  
OF JANUARY, A. D. 1889.



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LAWS OF ARIZONA.

SEC. 3. This Act shall take effect from and after its passage.

Approved March 18, 1889.

No. 12.

AN ACT

Concerning the Transaction of Judicial Business on Legal Holidays.

*Be it enacted by the Legislative Assembly of the Territory of Arizona:*

SECTION 1. No Court of Justice shall be open, nor shall any Judicial business be transacted on any Legal Holiday, except for the following purposes:

1. To give, upon their request, instructions to a Jury when deliberating on their verdict.

2. To receive a verdict or discharge a Jury.

3. For the exercise of the powers of a magistrate in a criminal action, or in a proceeding of a criminal nature; provided, that the Supreme Court shall always be open for the transaction of business; and provided further, that injunctions, attachments, claim and delivery and writs of prohibition may be issued and served on any day.

SEC. 2. All Acts and parts of Acts in conflict with this Act are hereby repealed.

SEC. 3. This Act shall be in force and effect from and after its passage.

Approved March 18, 1889.

No. 13.

AN ACT

Defining and Punishing Certain Offenses Against the Public Peace.

*Be it Enacted by the Legislative Assembly of the Territory of Arizona:*

SECTION 1. If any person within any settlement, town, village or city within this Territory shall carry on or about his person, saddle, or in his saddlebags, any pistol, dirk, dagger, slung shot, sword cane, spear, brass knuckles, bowie knife, or any other kind of knife manufactured or sold for purposes of offense or defense, he shall be punished by a fine of not less than twenty-five nor more than one hundred dollars; and in addition thereto, shall forfeit to the County in which he is convicted, the weapon or weapons so carried.

SEC. 2. The preceding article shall not apply to a person in actual service as a militiaman, nor as a peace officer

## LAWS OF ARIZONA.

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or policeman, or person summoned to his aid, nor to a revenue or other civil officer engaged in the discharge of official duty, nor to the carrying of arms on one's own premises or place of business, nor to persons traveling, nor to one who has reasonable ground for fearing an unlawful attack upon his person, and the danger is so imminent and threatening as not to admit of the arrest of the party about to make such attack upon legal process.

SEC. 3. If any person shall go into any church or religious assembly, any school room, or other place where persons are assembled for amusement or for educational or scientific purposes, or into any circus, show or public exhibition of any kind, or into a ball room, social party or social gathering, or to any election precinct on the day or days of any election, where any portion of the people of this Territory are collected to vote at any election, or to any other place where people may be assembled to minister or to perform any other public duty, or to any other public assembly, and shall have or carry about his person a pistol or other firearm, dirk, dagger, slung shot, sword cane, spear, brass knuckles, bowie knife, or any other kind of a knife manufactured and sold for the purposes of offense or defense, he shall be punished by a fine not less than fifty nor more than five hundred dollars, and shall forfeit to the County the weapon or weapons so found on his person.

SEC. 4. The preceding article shall not apply to peace officers, or other persons authorized or permitted by law to carry arms at the places therein designated.

SEC. 5. Any person violating any of the provisions of Articles 1 and 3, may be arrested without warrant by any peace officer and carried before the nearest Justice of the Peace for trial; and any peace officer who shall fail or refuse to arrest such person on his own knowledge, or upon information from some credible person, shall be punished by a fine not exceeding three hundred dollars.

SEC. 6. Persons traveling may be permitted to carry arms within settlements or towns of the Territory for one-half hour after arriving in such settlements or town, and while going out of such towns or settlements; and Sheriffs and Constables of the various Counties of this Territory and their lawfully appointed deputies may carry weapons in the legal discharge of the duties of their respective offices.

SEC. 7. It shall be the duty of the keeper of each and every hotel, boarding house and drinking saloon, to keep posted up in a conspicuous place in his bar room, or reception room if there be no bar in the house, a plain notice to travelers to divest themselves of their weapons in accordance with Section 9 of this Act, and the Sheriffs of the various Counties

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LAWS OF ARIZONA.

shall notify the keepers of hotels, boarding houses and drinking saloons in their respective Counties of their duties under this law, and if after such notification any keeper of a hotel, boarding house or drinking saloon, shall fail to keep notices posted as required by this Act, he shall, on conviction thereof before a Justice of the Peace, be fined in the sum of five dollars to go to the County Treasury.

SEC. 8. All Acts or parts of Acts in conflict with this Act are hereby repealed.

SEC. 9. This Act shall take effect upon the first day of Apr 1, 1889.

Approved March 18, 1889.

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No. 14.

AN ACT

To Amend Paragraph 492, Revised Statutes.

*Be it Enacted by the Legislative Assembly of the Territory of Arizona:*

SECTION 1. That Paragraph 492, Chapter 5, Title 13, of the Revised Statutes, be amended so as to read as follows: "If he fail to attend in person or by deputy any term of the District Court, the Court may designate some other person to perform the duties of District Attorney during his absence from Court, who shall receive a reasonable compensation to be certified by the Court, and paid out of the County Treasury, which the Court shall by order direct to be deducted from the salary of the District Attorney, if the absence of such Attorney is not excused by such Court."

SEC. 2. That all Acts and parts of Acts in conflict with this Act be, and the same are, hereby repealed.

SEC. 3. That this Act shall take effect and be in force from and after its passage.

Approved March 19, 1889.

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No. 15.

AN ACT

To Provide for the Payment of Boards of Supervisors of the Counties within the Territory of Arizona.

*Be it Enacted by the Legislative Assembly of the Territory of Arizona:*

SECTION 1. Each member of the Board of Supervisors within this Territory shall be allowed as compensation for their services Five Dollars per day for each day's actual attendance at the sitting of said Board, at which sitting any County business is transacted; and twenty cents per mile actually traveled



## CHAPTER XXXV.

An Act to prohibit unlawful carrying of concealed weapons, to provide penalties for violations of this act and to define the meaning of the term concealed weapons.

*Be it Enacted by the Legislative Assembly of the State of Montana:*

## Section 1.

Any person in this State who shall carry concealed or partially concealed on or about his person any revolver, pistol, dirk, dagger, slung shot, sword cane, or knuckles made of any metal or any hard substance shall be deemed guilty of a misdemeanor and shall be punished by a fine of not less than twenty five nor more than two hundred dollars, or by imprisonment in the County jail not less than ten nor more than thirty days, or by both such fine and imprisonment.

Carrying weapons concealed or partially concealed about person.

Penalty.

## Section 2.

The preceeding section shall not apply to a person in actual service as a militiaman, nor to a police officer or policeman, or person summoned to his aid nor to a revenue or other civil officer engaged in the discharge of official duty, nor to the carrying of arms on one's own premises, or place of business.

Reservation.

Section 3. If any person shall go into any church or religious assembly, any school room or other place where persons are assembled for amusement or for educational or scientific purposes, or into any circus, show, or public exhibition of any kind, or into a ball room, social party, or social gathering, or to any election precinct or any place of registration, on the day or days of any election or registration, where any portion of the people of the State are collected to register or vote at any election, or to any other place where people may be assembled to perform any public duty, or at any public assembly, and shall have or carry concealed or partially concealed about his person a

Carrying weapons in certain places.

Penalty. pistol or other firearm, dirk, dagger, slung shot, sword cane, knuckles, or bowie knife, he shall be punished by a fine of not less than fifty nor more than five hundred dollars.

Section 4.

Reservation. The preceding section shall not apply to peace officers or other persons authorized or permitted by law to carry arms at the places therein designated. "And any District Judge of any judicial district of the State of Montana, may, upon satisfactory proof being produced before him of the good moral character and peaceable disposition of any person, grant permission to such person to bear concealed or otherwise a "pistol" or "revolver" for such a period of time as such judge may deem necessary."

Permit of District Judge. Dis-

Section 5.

Arrest. Any person violating any of the provisions of sections one and three of this act may be arrested without warrant by any peace officer and carried before the nearest justice of the peace for trial: and any peace officer who shall fail or refuse to arrest such person on his own knowledge, or upon information from some creditable person, shall be punished by a fine not exceeding five hundred dollars.

Peace officer failing to arrest.

Penalty.

Section 6.

"Concealed weapon" defined. The term concealed weapons shall be taken to mean any weapon mentioned in the foregoing sections which shall be wholly or partially covered by the clothing or wearing apparel of the person so carrying the weapon.

Section 7.

Act not to apply to county designated by Governor. The provisions of this Act shall not apply to or be in force in any county which the governor may designate by proclamation as a frontier county and liable to incursions by hostile Indians.

**FOURTH ANNUAL REPORT**

**OF THE**

**BOARD OF COMMISSIONERS**

**OF THE**

**CENTRAL PARK.**

**JANUARY, 1861.**



**NEW YORK:**  
**WM. C. BRYANT & CO., PRINTERS, 41 NASSAU STREET, CORNER LIBERTY.**

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**1861.**



## APPENDIX.

## A.

## ORDINANCES OF THE CENTRAL PARK.

The Board of Commissioners of the Central Park do ordain as follows:

All persons are forbidden—

To enter or leave the Park except by the gateways.

To climb or walk upon the wall.

To turn cattle, horses, goats, or swine into the Park.

To carry firearms or to throw stones or other missiles within it.

To cut, break, or in any way injure or deface the trees, shrubs, plants, turf, or any of the buildings, fences, or other constructions upon the Park ;

Or to converse with, or in any way to hinder those engaged in its construction.

Two pounds are hereby established within the Central Park, for the impounding of horses, cattle, sheep, goats, dogs, swine, and geese found trespassing upon said Park. All such animals found at large upon the Park may be taken by any person or persons, and driven or carried to one of the said pounds, and may be kept enclosed therein during five days, at the end of which time, if not previously claimed, they may be sold at public auction; provided that within two days after they shall have been impounded, notice of the sale shall have been conspicuously posted in the pound.

Any person claiming property in such impounded animals before the day of sale, may recover the same after suitable proof of his or her right thereto, upon payment for each animal

FIRST  
ANNUAL REPORT

OF THE

*Philadelphia*  
Commissioners of Fairmount Park.

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PHILADELPHIA:

KING & BAIRD, PRINTERS, No. 607 Sansom Street.

1869.

EXHIBIT 13

## A SUPPLEMENT

To an Act, entitled "An Act appropriating ground for public purposes, in the City of Philadelphia," approved the twenty-sixth day of March, Anno Domini one thousand eight hundred and sixty-seven.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same,* That the boundaries of the Fairmount Park in the City of Philadelphia shall be the following, to wit: Beginning at a point in the north-easterly line of property owned and occupied by the Reading Railroad Company, near the City bridge over the river Schuylkill at the Falls, where said north-easterly line \* [is intersected by the line dividing property of H. Duhring from that of F. Stoever and T. Johnson; extending] from thence in a south-westerly direction upon said dividing line and its prolongation to the middle of the Ford road; from thence by a line passing through the southeast corner of Forty-ninth and Lebanon streets to George's run; thence along the several courses of said run to a point fourteen hundred and eighty-seven and a half feet from the middle of the Pennsylvania Railroad, measured at right angles thereto; thence by a straight line through the northeast corner of Forty-third and Hancock

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\* Amended by Act of April 21, 1869, Sec. 8, page 27.

SECT. 19. The said Park Commissioners shall have the power to govern, manage, lay out, plant and ornament the said Fairmount Park, and to maintain the same in good order and repair; and to construct all proper bridges, buildings, railways, and other improvements therein, and to repress all disorders therein under the provisions hereinafter contained.

SECT. 20. That the said Park Commissioners shall have authority to license the laying down, and the use for a term of years, from time to time, of such passenger railways as they may think will comport with the use and enjoyment of the said Park by the public, upon such terms as said Commissioners may agree; all emoluments from which shall be paid into the City Treasury.

SECT. 21. The said Park shall be under the following rules and regulations, and such others as the Park Commissioners may from time to time ordain:

I. No persons shall turn cattle, goats, swine or horses or other animals loose into the Park.

II. No persons shall carry fire-arms, or shoot birds in the Park, or within fifty yards thereof, or throw stones or other missiles therein.

III. No one shall cut, break, or in anywise injure or deface the trees, shrubs, plants, turf, or any of the buildings, fences, structures or statuary, or foul any fountains or springs within the Park.



IV. No person shall drive or ride therein at a rate exceeding seven miles an hour.

V. No one shall ride or drive therein, upon any other than upon the avenues and roads.

VI. No coach or vehicle used for hire, shall stand upon any part of the Park for the purpose of hire, nor except in waiting for persons taken by it into the Park, unless in either case at points designated by the Commission.

VII. No wagon or vehicle of burden or traffic shall pass through the Park, except upon such road or avenue as shall be designated by the Park Commissioners for burden transportation.

VIII. No street railroad car shall come within the lines of the Park without the license of the Park Commission.

IX. No person shall expose any article for sale within the Park without the previous license of the Park Commission.

X. No person shall take ice from the Schuylkill within the Park without the license of the said Commission first had, upon such terms as they may think proper.

XI. No threatening, abusive, insulting, or indecent language shall be allowed in the Park.

XII. No gaming shall be allowed therein, nor any obscene or indecent act therein.

XIII. No person shall go in to bathe within the Park.

XIV. No person shall fish or disturb the water-fowl in the pool, or any pond, or birds in any part of the Park, nor discharge any fire-works therein, nor affix any bills or notices therein.

XV. No person shall have any musical, theatrical, or other entertainment therein, without the license of the Park Commissioners.

XVI. No person shall enter or leave the Park except by such gates or avenues as may be for such purpose arranged.

XVII. No gathering or meeting of any kind, assembled through advertisement, shall be permitted in the Park without the previous permission of the Commission; nor shall any gathering or meeting for political purposes in the Park be permitted under any circumstances.

XVIII. That no intoxicating liquors shall be allowed to be sold within said Park.

SECT. 22. Any person who shall violate any of said rules and regulations, and any others which shall be ordained by the said Park Commissioners, for the government of said Park, not inconsistent with this act, or the laws and constitutions of this State and United States—the power to ordain which rules and regulations is hereby expressly given to said Commissioners

—shall be guilty of a misdemeanor, and shall pay such fine as may be prescribed by said Park Commissioners, not to exceed five dollars for each and every violation thereof, to be recovered before any alderman of said City, as debts of that amount are recoverable, which fines shall be paid into the City treasury: *Provided*, That if said Park Commissioners should license the taking of ice in said Park, or the entry of any street or railroad therein, or articles for sale, or musical entertainments, it may be with such compensation as they may think proper, to be paid into the City treasury; *And provided*, That any person violating any of said rules and regulations shall be further liable to the full extent of any damage by him or her committed, in trespass or other action; and any tenant or licensed party who shall violate the said rules, or any of them, or consent to or permit the same to be violated on his or her or their premises, shall forfeit his or her or their lease or license, and shall be liable to be forthwith removed by a vote of the Park Commission; and every lease and license shall contain a clause making it cause of forfeiture thereof for the lessee or party licensed to violate or permit or suffer any violation of said rules and regulations or any of them. It shall be the duty of the police appointed to duty in the Park, without warrant, forthwith to arrest any offender against the preceding rules and regulations, whom they may detect in the commission of such offence, and to take the person or persons so arrested forthwith before a magistrate having competent jurisdiction.

## ARTICLE XI.

## PROTECTION OF BIRDS.

## SECTION

1. Disturbance of birds or nests prohibited.
2. Penalty for disturbing same.
3. Throwing stones, wood, &c., prohibited.

## SECTION

4. Penalty for throwing same.
5. Protection of all birds, except hawks, &c., intended.
6. Duty of police.

**SECTION 1.** All persons are forbidden to molest, injure or disturb in any way, any small bird in the city of St. Louis, or the nest, young or brood of any small bird in said city.

Birds, or nests not to be disturbed.  
Ord. 8436, sec. 1.

**SEC. 2.** If any person shall willfully injure, molest, take or disturb in any way, any small bird in the city of St. Louis, or the nest, eggs, young or brood of any such small bird, he shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall forfeit and pay to said city not less than five dollars for each bird so by him injured, molested, taken or disturbed, and not less than twenty dollars for each nest of eggs or brood of young of any such small bird in the city of St. Louis, so by him injured, molested taken or disturbed.

Penalty for disturbing birds or nests.  
Ibid. sec. 2.

**SEC. 3.** No person shall throw from his hand any fragment of stone, wood, metal or other missile capable of inflicting injury, in any street, alley, walk or park of the city of St. Louis, or use or have in his possession ready for use in any street, alley, walk or park of the city of St. Louis, any sling, cross bow and arrow, air gun or other contrivance for ejecting, discharging or throwing any fragment, bolt, arrow, pellet, or other missile of stone, metal, wood or other substance capable of inflicting injury or annoyance.

Throwing stones, wood, &c., prohibited.  
Ibid. sec. 3.

**SEC. 4.** If any person shall throw from his hand, in any alley, street, walk or park of the city of St. Louis, any missile of wood, stone, metal or other substance, or sub-

Penalty.  
Ibid. sec. 4.



PENAL CODE  
OF  
STATE OF IDAHO,  
1901.

Press of  
**Capital News Printing Co.,**  
Boise, Idaho.

person of F. a bodily injury, as while being prosecuted in the magistrate's court for displaying a deadly weapon in a rude, angry and threatening manner in the presence of others, the defendant

was never in any danger of being convicted of an assault with a deadly weapon with intent to inflict bodily harm.—Territory v. Stocker, 9 Mont. 6. 22 Pac. 496.

**Section 4781. Persons Other than Officers Carrying Certain Weapons:**

It is unlawful for any person, except United States officials, officials of the State of Idaho, county officials, peace officers, guards of any jail, and officers or employees of any express company on duty, to carry, exhibit or flourish any dirk, dirk-knife, sword, sword-cane, pistol, gun or other deadly weapons, within the limits or confines of any city, town or village or in any public assembly of the State of Idaho. Every person so doing is guilty of a misdemeanor and is punishable by fine not less than fifty dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than twenty days nor more than fifty days, or by both such fine and imprisonment.

1889, 15th Ses. p. 23, Sec. 1.

**Section 4782. Fines Provided in Preceding Section To Whom Paid:**

One half of all fines collected under the preceding Section shall be paid to the officer making the arrest, which amount shall be payment in full for his services. The other one half shall be paid into the common School Fund of the county, after deducting the necessary costs of the prosecution of the case.

1889, 15th Ses. p. 23, Sec. 2.

**Section 4783. Forcible Entry:** Every person using or procuring, encouraging or assisting another to use, any force or violence in entering upon or detaining any lands or other possessions of another, except in the cases and in the manner allowed by law, is guilty of a misdemeanor.

1887 R. S. Sec. 6962; 1874-5 p. 209, Sec. 570.

Forcible entry: See Sec. 3974 C. Civ. Proc.

**Section 4784. Taking Repossession of Land:** Every person who has been removed from any lands by process of law, or who has removed from any lands pursuant to the lawful adjudication or direction of any court, tribunal, or officer, and who afterwards unlawfully returns to settle, reside upon, or take possession of such lands, is guilty of a misdemeanor.

1887 R. S. Sec. 6963.

## CHAPTER CCXVIII.

### CRIMES AGAINST THE REVENUE AND PROPERTY OF THE STATE.

**Section.**

4785. Embezzlement and falsification of accounts by public officers.

4786. Officers neglecting to pay over public moneys.

4787. Public moneys defined.

**Section.**

4788. Certain officers refusing to pay over fine or forfeiture according to law.

4789. Refusing to give assessor list of property.

ANNUAL REPORTS

OF THE

CITY OFFICERS AND CITY BOARDS

OF THE

CITY OF SAINT PAUL,

FOR THE FISCAL YEAR ENDING DECEMBER 31, 1888.

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GLOBE JOB OFFICE,  
D. RAMALEY & SON, PRINTERS,  
1889.



OF THE CITY OF SAINT PAUL, FOR 1888.

689

RULES AND REGULATIONS OF THE PUBLIC PARKS AND GROUNDS  
OF THE CITY OF SAINT PAUL.

1. No person shall drive or ride in any Park in the City of Saint Paul at a rate exceeding seven (7) miles per hour.
2. No person shall ride or drive upon any other part of any Park than the avenues and roads.
3. No coach or vehicle used for hire shall stand upon any part of any Park for the purpose of hire, unless licensed by the Board of Park Commissioners.
4. No person shall indulge in any threatening or abusive, insulting or indecent language in any Park.
5. No person shall engage in any gaming nor commit any obscene or indecent act in any Park.
6. No person shall carry firearms or shoot birds in any Park or within fifty yards thereof, or throw stones or other missiles therein.
7. No person shall disturb the fish or water fowl in any pool or pond or birds in any part of any Park, or annoy, strike, injure, maim or kill any animal kept by direction of the Board of Park Commissioners, either running at large or confined in a close; nor discharge any fireworks, nor affix any bills or notices therein.
8. No person shall cut, break or in anywise injure or deface the trees, shrubs, plants, turf, or any of the buildings, fences, bridges, structures or statuary, or foul any fountain, well or spring within any Park.
9. No person shall throw any dead animal or offensive matter, or substance of any kind into any lake, stream or pool, within the limits of any Park.
10. No person shall go in to bathe within the limits of any Park.
11. No person shall turn cattle, goats, swine, horses, dogs or other animals loose in any Park, nor shall any animals be permitted to run at large therein.
12. No person shall injure, deface or destroy any notices, rules or regulations for the government of any Park, posted or in any other way fixed by order or permission of the Board of Park Commissioners within the limits of any Park.
13. Complaints against any employe of any Park may be made at the office of the Superintendent of Parks.
14. No person shall use any Park drive for business purposes, or for the transportation of farm products, dirt or any like material, or for the passage of teams employed for such purposes.

Any person who shall violate any of the foregoing rules and regulations shall be guilty of a misdemeanor, and for each and every offense shall be fined not less than the sum of Five Dollars (\$5), nor more than Fifty Dollars (\$50), which sum shall be paid into the city treasury for park purposes.

JOHN D. ESTABROOK,  
Superintendent.

Ground or Bathing Beach of the City is enclosed, no person shall enter or leave the same except by the gateways. No person shall climb or walk upon the walls or fences thereof. Any of the entrances to such Parks, Public Play Grounds or Bathing Beaches of the city may be closed at any time by the direction of the officer or employee in charge of same.

**1561. Animals Prohibited].**—No person shall turn or lead any cattle, horses, goat, swine or other animals into any of such Parks, Public Play Grounds or Bathing Beaches.

**1562. Firearms—Missiles].**—All persons are forbidden to carry firearms or to throw stones or other missiles within any of the Parks, Public Play Grounds or Bathing Beaches of the City, and all persons are forbidden to cut, break or in any way injure or deface trees, shrubs, plants, turf or any of the buildings, fences, bridges or other construction or property contained therein.

**1563. Peddling and Hawking Prohibited].**—No person shall expose any article or thing for sale within any such Parks, Public Play Grounds or Bathing Beaches, nor shall any hawking or peddling be allowed therein.

**1564. Indecent Words—Fortune Telling].**—No threatening, abusive, insulting or indecent language shall be allowed in any part of such Parks, Public Play Grounds or Bathing Beaches; nor shall any conduct be permitted whereby a breach of the peace may be occasioned; nor shall any person tell fortunes or play any game of chance at or with any table or instrument of gaming, nor shall any person commit any obscene or indecent act therein.

**1565. Bill Posting Prohibited].**—No person shall post or otherwise affix any bills, notice or other paper upon any structure or thing within any such Park, Public Play Ground or Bathing Beach belonging to the city, nor upon any of the gates or inclosures thereof.

**1566. Prohibited Uses].**—No person shall play upon any musical instrument, nor shall any person take into, or carry or display in any Park, Public Play Ground or Bathing Beach, any flag, banner, target or transparency, nor shall any military company parade, drill, or perform therein, any military or other evolutions or movements, without a special permit from the Special Park Commission.

**1567. Bonfires].**—No person shall light, make or use any bonfire in any such Park, Public Play Ground or Bathing Beach.

**1568. Grass].**—No person shall go upon the grass, lawn or turf

M10

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# PENAL ORDINANCES

## OF THE CITY OF LOS ANGELES

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Containing all Penal Ordinances in force on June 14, 1921,  
ending with Ordinance No. 42,021 (New Series)

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Compiled by  
**JESS E. STEPHENS,**  
City Attorney  
and  
**E. H. DELOREY**  
Deputy City Attorney

Indexed by  
**PARKER & STONE CO.,** Law Publishers



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Published under direction of the City Council  
by  
**PARKER & STONE CO.,** Law Publishers  
232 New High Street

BE IT RESOLVED, that the book of compiled penal ordinances of the City of Los Angeles, as published by the Parker & Stone Publishing Company, be and the same is hereby designated as and declared to be the official publication of the said ordinances.

STATE OF CALIFORNIA,  
COUNTY OF LOS ANGELES, } SS.  
CITY OF LOS ANGELES.

I, Robt. Dominguez, City Clerk of the City of Los Angeles, do hereby certify that the foregoing is a full, true and correct copy of the resolution adopted by the City Council of the City of Los Angeles, at its meeting of January 26, 1922.



In Witness Whereof, I have hereunto set my hand and seal of the said city this 26th day of January, 1922.

ROBT. DOMINGUEZ,  
*City Clerk of the City of Los Angeles.*

APR 18 1923



## CITY OF LOS ANGELES

41

## BRICKYARDS DISTRICT.

ORDINANCE No. 13,077 (New Series).

Approved July 14, 1906.

An Ordinance regulating the location of brick yards in the City of Los Angeles.

Section 1. It shall be unlawful for any person, firm or corporation to establish, conduct or maintain, or to assist in establishing, conducting or maintaining, any brick yard or any establishment, factory or place for the manufacture of brick within that certain district in the City of Los Angeles bounded and described as follows, to-wit:

Beginning at the intersection of the center line of Alameda Street with the center line of Alpine Street; thence northwesterly along said center line of Alpine Street to the center line of Buena Vista Street; thence northeasterly along said center line of Buena Vista Street to the center line of Bernardo Street; thence northwesterly along said center line of Bernardo Street to the center line of Adobe Street; thence southwest-erly along said center line of Adobe Street 800 feet to a point; thence northwesterly in a direct line to the intersection of the center line of Innes Avenue with the center line of Sunset Boulevard; thence northwest-erly along said center line of Sunset Boulevard to the center line of Alvarado Street; thence northeasterly along said center line of Alvarado Street to the center line of Effie Street; thence northwesterly along said center line of Effie Street to the northerly boundary line of the City of Los Angeles; thence westerly along said boundary line to the westerly boundary line of said City of Los Angeles; thence southerly along the old west patent boundary line of the City of Los Angeles to the center line of Seventh Street; thence southeasterly along said center line of Seventh Street to the center line of Alameda Street; thence northerly along said center line of Alameda Street to the point of beginning.

Provided, however, that this Ordinance shall not apply to any person, firm or corporation conducting or maintaining any brick yard, or any establishment, factory or place for the manufacture of brick within the hereinbefore described district, on the 22d day of January, 1906, who shall, within ten days after the taking effect of this Ordinance execute and deliver a good and sufficient bond to the City of Los Angeles in the sum of \$1000.00, with two or more sureties, to be approved by the said City Council, conditioned for the removal of such brick yard, establish-ment or factory from said district within two years from the 22d day of January, 1906.

Sec. 2. Any person violating any of the provisions of this Ordinance shall be deemed guilty of a misdemeanor and shall be punished by a fine of not more than \$200, or by imprisonment in the City Jail for a period of not more than fifty days, or by both such fine or imprisonment, and every day during which any violation of this Ordinance continues shall be deemed a separate offense and shall be punished as in this section provided.

## REGULATIONS FOR PUBLIC PARKS.

ORDINANCE No. 13,182 (New Series).

Approved August 13, 1906.

An Ordinance prescribing the rules and regulations for the govern-ment of the public parks of the City of Los Angeles and regulating the use of public streets in and about such public parks, and prescribing the penalty for violation of the same.

Section 1. That the rules and regulations hereinafter prescribed shall govern the public parks of the City of Los Angeles.

Sec. 2. That within the limits of any of said parks, it shall be un-lawful for any person or persons to do any of the acts hereinafter specified, to-wit:

1. To lead, or let loose any cattle, horse, mule, gote, sheep, swine,

dog or fowl of any kind, provided that this shall not apply to dogs when led by a cord or chain, not more than six feet long.

2. To carry or discharge any fire arms, firecrackers, rockets, torpedoes, or any other fireworks, or air gun or slungshot.

3. To cut, break, injure, deface, or disturb any tree, shrub, plant, rock, building, cage, pen, monument, fence, bench, or other structure, apparatus or property; or to pluck, pull up, cut, take or remove any shrub, bush, plant or flower; or to mark or write upon any building monument, fence, bench, or other structure.

4. To cut or remove any wood, turf, grass, soil, rock, sand or gravel.

5. To distribute any hand-bills or circulars, or to post, place or erect any bills, notice, paper, or advertising device or matter of any kind.

6. To swim, bathe, wade in, or pollute the water of any fountain, pond, lake or stream.

7. To make or kindle a fire for any purpose.

8. To camp or lodge therein.

9. To ride or drive any horse, or other animal, or to propel any vehicle, cycle, or automobile elsewhere than on the roads or drives provided for such purpose.

10. To indulge in riotous, boisterous, threatening, or indecent conduct, or abusive, threatening, profane or indecent language.

11. To sell, or offer for sale, any merchandise, article or thing, whatsoever, without the written consent of the Board of Park Commissioners.

12. To hitch, or fasten any horse, or other animal, except at a place especially designated and provided for such purpose.

13. To ride or drive at a rate of speed exceeding fifteen miles per hour, except upon the road or roads specially provided and set apart by the Board of Park Commissioners for faster driving.

14. To ride or drive any horse or animal not well broken and under perfect control of the driver.

15. To play or bet at or against any game which is played, conducted, dealt or carried on with cards, dice, or other device, for money, chips, shells, credit, or any other representative of value, or to maintain or exhibit any gambling table or other instrument of gambling or gaming.

16. To practice, carry on, conduct, or solicit for any trade, occupation, business, or profession, without the permission of the Board of Park Commissioners.

17. To row, or sail on any pond, lake or waters in any boat, excepting one provided for that purpose by the Board of Park Commissioners, or holder of boating privileges, without first obtaining the permission of the Board of Park Commissioners.

18. To drive, or have any dray, truck, wagon, cart, or other traffic vehicle (carrying goods or regularly used or employed in carrying goods, merchandise, lumber, machinery, oil, manure, dirt, sand or soil or any article of trade or commerce or any offensive article or material whatsoever) upon any road or drive, except such as may be especially provided or designated for such use.

18-a. It shall be unlawful for any person to drive any truck, dray, wagon, cart or other traffic vehicle of more than one ton capacity carrying or regularly used or employed in carrying goods, wares, merchandise, lumber, machinery, oil, manure, dirt, sand, soil or any article of trade or commerce along or upon any road or drive in Griffith or Elysian Parks without first securing a permit so to do from the Board of Park Commissioners. (Section added by Ord. No. 39,604 (N. S.), approved December 8, 1919.)

19. To play, or engage in any game, excepting at such place as shall be especially set apart for that purpose.

20. To remain, stay or loiter, in any public park between the hours of 10:30 o'clock p. m. and 5 o'clock a. m. of the following day.



## CITY OF LOS ANGELES

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[As amended by Ordinance No. 31,868 (New Series), approved February 25, 1915.]

Sec. 3. No company, society, or organization of more than twenty-five persons shall hold or conduct any picnic, celebration, parade, service, or exercise in any public park, without first obtaining permission from the Board of Park Commissioners, and it shall be unlawful for any person to take part in any picnic, celebration, parade, service, or exercise held or conducted contrary to the provisions hereof.

Sec. 4. It shall be unlawful for any person having the control or care of any dog to suffer or permit such dog to enter or remain in a public park unless it be led by a leash of suitable strength not more than six feet in length.

Sec. 5. It shall be unlawful for any male person over eight years of age to enter or use any water-closet for women in a public park.

Sec. 6. It shall be unlawful for any person to fish in any public park without first obtaining from the Board of Park Commissioners a written permit so to do, designating the manner, time and place in which such person may fish.

Sec. 7. It shall be unlawful for any persons to assemble, collect or gather together in any walk, driveway, passage way or pathway in any park or in any other place set apart for the travel of persons or vehicles in or through any park or to occupy the same so that the free passage or use thereof by persons or vehicles passing along the same shall be obstructed in any manner.

Sec. 8. It shall be unlawful for any person or persons to sell, expose for sale or offer to sell, in or along any public street, lane or thoroughfare, adjoining or approaching any public park, in the City of Los Angeles, within 200 feet of any entrance to said park, any goods, wares or merchandise of any kind whatsoever.

Sec. 9. It shall be unlawful for any person or persons to stand, keep or expose for hire, any wagon, carriage or other vehicle, in or along any public street, lane or thoroughfare, adjoining or approaching any public park in said city, within 200 feet of any entrance to such park.

Sec. 10. It shall be unlawful for any male person over the age of eight years to occupy any bench or seat, or to stay, loiter or remain in any pavilion, or other structure in any park which shall be reserved and designated by the Board of Park Commissioners for the use of women and children only.

Sec. 11. It shall be unlawful for any person to hold, conduct or address any public assemblage, meeting or gathering, or to make or deliver any public speech, lecture, or discourse, or to conduct, or take part in any public debate, or discussion, in any public park within the City of Los Angeles, without first having obtained a permit in writing from the Board of Park Commissioners of said city.

Sec. 11-b. It shall be unlawful for any parent or guardian, or any person having the custody of any child under the age of eight years, to cause, permit or allow such child to enter or visit any public park having a lake within the boundaries of such park, in the City of Los Angeles, unless such child be accompanied by a person of not less than sixteen years of age.

[New section added by Ordinance No. 31,363 (New Series), approved December 4, 1914.]

Sec. 12.—All foremen and employes in public parks are hereby given the power and authority of special policemen for the purpose of making arrests for any violation of the provisions of this Ordinance.

Sec. 13. Any person who shall violate any of the provisions of this Ordinance shall be deemed guilty of a misdemeanor; and upon conviction thereof shall be punishable by a fine of not less than five dollars, nor more than two hundred dollars, or by imprisonment in the City Jail

for not less than five days nor more than six months, or by both such fine and imprisonment.

Sec. 14. That all Ordinances and parts of Ordinances in conflict herewith are hereby repealed.

#### TAKING WATER FROM WATER MAINS.

ORDINANCE No. 13,281 (New Series).

Approved Aug. 29, 1906.

An Ordinance of the City of Los Angeles, making it unlawful to take water from, or in any way to break, tap or injure any water main, pipe, conduit, hydrant, reservoir, or ditch, of said City, without permission to do so from the Board of Water Commissioners, thereof.

Section 1. It shall be unlawful for any person to draw or take or cause to be drawn or taken, any water from any water main, pipe, conduit, hydrant, reservoir or ditch of said City of Los Angeles, without permission to do so from the Board of Water Commissioners of said City.

Sec. 2. It shall be unlawful for any person to break, tap or in any way injure, any water main, pipe, conduit, hydrant, reservoir or ditch of the City of Los Angeles, without permission to do so from the Board of Water Commissioners of the said City of Los Angeles.

Sec. 3. Any person violating any of the provisions of this Ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than \$100.00 or by imprisonment in the City Jail for a period of not exceeding 50 days, or both such fine and imprisonment.

#### EMPLOYMENT AGENCIES.

ORDINANCE No. 13,348 (New Series).

Approved September 18, 1906.

An Ordinance regulating Employment or Intelligence agencies or offices in the City of Los Angeles.

Section 1. That no license to conduct, manage or carry on any employment or intelligence agency or office, or any office, agency or place where employment is procured or provided for, or furnished to or for any person, shall be issued to any person, except upon a permit in writing previously granted by the Board of Police Commissioners of the City of Los Angeles and filed with the City Clerk, authorizing the issue of such license to such person, firm or corporation, and specifying the location of such employment agency. That no such permit shall be granted except upon the written application of the person, firm or corporation, desiring the same, which application shall be filed with said Board, signed by the applicant, and shall specify the place where such employment or intelligence agency or office is to be located or carried on.

Sec. 1½. Before filing said application the applicant shall deposit with the City Tax and License Collector a sum sufficient to cover the license for the quarter immediately succeeding the issuance of said license. Said City Tax and License Collector shall issue a receipt for the amount so deposited, and said applicant shall exhibit said receipt to the Secretary of the Board of Police Commissioners, who shall thereupon file said application if the same is in due form; no application shall be filed except upon the production of said receipt. If said application be granted, said deposit shall be retained by said City Tax and License Collector in payment for the license for the quarter next succeeding the issuance of said license. If said application be denied, said City Tax and License Collector, upon notification in writing from the secretary of said Board to the effect that said application has been denied, and upon the surrender of said receipt, shall return said deposit to said applicant.—[New sec. added by Ord. No. 15,291 (N. S.), approved August 27, 1907.]

Sec. 2. That the Board of Police Commissioners is hereby empowered to revoke the permit of any person, firm or corporation when-



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**PARKS.**

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nue, be and the same is hereby accepted and ordered to be marked on the Borough plot.

2. Park alley be and is hereby continued from Third <sup>Ord. 5 Aug., 1895</sup> avenue south to Fifth avenue, the centre line of said alley to be 190 feet east of the centre line of Main street, said <sup>Continued</sup> alley to be twenty feet wide, or ten feet on each side of above described centre line.

3. The owners of lots or lands bounding on and oppo- <sup>Ord. 3 Aug., 1886</sup> site the sidewalks along \* \* \* both sides of Park alley from Washington avenue to Second avenue \* \* \* are hereby required to put up curbstones at the <sup>Curb, pave and gutter</sup> edge of the sidewalks and to pave and gutter the said sidewalks under the direction of the Borough Surveyor and the Street Committee. \* \* \*

[If neglected after thirty days' notice Street Committee to have work done and file lien therefor. See Quick street § 4.]

**PARKS.**

1. The following rules and regulations shall be adopted <sup>Ord. 2 July, 1878</sup> for the government and protection of Reeves Park, in the Borough of Phoenixville:

**SECTION I, PENAL.**

1. No person shall enter or leave the park except by <sup>Rules of Reeves' Park</sup> such gates or avenues as may be for such purposes arranged.

2. No person shall indulge in any threatening, abusive, insulting or indecent language in the park.

3. No person shall engage in gaming or commit any obscene or indecent act in the park.

4. No person shall carry fire-arms or shoot birds or throw stones or other missiles therein.

5. No person shall cut, break or in anywise injure or deface the trees, shrubs, plants, turf or any of the buildings, seats, fences, lamps or statuary in the park.

6. No person shall turn cattle, goats, swine, horses, dogs or other animals loose into the park.

7. No person shall injure, deface or destroy any notices, rules or regulations posted, or in any other manner permanently fixed for the government of the park.

8. No person shall engage in any play at baseball,

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SEC. 4. No military or other parade or procession or funeral shall take place, or pass through the limits of the parks under the control of the Park Commission, without the order or permission of the Park Commissioners.

SEC. 5. No person shall engage in any play, at baseball, cricket, shinney, football, croquet, or at any other game, with ball and bat, within the limits of the parks under the control of this Commission, except on such grounds only as shall be specially designated for such purpose.

SEC. 6. No person shall be permitted to use the shores of Lake Merritt as a landing place for boats, or keep thereat boats for hire, or floating boathouses with pleasure boats for hire, except by special order or permission of the Park Commissioners, and only at places designated by and under restrictions determined upon by said Commissioners.

SEC. 7. No regatta or boat race by clubs shall take place upon Lake Merritt without special permission granted by the Park Commission.

SEC. 8. No person shall turn loose into the parks controlled by this Commission any cattle, goats, swine, horses, or other animals.

SEC. 9. No person shall carry firearms, or shoot birds or throw stones or other missiles within the boundaries of the parks controlled by the Park Commission.

SEC. 10. No person shall cut, break, or in anywise injure or deface the trees, shrubs, plants, turf, or any of the buildings, fences, structures, or statuary or foul any fountains or springs within the parks controlled by the Park Commission.

SEC. 11. No person shall drive or ride within the boundaries of the parks controlled by the Park Commission at a rate exceeding seven miles an hour.

SEC. 12. No person shall ride or drive within the limits of the parks controlled by the Park Commission upon any other than the avenues and roads therefor.

SEC. 13. No coach or vehicle used for hire shall stand upon any part of the parks controlled by the Park Commission for the purpose of hire, nor except in waiting for persons taken by it into the parks, unless in either case at points designated by the Park Commission.

SEC. 14. No wagon or vehicle of burden or traffic shall pass through the parks, except upon such road or avenue as shall be designated by the Park Commissioners for burden transportations.

SEC. 15. No person shall expose or display any article for sale within the parks without the order or permission of the Park Commission.

## CHAPTER II.

## OF THE PUBLIC PARKS AND THE GOVERNMENT THEREOF.

**Sec. 134. Park Policeman.**

There shall be selected by the council a park policeman whose duty it shall be to have carried out the rules and regulations for the government of the park.

**Sec. 135. Acts prohibited in Park.**

All persons are forbidden to enter or leave the park except by the gateways; to climb or walk upon any of the walls or fence, to turn cattle, horses, goats or swine into the park; to carry firearms, or to throw stones or other missiles within it; to cut, break, or in any way injure or deface the trees, benches, shrubs, plants, turf, or any of the buildings, fences, bridges, or other constructions upon the park; or to converse with, or in any way hinder those engaged in its construction.

**Sec. 136. Fast driving, etc., prohibited.**

No animal or wheeled vehicle shall travel on any part of the park, except upon the driveway, nor at a rate exceeding seven miles per hour. Persons on horseback shall not travel at a rate exceeding seven miles per hour.

**Sec. 137. "Standing" or "hitching" places.**

No animal or vehicle shall be permitted to stand upon any driveway or carriage road of the park, or any part thereof, and no animal or vehicle shall be permitted to be hitched or allowed to stand at any place within the park enclosure, except such places as may be provided and designated as "standing" or "hitching" places. Nor shall any person upon the park solicit or invite passengers.

**Sec. 138. Vehicles for hire in park.**

No hackney coach, carriage or other vehicle for hire, shall stand upon any part of the park for the purpose of taking in any



other highway under the jurisdiction of the park department, or on any recreation pier, without a permit therefor issued by the commissioner or his supervisor of recreation nor otherwise than in accordance with the terms of such permit.

§16. Animals at large. No horse or other animal shall be allowed to go at large in any park or upon any park-street, except dogs that are restrained by a chain or leash not exceeding 6 feet in length.

§17. Disorderly conduct. No person shall, in any park,

1. Use threatening, abusive or insulting language;

2. Do any obscene or indecent act;

3. Throw stones or other missiles;

4. Beg or publicly solicit subscriptions or contributions;

5. Tell fortunes;

6. Play games of chance, or use or operate any gaming table or instrument;

7. Climb upon any wall, fence, shelter, seat, statue or other erection;

8. Fire or carry any firearm, firecracker, torpedo or fireworks;

9. Make a fire;

10. Enter or leave except at the established entrance-ways;

11. Enter any park for the purpose of loitering and remaining therein after 12 o'clock at night, except as, on special occasions, the occupation and use thereof may be authorized beyond the regular hours;

## CHAPTER XLIV

## Parks and Public Places

Sec. 1542. **All Parks Dedicated to Public Use.** All the parks heretofore marked out and dedicated to the city, and all public parks hereafter acquired by the city shall be and remain set apart and dedicated to the use of the public as parks and public grounds, and the same shall be regulated and governed in such manner as the Commission may from time to time ordain.

Sec. 1543. **For the Protection of Parks.** Any person who wilfully or maliciously breaks, cuts, disfigures, injures or destroys any tree, shrub, plant or flower within the enclosure of any of the public parks of the city, or any railing, structure or monument therein, or who shall hitch any horse or animal to any tree or shrub therein, shall, on conviction, be fined not less than one nor more than one hundred dollars.

Sec. 1544. **Conduct in Parks.** No person shall enter or leave any of the public parks of the City of Birmingham except by the gateways; no person shall climb or walk upon the walls or fences thereof; no person shall turn or lead any cattle, horses, goat, swine or other animals into any of such parks; no person shall carry fire-arms or throw stones or other missiles within any of such public parks; no person shall expose any article or thing for sale within any of such parks, nor shall any hawking or peddling be allowed therein; no threatening, abusive, insulting or indecent language shall be allowed in any part of any of such parks calculated to provoke a breach of the peace, nor shall any person tell fortunes or play at any game of chance at or with any table or instrument of gaming nor commit any obscene or indecent act there-

**FIREARMS REGULATIONS IN THE NATIONAL PARKS**

**1897—1936**

**May 13, 2008**

## Background

This information has been compiled to provide National Park Service employees more complete insight into the history of NPS firearms regulations. The first Servicewide regulations were adopted in 1936.<sup>1</sup> Although it has not been widely noted, those regulations prohibited firearms and required that they be surrendered when visitors entered the parks. Visitors could obtain written permission to carry them through the park if the weapons were “sealed.”

The current Servicewide regulations governing weapons in parks were adopted in almost their present form in 1983, and published at 36 CFR 2.4.<sup>2</sup> However, in 1984, several adjustments were made to:

- a. Make it clear that Alaska had different rules, and individual parks might have some variations in park-specific special regulations.
- b. Re-order some of the wording to make it easier to follow.
- c. Add a definition of what constitutes a “residential dwelling.”
- d. Add the word “temporarily” in front of the word “inoperable.”
- e. Clarify that the regulations applied on privately owned lands and waters under the legislative jurisdiction of the US.
- f. Add a definition for the word “unloaded.”

Item 1.e above was further amended in 1987 to clarify that the regulations apply “regardless of land ownership, on all lands and waters within a park area that are under the legislative jurisdiction of the U.S.”

Prior to adoption of the 1936 Servicewide regulations, parks adopted park-specific regulations prohibiting weapons—the first (apparently) being Yellowstone National Park in 1897. Attached is a compilation of those regulations. Due to difficulty in retrieving archival materials, there are some gaps in this compilation. We will continue our efforts to fill these gaps, so check [www.nps.gov/policy/Firearms.pdf](http://www.nps.gov/policy/Firearms.pdf) to ensure you have the latest edition. We invite park superintendents to provide the NPS Office of Policy any additional information they may have that would help in this effort.

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<sup>1</sup> The 1936 regulations are on-line at <http://www.nps.gov/policy/1936Regulations.pdf>

<sup>2</sup> 36 CFR 2.4 is on-line at [http://edocket.access.gpo.gov/cfr\\_2007/julqtr/pdf/36cfr2.4.pdf](http://edocket.access.gpo.gov/cfr_2007/julqtr/pdf/36cfr2.4.pdf)

**FIREARMS REGULATIONS  
1897 – 1936**

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**FIREARMS REGULATIONS  
1897 – 1936**

YELLOWSTONE NATIONAL PARK<sup>3</sup>

1. Regulations of June 1, 1897 –

(5) Hunting or killing, wounding or capturing, of any bird or wild animal, except dangerous animals, when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits<sup>4</sup>, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

“Rules and Regulations of the Yellowstone National Park,” June 1, 1897. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1898, Miscellaneous Reports [vol. 3]* (Washington: Gov’t Printing Office, 1898), p. 972. See also, Act of May 7, 1894, ch. 72, 28 Stat. 73, in particular, §4 (28 Stat. 74).

N.B. In his report to the Secretary of August 31, 1897, the acting superintendent, Maj. Gen. S.B.M. Young, United States Volunteers (Colonel Third Cavalry), wrote in connection with this regulation:

Carrying Firearms through the Park

The custom of carrying firearms through the park has been almost universal among those who live in the neighboring States and travel in their own conveyances, or on saddle animals accompanied by pack animals. During the first half of the season it was found that many firearms, fastened with red tape and sealing wax at the point of entry, had broken seals at the point of exit. In many cases it was evident that the seals were broken by accident; others showed signs of having been broken and resealed. To remedy this a new system of sealing has been adopted similar to that used by express companies . . . .

The regulation prohibiting firearms in the park, except on written permission from the superintendent [in which case the arms were sealed], has been strictly enforced. It is essential to the protection of the park.

<sup>3</sup> The very first park regulations were apparently promulgated by Secretary of the Interior Columbus Delano at the time of the dedication of YELL. They are attached hereto as Appendix A.

<sup>4</sup> The first park regulations to mention “outfits,” were the YELL regulations of July 1, 1888, reproduced in Appendix C. The interim regulations, dated May 4, 1881, are found in Appendix B.

A certain sentiment of hostility toward the park and of antagonism toward the efforts of the authorities to protect the wild animals from destruction has existed and continues to exist among the ranchers and the people of the settlements near the park boundaries. This feeling of hostility seems to be due to an idea, which prevails widely, that a reservation of any part of the public domain for the perpetual benefit of the whole people is an invasion and an abridgement of the private rights of the people of the adjoining region. This idea naturally arises from an ignorance of the benefits that result from such reservations to the people of the whole country and an equal ignorance of the advantages which accrue to the inhabitants of the immediate vicinity. In consequence of the benefits which have already resulted to this region from the existence of this park as a breeding place from which the surplus game may wander down into the adjoining country where it may be freely taken, and from the opportunities afforded by the park for remunerative employment during the summer season, there is already a marked diminution of this hostile feeling. As these benefits come to be better understood I believe that this hostility will further diminish, and my best efforts shall be devoted to the encouragement of a friendly sentiment toward the park among the citizens of the surrounding country.

*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1897. Miscellaneous Reports [vol. 3] (Washington: Gov't Printing Office, 1897), pp. 781-82.*

In his report for the year prior to the regulation's adoption, Acting Superintendent Young stated:

Over 200 stand of arms have been taken from persons entering the park by the two main thoroughfares, including those taken from parties found inside, and as a probable resultant, young broods of quail and grouse abound throughout the park. The deer, bear, lynx, fox, coon, tree squirrel, and chipmunk, although not scarce, are not so plentiful as they should be in their natural home in the park. If firearms, hunters, and trappers are kept out of the park they will multiply and become plentiful, and their instinctive fear of man will gradually so lessen in a few years that visitors will be enabled to see and study them in their natural state. These animals drift down below the heavy snow line in winter and the supply that is taken by ranchmen and hunters outside the park boundaries will be a sufficient trimming in numbers to promote a healthful breeding and growth in the natural game nursery within the boundaries.

*Report of Secretary of the Interior; Being Part of the Message and Documents Communicated to the Two Houses of Congress at the Beginning of the Second Session of the Fifty-Fourth Congress. In Five Volumes. (Washington: Gov't Printing Office, 1896), vol. III, p. 740.*

After the regulation's promulgation, the Sec'y of the Interior commented as follows:

The regulations prohibiting firearms in the park, except under written permission of the superintendent, have been strictly observed, the enforcement thereof being essential to the best interest of the park.



*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1897, Report of the Secretary of the Interior [vol.1] (Washington: Gov't Printing Office, 1897), p. LXXXIII.*

2. Regulations of April 1, 1899 –

(5) Hunting or killing, wounding, or capturing of any bird or wild animal, except dangerous animals, when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

“Rules and Regulations of the Yellowstone National Park,” April 1, 1899. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1900*, p. 535.

3. Regulations of July 1, 1900 –

(5) Hunting or killing, wounding or capturing of any bird or wild animal, except dangerous animals, when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1901, Miscellaneous Reports, Part I* (Washington: Gov't Printing Office, 1901), p. 540.

4. Regulations of February 7, 1902 –

(5) Hunting or killing, wounding, or capturing of any bird or wild animal, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under

other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

“Rules and Regulations of the Yellowstone National Park,” February 7, 1902. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1904. Miscellaneous Reports. Part I. Bureau Officers, etc.* (Washington: Gov’t Printing Office, 1904), p. 367.

Superintendent S.B.M. Young included the following in his annual report for FY ’07:

Evidence of poaching in former unfrequented portions of the park difficult of access have been found particularly in the northwest corner, where within the last fortnight a trapper’s cabin, supplied with provisions, cooking utensils, and bedding, was found . .

.. In addition to the trails shown on the map crossing the boundary lines of the park there are numerous other trails – all originally made by hunters, trappers, and prospectors. There are now four main entrance roads leading into the park – north, east, south, and west – which seem to be sufficient for all purposes concerning the park and for accommodation of visitors. Applications have come to this office from far and near for permission to enter the park on these various trails with arms, in order to pass through the park for the purpose of hunting outside of the park. All such applications for permits to carry guns unsealed through any portion of the park have been refused, but permission to carry sealed guns has been granted to persons who enter the park at one of the regular stations where their guns may be sealed, and make exit at one of the regular stations (their route through the park being particularly specified) where their guns may be unsealed and condition reported upon. Permits to carry game or game trophies through the park have been refused. There has been much adverse criticism by hunters and guides on these rulings, but the best interests of the park demand that it shall no longer continue a thoroughfare for sportsmen, hunters, and game-slaughters.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1907. Administrative Reports in 2 Volumes.* (Washington: Gov’t Printing Office, 1907), pp. 551-52.

In 1908, Young added:

Poachers and other violators of the law were arrested in every quarter of the park, and several arrests were made outside the park in Wyoming and Montana on information and evidence furnished by park scouts, and the parties were convicted. It is evident, however, that many poachers escaped arrest. There are not sufficient scouts for thorough protection against poachers.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1908.*  
*Administrative Reports in 2 Volumes.* (Washington: Gov't Printing Office, 1908), p. 409.

5. Regulations of July 2, 1908 –

(5) Hunting or killing, wounding or capturing any bird or wild animal, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Laws and Regulations Relating to the Yellowstone National Park, Wyoming* (Washington: Gov't Printing Office, 1908), p. 13.

6. Regulations of May 27, 1911 –

(5) Hunting or killing, wounding, or capturing any bird or wild animal, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard parties having firearms, traps, nets, seines, or explosives will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1911.*  
*Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1912), p. 575.

7. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one may frighten, hunt or kill, wound or capture any bird or wild animal in the park, except

dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or traveling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed.

*General Information Regarding Yellowstone National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), p. 67.

8. Regulations of February 18, 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Yellowstone National Park* (1929), pp. 61-62.

9. Regulations of January 11, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Yellowstone National Park (1930), p. 64.*

10. Regulations of December 20, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Yellowstone National Park (1931), pp. 56-57.*

11. Regulations of January 23, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.



Molesting, teasing, or touching the bears is prohibited. Persons feeding bears do so at their own risk and peril.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animals shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in section 4 of the act of Congress approved May 7, 1894 (28 Stat. 73), entitled: “An act to protect the birds and animals of Yellowstone National Park, and to punish crimes in said park, and for other purposes.”

*Circular of General Information Regarding Yellowstone National Park (1932), pp. 57-58.*

## 12. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting, or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

Feeding directly from the hand, touching, teasing, or molesting bears is prohibited. Persons photographing bears do so at their own risk and peril.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction, such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animals shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the parks.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the parks sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in section 4 of the act of Congress approved May 7, 1894 (28 Stat. 73), entitled: “An act to protect the birds and animals in Yellowstone National Park, and to punish crimes in said park, and for other purposes.”

*General Information Regarding Yellowstone National Park* (Washington: Gov’t Printing Office, 1933), pp. 48-49.

#### SEQUOIA AND GENERAL GRANT NATIONAL PARKS

##### 1. Regulations of Sequoia National Park of June 2, 1902 –

(6) Hunting or killing, wounding, or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person, or persons, violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

“Rules and Regulations of the Sequoia National Park,” June 2, 1902. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1903, Miscellaneous Reports, Part I* (Washington: Gov’t Printing Office, 1903), p. 551.

##### 2. Regulations of General Grant National Park of June 2, 1902 –

(6) Hunting or killing, wounding, or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person, or persons,

violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

“Rules and Regulations of the General Grant National Park,” June 2, 1902. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1903, Miscellaneous Reports, Part I* (Washington: Govt’ Printing Office, 1903), p. 553.

N.B. The acting superintendent of Sequoia and Gen’l Grant National Parks added the following to his annual report for the Fiscal Year ended June 30, 1905:

In my opinion, tourists entering this park have no use for guns. Hunting is at no time permitted, and the game is not threatening or dangerous. The excuse might be offered that the tourists were en route to the forest reserve and were simply taking their guns through. I would therefore recommend that the carrying of guns through the park be permitted only on the Mineral King road, which is a county road, and that it be made generally known that no gun will be permitted within the park at any other place without first obtaining the permission of the acting superintendent, and that this permission be generally denied, except to those for whom the acting superintendent himself could be individually responsible. The sealing of guns would soon lead to the belief that the general right to carry guns in the park exists, and that the absence of one authorized to seal the gun at the point where the park was entered was sufficient justification for entering the park with an unsealed gun. Notices and regulations are soon ignored and lose their effect when privileges begin to be considered as rights, and the work of the rangers and guards is increased, as a practice once tolerated, because of a misunderstanding or mistaken belief, grows into an ungovernable nuisance and a source of never-ending trouble. I therefore consider it best to have it generally known that no persons will be permitted to carry guns in the park, except over the Mineral King road, above mentioned. There would then be no excuse for a man being found in the park with an unsealed gun. Rangers and guards can not be at all points, especially along the reserve, at which people enter.

*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1905. Report of the Secretary of the Interior and Bureau Officers, etc.* (Washington: Gov’t Printing Office, 1905), pp. 712-13.

The next year, the Secretary of the Interior commented thus:

The rules and regulations were carefully observed by the soldiers, and their duties were performed in a thorough and satisfactory manner. The visitors to the parks seemed disposed to confirm to all the requirements, while the residents in the vicinity of the parks seemed interested in having the regulations obeyed. Violations of the regulations occurred in but two instances: A man brought a pistol into Sequoia Park without having it sealed; it was taken from him and will be held until the close of the season. Another man was found hunting in Sequoia Park; his gun was taken from him and he was ejected from the park.

*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1906. Report of the Secretary of the Interior and Bureau Officers, etc.* (Washington: Gov't Printing Office, 1906), p. 203

3. Regulations [of both parks] of March 30, 1907 –

(6) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person, or persons, violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Sequoia and General Grant National Parks, California* (Washington: Gov't Printing Office, 1908), pp. 9, 11.

4. Regulations of March 30, 1912 –

(6) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person, or persons, violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), p. 683.

5. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one may frighten, hunt or kill, wound or capture any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild

animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed.

*General Information Regarding Sequoia and General Grant National Parks – Season of 1918*  
(Washington: Gov't Printing Office, 1918), pp. 33-34.

6. Regulations of January 14, 1928 –

(4) *Hunting*.—The parks are sanctuaries for wild life of every sort and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said parks.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description, used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of said parks, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said parks, or either of them, of the dead bodies, or any part thereof, of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the parks except upon written permission of the superintendent. Visitors entering or traveling through the parks to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the parks sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress, approved June 2, 1920 (41 Stat. 732), accepting the cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said parks, whether in public or private ownership.

*Circular of General Information Regarding Sequoia and General Grant National Parks*  
(Washington: Gov't Printing Office, 1928), p. 23.

7. Regulations of January 2, 1930 –



(4) *Hunting*.—The parks are sanctuaries for wild life of every sort and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said parks.

Molesting, teasing, or touching the bears is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description, used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of said parks shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said parks, or either of them, of the dead bodies, or any part thereof, of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the parks except upon written permission of the superintendent. Visitors entering or traveling through the parks to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the parks sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said parks, whether in public or private ownership.

*Circular of General Information Regarding Sequoia and General Grant National Parks* (1930), p. 33-34.

## 8. Regulations of December 6, 1930 –

(4) *Hunting*.—The parks are sanctuaries for wild life of every sort and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said parks.

Molesting, teasing, or touching the bears is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description, used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of said parks shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said parks, or either of them, of the dead bodies, or any part thereof, of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the parks except upon written permission of the superintendent. Visitors entering or traveling through the parks to places beyond shall, at entrance, report and surrender all firearms,

traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the parks sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said parks, whether in public or private ownership.

*Circular of General Information Regarding Sequoia National Park and General Grant National Park (1931), pp. 43-44.*

#### 9. Regulations of December 21, 1932 –

(4) *Hunting*.—The parks are a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the parks.

Feeding directly from the hand, touching, teasing, or molesting bears is prohibited. Persons photographing bears do so at their own risk and peril.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of the parks shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction, such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said parks of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the parks carcasses of birds or animals killed outside of the parks.

Firearms are prohibited within the parks except upon written permission of the superintendent. Visitors entering or traveling through the parks to places beyond shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the parks sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress approved June 2, 1920 (41 Stat. 732),

accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said parks, whether in public or private ownership.

*General Information Regarding Sequoia and General Grant National Parks* (Washington: Gov't Printing Office, 1933), pp. 37-38.

## YOSEMITE NATIONAL PARK

### 1. Regulations of June 2, 1902 –

(6) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

“Rules and Regulations of the Yosemite National Park,” June 2, 1902. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1903, Miscellaneous Reports, Part I* (Washington: Govt' Printing Office, 1903), p. 526.

In his Annual Report for 1905, Secretary Hitchcock commented on Yosemite's firearm regulation as follows:

The duty of enforcing the regulation prohibiting the killing of game in the park continues to be a matter of considerable difficulty. Heretofore the custom has been to require persons entering the park with firearms in their possession to surrender such arms during their stay in the park, or, when the parties desired to leave the reservation by a different route, the arms were sealed up and delivered to the owners, with a permit to carry the sealed arms through the park. It has been found, however, that this system afforded no protection to the game in the park, inasmuch as persons entering the reservation with the object of hunting would have their arms sealed up by the first detachment of troops they met and as soon as they were out of sight would break the seals; thereafter, if they met other troops, they would claim that their arms had not been previously sealed; and there being no means of disproving this statement, the second detachment could only again put seals upon the weapons, to be a second time broken, so that the owners could use the weapons in violation of the park regulations.

Owing to this practice, the sealing of arms has been discontinued during the past season, and persons entering the park have been required by the first patrol they encountered to surrender any weapons in their possession. A large number of applications for permits to carry rifles and shotguns into the park for alleged “protection” were received; but as the applicants declined to give any information regarding their plans and purposes, only one such request was granted. In the case of parties of tourists consisting partly of women permits to carry revolvers were given to some of the men in the party. Notwithstanding these precautions, it has been impracticable to prevent entirely the killing of game in the park, as entrance thereto can be had at almost any point, and hunters can thus sometimes evade the various detachments of troops patrolling the reservation.

*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1905. Report of the Secretary of the Interior and Bureau Officers, etc.* (Washington: Gov’t Printing Office, 1905), pp. 165-66.

Captain H.C. Benson, Fourth Cavalry, the acting superintendent of Yosemite reported as follows:

#### Permits to Carry Arms

Numerous letters have been prepared at the instance of one Congressman, requesting that a number of parties who are desirous of making trips through the park be permitted to carry firearms for their protection, promising to conform to all the regulations. Regulations positively prohibit the killing of game. The carrying of firearms in the Yosemite National Park, or any national park, means that the person so carrying them is on a hunting trip; and it is so recognized throughout this part of the country. These letters were never presented, as stated in the body of the letter, but were always mailed to the acting superintendent by the party desiring a permit, with the request that the permit be forwarded to him saying nothing, however, about his intention of conforming to the rules and regulations. Letters were therefore addressed to these people, requesting that they inform the acting superintendent of the date when they expected to reach the park, where they expected to enter, what places they expected to visit, and how long they expected to remain, requesting also a statement from each member of the party that the arms would not be used for the killing of game. In no instance whatever have these questions been answered. In some cases the letters were not answered at all, while in other instances their reply simply was that the party had changed his mind and would not visit the Yosemite, and others, again, stated that they had decided not go on a camping trip this year. The spectacle of from five to seven men arriving on the park limits on the first day of the “open” season, each an provided with a rifle, and the majority of them with shotguns also, all for the purpose of “protection,” would be an amusing one were it not for the fact that it meant the slaughter of game within the park. Under the circumstances, but one such permit was granted. Permits were given for the carrying of revolvers by men when they were accompanied by women, but in no other cases.

It was positively known to the acting superintendent that the sealing of arms in previous years was but a farce, as the seals were broken immediately upon leaving the detachments, in many cases, and that when the next detachment was encountered the statement was made that the guns had not been previously sealed. As there was nothing to disprove this statement, the guns would be again sealed to be again broken and used in violation of park regulations. For this reason, arms have not been sealed this season.

The protection of game is a very difficult matter, due to the fact that entrance can be had to the park at almost any point whatever, and to the fact that all of the inhabitants of this region believe that the game in the mountains belongs to them. With the withdrawal of the troops, there is absolutely nothing to prevent the annual influx of hunters. The game having been driven from the higher mountains by the snow and having grown quite tame during the summer from not being interfered with or frightened, fall easy prey to the unscrupulous.

Id. at 697-98.

In his report for the Fiscal Year ended June 30, 1906, Secretary Hitchcock stated:

[According to the Yosemite superintendent] the Yosemite Valley has, under the control of the State of California, been a death trap to game unfortunate enough to enter it. Practically every person living in the valley kept a rifle, shotgun, and revolver, and game of every description was considered legitimate prey. It is hoped that within a short time, now that the rules and regulations prescribed by the Department for the protection of game can be enforced in Yosemite Valley, that the game will soon learn that it is a safe retreat and not a death trap.

The rules do not permit the carrying of firearms in the park. In the early part of the season two men were arrested by the park rangers for killing deer in the park; they were prosecuted under the State game laws and each fined . . . .

*Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1906. Report of the Secretary of the Interior and Bureau Officers, etc.* (Washington: Gov't Printing Office, 1906), p. 195.

The acting superintendent gave an example of the constant battle against poaching in his annual report:

In the latter part of August, 1906, a letter was received from the Department stating that Mr. W.T. Scoon, of Modesto, Cal., with a party of friends, would make a trip through the reservation for protection, promising to conform to all the regulations. Notice was received by me from Mr. Scoon on September 5 that it was his purpose, with his party of four, to leave Modesto on or about the 10<sup>th</sup> of September. I thereafter requested him to advise me as to the names of the people who would compose his party and the point at which he expected to enter the park, in order to make arrangements for their reception at the point of entrance, to which he replied,



under date of September 11, stating “We will go up on the Oak Flat road by the way of Crockers and there will be in the party A.N. Crow, R.B. Crow, James Klo, and myself, and the party expects to leave Modesto September 13.”

As there is absolutely no reason for carrying firearms for “protection” in the park, and the rules do not permit the carrying of firearms, and noting that the two members of this party, namely, the Crow Brothers, have on previous occasions killed game in the park when they were carrying firearms under a permit in which they had stipulated to conform to the rules and regulations, I sent an officer and two men to accompany this party in order that they might secure the “protection” they desired. They seemed much surprised and greatly put out that they were to be furnished with this protection. They stated that they had no intention whatever of hunting generally, but desired only to kill two or three bucks, just sufficient for their own use. They remained several days, debating whether they would go on the trip if they were not permitted to hunt, but finally moved to Poopenaut Valley, remained there several days, then went to Lake Eleanor for a few days, and finally left the park. It was undoubtedly their intention of going on a hunting trip pure and simple, as each man carried a rifle and a shotgun and they were provided with thirty days’ rations. They remained in the park but ten days. It was not “protection” they desired of their firearms, but a definite intention to violate the rules and regulations of the park by hunting.

. . . . Immediately upon the withdrawal of the troops from the park it is overrun with pot hunters, and these same men often remain throughout the entire winter, killing and trapping all the game in their vicinity.

As the park can be entered from all points of the compass it is impracticable to keep these hunters out except by constant patrolling on the part of troops or rangers. As the rangers live, one on the south side and the other to the far southwest of the park, and make no attempt to patrol except a few miles from the residence of one, and that only on a wagon road, their services during winter are of but little value, and the game receives scarcely any protection from them.

Id. at 653-54.

## 2. Regulations of February 29, 1908<sup>5</sup> –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or

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<sup>5</sup> In connection with YOSE, as early as 1896 the Sec’y of the Interior noted that “all persons [were] required to surrender” firearms, no permits for their carry being issued. Given “the depredations upon the game and song birds” it was felt that this policy was necessary, in order “[t]o prevent as far as possible trespass and flagrant violation of the rules of the park during the close-season . . . of California.” The Sec’y went on to state that “[p]ersons entering by trails from the north and east on which there were no permanent guard posts, were, when discovered, disarmed by patrol parties. Notwithstanding the adoption of such stringent measures firearms have been occasionally smuggled in by campers.” *Report of the Secretary of the Interior* [etc.] (Washington: Gov’t Printing Office, 1896), vol. 1, p. CV.

means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Yosemite National Park, California* (Washington: Gov't Printing Office, 1908), p. 15.

### 3. Regulations of June 1, 1909 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives, will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1909. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1910), p. 436.

### 4. Regulations of March 30, 1912 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives, will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), pp. 670-71.

5. Regulations of May 11, 1914 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives, will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1914. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1915), p. 738.

In his annual report for Fiscal Year 1916, the superintendent addressed the firearms regulation as follows:

Approximately 1,500 firearms of various sorts and calibers have been sealed or taken up during the year. At present firearms carried by through automobile passengers are sealed and the owners are permitted to retain possession. In such cases the number of guns sealed is stated on the permit and the seals are broken by the ranger at the point of exit. Those brought into the park by people on foot or horseback are taken up and turned in to the supervisor's office, whence they are shipped to the owner at the latter's risk. This method of handling firearms has proven very satisfactory. There should, however, be incorporated in the firearms regulations a clause stating, in effect, that in cases where arms once sealed are later found with seals broken, or in cases where arms are brought into the park unsealed in direct violation of the regulations, or in cases where there is any attempt to evade the regulations by denial of possession or concealment, said arms shall be promptly confiscated and the party shall forfeit all claim thereto.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1916. Volume I* (Washington: Gov't Printing Office, 1917), p. 794.

For Fiscal Year 1917, the superintendent noted:

Firearms to the number of 1,794, of various classes, were handled by the ranger department during the year. Of these 1,236 were sealed at the park entrances, and 558 were taken up by the park rangers at various points and were later returned to their respective owners. The method of handling firearms was the same as that used through the latter part of the 1916 season. Firearms carried by automobile passengers are sealed at the park entrance and are allowed to remain in the possession of the owner. In this case the number of guns sealed is noted on the permit by the ranger issuing the permit and the seals are in turn broken by the ranger at point of exit. Those brought into the park by people on foot or horseback are taken up and turned into the supervisor's office, whence they are shipped to the owners at the latter's risk. Likewise, in cases where persons are found in the park with firearms which have not been sealed, such firearms are taken up and handled in the same manner. In the latter case, unless the owner can readily explain the reason for carrying unsealed firearms, additional penalties in the way of fines are imposed.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1917. Volume I* (Washington: Gov't Printing Office, 1918), p. 935.

6. Regulations in effect April 15, 1918 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and no one may frighten, hunt or kill, wound or capture any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or traveling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed.

*General Information Regarding Yosemite National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), pp. 33-34.

7. Regulations of November 24, 1928 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, trapping,

ensnaring, or capturing birds or wild animals within the limits of said park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE. The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress, approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

*Circular of General Information Regarding Yosemite National Park (1929), pp. 41-42.*

#### 8. Regulations of January 14, 1930 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of said park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress, approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.



This act by its terms applies to all lands within said park whether in public or private ownership.

*Circular of General Information Regarding Yosemite National Park* (1930), p. 45.

9. Regulations of December 8, 1930 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of said park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress, approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

*Circular of General Information Regarding Yosemite National Park* (Washington: Gov't Printing Office, 1931), pp. 45-46.

10. Regulations of January 13, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or

animals shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park . . . and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

*Circular of General Information Regarding Yosemite National Park (1932), pp. 42-43.*

#### 11. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the parks.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Feeding directly from the hand, touching, teasing, or molesting bears is prohibited. Persons photographing bears do so at their own risk and peril.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park

officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 5 and 6 of the act of Congress approved June 2, 1920 (41 Stat. 732), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Yosemite National Park, Sequoia National Park, and General Grant National Park, respectively, and for other purposes.

This act by its terms applies to all lands within said parks, whether in public or private ownership.

*General Information Regarding Yosemite National Park* (Washington: Gov't Printing Office, 1933), pp. 34-35.

#### MESA VERDE NATIONAL PARK

##### 1. Regulations of March 19, 1908 –

(8) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than those prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will be permitted in the park only on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Mesa Verde National Park, Colorado* (Washington: Gov't Printing Office, 1908), p. 9.

##### 2. Regulations of March 30, 1912 –

(8) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will be permitted in the park only on written permission from the superintendent.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), pp. 715-16.

3. Regulations in effect April 15, 1918 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort and no one should frighten, hunt or kill, wound or capture any bird or wild animal in the park except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

*General Information Regarding Mesa Verde National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), p. 47.

4. Regulations of December 11, 1928 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mesa Verde National Park* (Washington: Gov't Printing Office, 1929), p. 54.

5. Regulations of March 1, 1930 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mesa Verde National Park* (Washington: Gov't Printing Office, 1930), p. 56.

6. Regulations of January 8, 1931 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers



authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mesa Verde National Park* (Washington: Gov't Printing Office, 1931), p. 57.

7. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting, killing, wounding, capturing, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*General Information Regarding Mesa Verde National Park* (Washington: Gov't Printing Office, 1933), pp. 55-56.

CRATER LAKE NATIONAL PARK

1. Regulations of August 27, 1902 –

(4) Hunting or killing, wounding or capturing, any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation.

Firearms will only be permitted in the park on written permission from the superintendent thereof.

“Rules and Regulations of the Crater Lake National Park,” August 27, 1902. *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1903. Miscellaneous Reports. Part I. Bureau Officers, etc.* (Washington: Gov’t Printing Office, 1903), p. 567.

2. Regulations of June 10, 1908 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Crater Lake National Park, Oregon* (Washington: Gov’t Printing Office, 1908), p. 6.

N.B. In his annual report for Fiscal Year 1911, superintendent W.F. Arant addressed the system of surrendering firearms upon arrival thus:

During the last season all guns were taken at the superintendent’s office, checked, and returned upon presentation of the coupon when the visitor was ready to depart from the park.

As a matter of safety and a prevention of violation of the rules and regulations of the reserve this mode was not objectionable, but was laborious and somewhat inconvenient to both the management of the park and the public. Under this method there are usually from 20 to 50 guns in the office all the time. I made requisition to the department for gun seals, such as are used in the Yellowstone Park, with instructions regarding their use.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1911. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov’t Printing Office, 1912), p. 657.

3. Regulations of March 30, 1912 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or

means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), p. 730.

4. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one should frighten, hunt or kill, wound or capture any bird or wild animal in the park except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

*General Information Regarding Crater Lake National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), pp. 14-15.

5. Regulations of January 19, 1928 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals, when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals or in possession of game killed on the park lands under circumstances other than prescribed above shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited

in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officers nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Crater Lake National Park* (Washington: Gov't Printing Office, 1929), p. 13.

6. Regulations of December 28, 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals, when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases, may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officers, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Crater Lake National Park* (Washington: Gov't Printing Office, 1930), p. 13.

7. Regulations of January 14, 1931 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals, when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of

the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Crater Lake National Park (1931), pp. 14-15.*

8. Regulations of January 15, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE. The foregoing regulation is in effect a declaration of the law on this subject contained in section 4 and 5 of the act of Congress approved August 21, 1916 (39 Stat. 521), accepting cession by the State of Oregon of exclusive jurisdiction of the lands embraced in the Crater Lake National Park, and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

*Circular of General Information Regarding Crater Lake National Park (1932), pp. 22-23.*

9. Regulations of December 21, 1932 –



(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or wild animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction, such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets or explosives in their possession to the first park officer and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved August 21, 1916 (39 Stat. 521), accepting cession by the State of Oregon of exclusive jurisdiction of the lands embraced in the Crater Lake National Park, and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

*General Information Regarding Crater Lake National Park* (Washington: Gov't Printing Office, 1933), pp. 20-21.

#### MOUNT RAINIER NATIONAL PARK

##### 1. Regulations of August 1, 1903 –

(2) The hunting or killing, wounding or capturing of any bird or wild animal on the Government lands in the park, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. Firearms will only be permitted in the reservation on the written permission of the acting superintendent.

“Regulations Governing Mount Rainier National Park.” *Annual Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1904. Miscellaneous Reports. Part I. Bureau Officers, etc.* (Washington: Gov’t Printing Office, 1904), p. 442.

N.B. In his annual report, the acting superintendent commented on this regulation thus:

Public sentiment very strongly indorses the regulation which prohibits carrying firearms within the limits of the park except by written permit issued by the acting superintendent. This regulation has been thoroughly enforced by the forest rangers without any special difficulty. In one instance they were obliged to take the guns from two men who were in the park under the pretext of being prospectors, but who were actually there to kill whatever large game they might come across. This was not long after the regulation was issued, and they were, perhaps, not at the time aware that guns were prohibited.

Id. at 440.

2. Regulations of June 10, 1908 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Mount Rainier National Park, Washington* (Washington: Gov’t Printing Office, 1908), p. 8.

3. Regulations of March 30, 1912 –

(4) Hunting or killing, wounding, or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), p. 700.

4. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one should frighten, hunt or kill, wound or capture any bird or wild animal in the park except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

*General Information Regarding Mount Rainier National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), p. 33.

5. Regulations of November 22, 1928 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and hunting, killing, wounding or capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds, or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines or other property so surrendered to any park officer nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mount Rainier National Park* (Washington: Gov't Printing Office, 1929), p. 28.

6. Regulations of December 30, 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and hunting, killing, wounding, capturing, or frightening any bird or wild animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mount Rainier National Park* (1930), p. 29.

7. Regulations of December 8, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases, may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers

authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mount Rainier National Park* (Washington: Gov't Printing Office, 1931), pp. 28-29.

8. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved June 30, 1916 (39 Stat. 243), accepting cession by the State of Washington of exclusive jurisdiction of the lands embraced within the Mount Rainier National Park.

This act by its terms applies to all lands within said park whether in public or private ownership.

*General Information Regarding Mount Rainier National Park* (Washington: U.S. Gov't Printing Office, 1933), pp. 27-28.



PLATT NATIONAL PARK<sup>6</sup>

Regulations of June 10, 1908 –

(6) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Platt National Park, Oklahoma* (Washington: Gov't Printing Office, 1908), pp. 11-12.

WIND CAVE NATIONAL PARK

1. Regulations of June 10, 1908 –

(5) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof.

*Laws and Regulations Relating to the Wind Cave National Park, South Dakota* (Washington: Gov't Printing Office, 1908), p. 7.

2. Regulations of March 30, 1912 –

(5) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or

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<sup>6</sup> Originally Sulphur Springs Reservation, renamed and redesignated Platt National Park June 29, 1906; combined with Arbuckle National Recreation Area and additional lands and renamed and redesignated Chickasaw National Recreation Area March 17, 1976.

inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the supervisor and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the supervisor thereof.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1915. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1916), p. 1046.

### 3. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one may frighten, hunt or kill, wound or capture any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed.

*General Information Regarding Wind Cave National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), pp. 16-17.

### 4. Regulations of March 8, 1926 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this

regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines or other property so surrendered to any park officer nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Wind Cave National Park* (Washington: Gov't Printing Office, 1929), pp. 9-10.

5. Regulations of December 28, 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Wind Cave National Park* (1930), pp. 9-10.

6. Regulations of December 2, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory

evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed.

The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Wind Cave National Park* (Washington: Gov't Printing Office, 1931), pp. 9-10.

#### 7. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park, under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*General Information Regarding Wind Cave National Park* (Washington: U.S. Gov't Printing Office, 1933), pp. 9-10.

#### 8. Regulations in effect 1933 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting, killing, wounding, frightening, capturing or attempting to capture at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from

destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park, under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the Office of National Parks, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park carcasses of birds or animals killed outside of the park.

Firearms and traps are prohibited within the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender, if required, all firearms, traps, seines, nets or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*General Information Regarding Wind Cave National Park* (Washington: Gov't Printing Office, 1934), p. 11.

## GLACIER NATIONAL PARK

### 1. Regulations of December 3, 1910 –

(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives will turn them over to the officer in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Laws, Regulations, and General Information Relating to Glacier National Park, Montana 1910* (Washington: Gov't Printing Office, 1911), p. 6.

### 2. Regulations of March 30, 1912 –



(4) Hunting or killing, wounding or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard parties having firearms, traps, nets, seines, or explosives will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), p. 752.

### 3. Regulations of May 13, 1914 –

(4) Hunting or killing, wounding, or capturing any bird or wild animal on the park lands, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, will be taken up by the superintendent and subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives will turn them over to the officer in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1914. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1915), p. 833.

### 4. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one should frighten, hunt or kill, wound or capture any bird or wild animal in the park except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than

prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

*General Information Regarding Glacier National Park – Season of 1918* (Washington: Gov't Printing Office, 1918), p. 65.

5. Regulations of December 12, 1928 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, pursuing, or capturing at any time of any bird or wild animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons within said park limits when engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies, or any part thereof, of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE. The foregoing regulation is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress, approved August 22, 1914 (38 Stat. 700) accepting cession by the State of Montana of exclusive jurisdiction over the lands embraced within the Glacier National Park.

This act by its terms applies to all lands within the park, whether in public or private ownership.

*Circular of General Information Regarding Glacier National Park* (1929), pp. 33-34.

6. Regulations of March 6, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, pursuing, or capturing at any time of any bird or wild animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited, within the limits of said parks.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons within said park limits when engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies, or any part thereof, of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—This paragraph is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved August 22, 1914 (38 Stat. 700), accepting the cession by the State of Montana of exclusive jurisdiction over the lands embraced within the Glacier National Park.

This act by its terms applies to all lands within the park, whether in public or private ownership.

Game killed or taken within the park, and firearms in possession therein, in violation of these regulations, shall be forfeited to the United States, and any employee of the park assigned to police duty shall have authority to search without a warrant any automobile or other vehicle, or any container therein, for such game or firearms and to seize the same if found, when he has reasonable grounds for belief that the automobile or other vehicle, or container therein, contains game or firearms subject to forfeiture as provided herein.

*Circular of General Information Regarding Glacier National Park* (Washington: Gov't Printing Office, 1930), p. 33.

## 7. Regulations of December 3, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, pursuing, or capturing at any time of any bird or wild animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons within said park limits when engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies, or any part thereof, of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no

responsibility for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

Game killed or taken within the park, and firearms in possession therein, in violation of these regulations, shall be forfeited to the United States, and any employee of the park assigned to police duty shall have authority to search without a warrant any automobile or other vehicle, or any container therein, for such game or firearms and to seize the same if found, when he has reasonable grounds for belief that the automobile or other vehicle, or container therein, contains game or firearms subject to forfeiture as provided therein.

NOTE.—This paragraph is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved August 22, 1914 (38 Stat. 700), accepting cession by the State of Montana of exclusive jurisdiction over the lands embraced within the Glacier National Park.

This act by its terms applies to all lands within the park, whether in public or private ownership.

*Circular of General Information Regarding Glacier National Park* (1931), pp. 29-30.

#### 8. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

Feeding directly from the hand, touching, teasing, or molesting bears is prohibited. Persons photographing bears do so at their.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction, such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved August 22, 1914 (38 Stat.

700), accepting cession by the State of Montana of exclusive jurisdiction of the lands embraced within the National Park.

This act by its terms applies to all lands within said park whether in public or private ownership.

*General Information Regarding Glacier National Park* (Washington: Gov't Printing Office, 1933), p. 23.

#### ROCKY MOUNTAIN NATIONAL PARK

##### 1. Regulations of May 29, 1915 –

(5) The park is a sanctuary for wild life of every sort, and no one should frighten, hunt or kill, wound or capture any bird or wild animal in the park except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

(6) The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under other circumstances than prescribed above, must be taken up by the superintendent and held subject to the order of the Secretary of the Interior, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the supervisor. Visitors entering or travelling through the park to places beyond should, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

“Rules and Regulations Approved May 29, 1915.” *Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1915, Administrative Reports in 2 Volumes* (Washington: Gov't Printing Office) vol. 1, p. 1124.

In his annual report for Fiscal Year 1916, the superintendent added:

There is no evidence of the slaughter of game during the past year in the park, a strict vigilance having been kept during the winter months for hunters and trappers. Mountain sheep are plentiful and no doubt increasing, and have been seen more frequently by tourists than in former years. It is now possible to approach them quite closely, and one instance is known where an automobile came within 30 feet of a group which did not disturb them. One ranger reports seeing 182 in one group near Specimen Mountain.

Firearms are not allowed in the park and notice to this effect is posted at all entrances.

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1916. Volume I* (Washington: Gov't Printing Office, 1917), p. 794.



2. Regulations in effect April 15, 1918 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and no one may frighten, hunt or kill, wound or capture any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, must be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms will be permitted in the park only on written permission of the superintendent. Visitors entering or travelling through the park to places beyond must, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed.

*General Information Regarding Rocky Mountain National Park – Season of 1918*  
(Washington: Gov't Printing Office, 1918), pp. 26-27.

3. Regulations of January 17, 1928 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding or capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and, in proper cases, may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines or other property so surrendered to any park officer nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Rocky Mountain National Park* (Washington: Gov't Printing Office, 1929), p. 30.

4. Regulations of January 2, 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Rocky Mountain National Park* (1930), p. 29.

5. Regulations of December 6, 1930 –

(5) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Rocky Mountain National Park* (Washington: Gov't Printing Office, 1931), p. 30.

6. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved March 2, 1929 (45 Stat. 1536), accepting cession by the State of Colorado of exclusive jurisdiction of the lands embraced in the Rocky Mountain National Park.

This act by its terms applies to all lands within said park whether in public or private ownership.

*General Information Regarding Rocky Mountain National Park* (Washington: U.S. Gov't Printing Office, 1933), p. 26.

## HAWAII NATIONAL PARK

1. Regulations in effect 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, wounding, capturing, or frightening any bird or animal in the park, except the wild goat, as provided in Rule 1, is prohibited. Firearms are prohibited in the park except on written permission of the superintendent, who also has authority to waive inquiry as to the possession of firearms by visitors traveling through the park to places beyond.

*Circular of General Information Regarding Hawaii National Park* (Washington: Gov't Printing Office, 1929), p. 14.

2. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except wild goats and pigs as provided in Rule I, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park, shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction, such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park, except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulations is [sic] in effect a declaration of the law on this subject as contained in sections 4 and 5 of the act of Congress approved April 19, 1930 (46 Stat. 227), to provide for the exercise of sole and exclusive jurisdiction by the United States over the Hawaii National Park in the Territory of Hawaii, and for other purposes.

The act by its terms applies to all lands within said park, whether in public or private ownership.

*General Information Regarding Hawaii National Park* (Washington: Gov't Printing Office, 1933), p. 17.

ACADIA NATIONAL PARK

1. Regulations in effect 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park is prohibited.

Firearms are prohibited in the park except on written permission of the superintendent.

*Circular of General Information Regarding Acadia National Park* (Washington: U.S. Gov't Printing Office, 1929), p. 13.

2. Regulations in effect 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park is strictly prohibited. No light shall be used for the purpose of observing the wild life in the park except as authorized in writing by the superintendent.

Firearms are prohibited in the park except on written permission of the superintendent.

*Circular of General Information Regarding Acadia National Park* (1930), p. 12.

3. Regulations of January 14 and December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park is prohibited. No light shall be used for the purpose of observing the wild life in the park except as authorized in writing by the superintendent.

Firearms are prohibited in the park except on written permission of the superintendent.

*Circular of General Information Regarding Acadia National Park* (1932), p. 13; *General Information Regarding Acadia National Park* (1933), p. 16.

LASSEN VOLCANIC NATIONAL PARK

1. Regulations in effect 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park is prohibited.

Firearms are prohibited in the park except on written permission of the superintendent.

*Circular of General Information Regarding Lassen Volcanic National Park* (Washington: Gov't Printing Office, 1929), p. 11.

2. Regulations in effect 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of said park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals within the limits of said park, shall be taken



up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having same are guilty of violating this regulation. Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE. The foregoing regulation is in effect a declaration of the law on this subject contained in section 4 and 5 of the act of Congress, approved April 26, 1928 (45 Stat. 463), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Lassen Volcanic National Park, and for other purposes.

This act by its terms applies to all lands within said park, whether in public or private ownership.

*Circular of General Information Regarding Lassen Volcanic National Park (1930), pp. 12-13.*

### 3. Regulations of January 14, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE. The foregoing regulation is in effect a declaration of the law on this subject contained in section 4 and 5 of the act of Congress, approved April 26, 1928 (45 Stat. 463), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Lassen Volcanic National Park, and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

*Circular of General Information Regarding Lassen Volcanic National Park* (1932), p. 16.

4. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park, except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

NOTE.—The foregoing regulation is in effect a declaration of the law on this subject as contained in sections 4 and 5 of the act of Congress approved April 26, 1928 (45 Stat. 463), accepting cession by the State of California of exclusive jurisdiction of the lands embraced within the Lassen Volcanic National Park, and for other purposes.

The act by its terms applies to all lands within said park, whether in public or private ownership.

*General Information Regarding Lassen Volcanic National Park* (Washington: Gov't Printing Office, 1933), pp. 16-17.

MOUNT MCKINLEY NATIONAL PARK

1. Regulations in effect 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, and snaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

No game meat shall be taken into the park without prior permission in writing from the superintendent or his nearest representative.

*Circular of General Information Regarding Mount McKinley National Park* (Washington: Gov't Printing Office, 1929), p. 19.

## 2. Regulations in effect 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, and snaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

No game meat shall be taken into the park without prior permission in writing from the superintendent or his nearest representative.

*Circular of General Information Regarding Mount McKinley National Park* (Washington: Gov't Printing Office, 1930), pp. 21-22.

3. Regulations of January 29, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Mount McKinley National Park* (1932), pp. 22-23.

ZION AND BRYCE CANYON NATIONAL PARKS

1. Regulations of January 12, 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this

regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent.

Visitors entering or traveling through the park to places beyond shall at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Zion and Bryce Canyon National Parks*  
(Washington: Gov't Printing Office, 1929), p. 14.

## 2. Regulations in effect 1931 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent.

Visitors entering or traveling through the park to places beyond shall at entrance report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Zion and Bryce Canyon National Parks*  
(Washington: Gov't Printing Office, 1931), p. 20.

## 3. Regulations of February 6, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the



superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Zion and Bryce Canyon National Parks* (1932), pp. 20-21.

#### 4. Regulations of December 21, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description, used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park, except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*General Information Regarding Zion and Bryce Canyon National Parks* (Washington: Gov't Printing Office, 1933), pp. 16-17.

#### NATIONAL MONUMENTS

1. Regulations of November 19, 1910<sup>7</sup> –(2) No firearms are allowed.<sup>8</sup>

*Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), p. 769.

2. Regulations in effect 1930<sup>9</sup> –

(5) *Hunting*.—The national monuments are sanctuaries for wild life of every sort, and the hunting, killing, wounding, capturing, or frightening of any bird or wild animal in any monument is strictly prohibited, except poisonous snakes or dangerous animals when it is necessary to prevent them from destroying life or inflicting injury.

*Glimpses of Our National Monuments* (Washington: U.S. Gov't Printing Office, 1933), p. 71.

N.B. Note that the explicit firearm prohibition of the 1910 regulation has been deleted.

CARLSBAD CAVERNS NATIONAL PARK

## Regulations of February 28, 1933 –

## (1) Preservation of Natural Features and Curiosities.

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No canes, umbrellas, or sticks of any kind, or firearms or any other explosive material will be permitted to be taken into the caverns.

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<sup>7</sup> Prior to being promulgated for general application to all national monuments, this same regulation was prescribed for Muir Woods National Monument, on September 10, 1908. *General Information Regarding the National Monuments Set Aside under the Act of Congress Approved June 8, 1906* (Washington: Gov't Printing Office, 1917), p. 9.

<sup>8</sup> National Monuments administered by the Department of the Interior at the time, and administered by the National Park Service today, include: Devils Tower, Montezuma Castle, El Morro, Chaco Canyon, Muir Woods, Pinnacles, Tumacacori, Mukuntuweap (now part of Zion NP), Natural Bridges, Gran Quivira, Sitka, Rainbow Bridge, Colorado, and Petrified Forest. See, *Reports of the Department of the Interior for the Fiscal Year Ended June 30, 1912. Administrative Reports in 2 Volumes. Volume I* (Washington: Gov't Printing Office, 1913), p. 769.

<sup>9</sup> National Monuments administered by the National Park Service in 1930: Arches, Aztec Ruins, Capulin Mtn., Casa Grande, Chaco Canyon, Colorado, Craters of the Moon, Devils Tower, Dinosaur, El Morro, Fossil Cycad, Geo. Washington's Birthplace, Glacier Bay, Gran Quivira, Hovenkeep, Katmai, Lewis and Clark Cavern, Montezuma Castle, Muir Woods, Natural Bridges, Navajo, Petrified Forest, Pinnacles, Pipe Spring, Rainbow Bridge, Scotts Bluff, Shoshone Cavern, Sitka, Tumacacori, Verendyre, Wupatki, and Yucca House. *Glimpses of Our National Monuments* (Washington: U.S. Gov't Printing Office, 1930), pp. I-II.

(3) *Hunting*.—The park is a sanctuary for wildlife of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

Story, Isabella F., *Carlsbad Caverns National Park* (Washington: U.S. Gov't Printing Office, 1935), p. 23.

#### GREAT SMOKY MOUNTAINS NATIONAL PARK

##### 1. Regulations of May 9, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, pursuing, or capturing at any time of any bird or wild animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, or taking the eggs of any bird, is prohibited within the limits of said park. Firearms are prohibited within the park except upon written permission of the superintendent.

*General Information [Regarding] Great Smoky Mountains National Park* (1932), p. 11.

##### 2. Regulations of March 10, 1933 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, pursuing, or capturing at any time of any bird or wild animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, or taking the eggs of any bird, is prohibited within the limits of said park. Firearms are prohibited within the park except upon written permission of the superintendent.

*General Information Regarding Great Smoky Mountains National Park* (Washington: 1933), p. 16.

##### 3. Regulations in effect 1934/35 –

(4) *Hunting*.—The park is a sanctuary for wildlife of every sort, and all hunting or the killing, wounding, frightening, pursuing, capturing or attempting to capture at any time of any bird or wild animal, except dangerous animals, when it is necessary to prevent them from destroying human lives or inflicting personal injury, or taking the eggs of any bird, is prohibited within the limits of said park. Firearms are prohibited within the park except upon written permission of the superintendent. The outfits, including guns, teams, traps, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction such forfeiture shall be

adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation. During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

*General Information Regarding Great Smoky Mountains National Park* (1933<sup>10</sup>), p. 16.

#### GRAND CANYON NATIONAL PARK

##### 1. Regulations of January 16, 1928<sup>11</sup> –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and hunting, killing, wounding, capturing, or frightening any bird or animal in the park is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Grand Canyon National Park* (Washington: U.S. Gov't Printing Office, 1929), p. 43.

##### 2. Regulations of January 2, 1930 –

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<sup>10</sup> While the publication date given on the face of the pamphlet states “1933,” this regulation would appear to be later in date, given that (1) the regulation of March 10, 1933 (see part I at <<http://www.nps.gov/policy/Firearmsregs.pdf>>) appears to have been significantly expanded, and (2) the pamphlet was found in a bound volume of similar brochures dated 1936.

<sup>11</sup> In a 1928 article entitled “U.S. National Parks Magnificent Schools,” Dr. Frank Thomas, formerly the park naturalist at Yellowstone, gave potential visitors to the parks a few helpful tips, including the following:

Don't carry any firearms. They'll only be sealed at the park entrance, and you lose the gun and a stiffish fine besides if you tamper with the seal.

*The Science News-Letter*, Vol. 13, No. 366, American Traveler Number (April 14, 1928), pp. 227, 228.

(4) *Hunting*.—The park is a sanctuary for wild life of every sort and hunting, killing, wounding, capturing, or frightening any bird or animal in the park is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Grand Canyon National Park* (Washington: U.S. Gov't Printing Office, 1930), p. 44.

### 3. Regulations of January 9, 1931 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or animal in the park is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibilities for loss or damage to any firearms, traps, nets, seines, or other property so surrendered to any park officer, nor are park officers authorized to accept responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Grand Canyon National Park* (Washington: Gov't Printing Office, 1931), p. 44.

### 4. Regulations of February 15, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal,



except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Grand Canyon National Park (1932), p. 47.*

#### 5. Regulations of December 31, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park, shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer, and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*General Information Regarding Grand Canyon National Park* (Washington: Gov't Printing Office, 1933), p. 35.

#### GRAND TETON NATIONAL PARK

##### 1. Regulations in effect 1929 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent or his authorized representative at the park and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent or his authorized representative.

*Circular of General Information Regarding Grand Teton National Park* (Washington: U.S. Gov't Printing Office, 1929), p. 17.

##### 2. Regulations in effect 1930 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing birds or wild animals, or in possession of game killed on the park lands under circumstances other than prescribed above, shall be taken up by the superintendent or his authorized representative at the park and held subject to the order of the Director of the National Park Service, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner was not a party to such violation. Firearms are prohibited in the park except on written permission of the superintendent or his authorized representative.

*Circular of General Information Regarding Grand Teton National Park* (Washington: U.S. Gov't Printing Office, 1930), p. 16.

##### 3. Regulations of January 29, 1932 –

(4) *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying life or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be taken up by the superintendent and held subject to the order of the Director of the National Park Service. Possession within said park of the dead bodies or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, nets, seines, or explosives in their possession to the first park officer, and in proper cases may obtain his written leave to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*Circular of General Information Regarding Grand Teton National Park* (1932), pp. 15-16.

## GENERAL REGULATION<sup>12</sup>

Regulation of June 18, 1936 –

(7) *Protection of wildlife*.—The parks and monuments are sanctuaries for wildlife of every sort, and all hunting, or the killing, wounding, frightening, capturing, or attempting to capture at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the parks and monuments.

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<sup>12</sup> The general regulation states it is “for the proper use, management, government, and protection of, and maintenance of good order in all the National Parks, National Monuments, National Military Parks, National Historical Parks, Battlefield Sites, and miscellaneous memorials which are, or hereafter may be, under the administrative jurisdiction of the National Park Service of the Department of the Interior: *Provided, however*, That these rules and regulations shall not apply to National Cemeteries or to National Capital Parks. All previous rules and regulations . . . except such local subsidiary regulations as are continued in force under the provisions hereof . . . are hereby repealed.” *Id.* Such “subsidiary regulations” included explicit special regulations, such as those for mining in Death Valley National Monument (section 16), and the prohibition on fishing in Muir Woods National Monument (section 9), contained in the general regulation itself. Other park-specific regulations were clearly contemplated therein, for example, those regulating the hours of swimming at Hot Springs National Park (section 2(m)), and restricting the use of spring water at Platt National Park (section 4). No special regulations, either explicit or implicit, were included with respect to firearms. *Id.* at 673-75.

Unauthorized possession within a park or monument of the dead body of any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements must be made at entrance stations to identify and transport through the parks and monuments, where necessary, the carcasses of birds or animals legally killed outside the parks and monuments. Failure to make such arrangements shall be deemed a violation of this regulation.

(8) *Firearms, etc.*—Firearms, explosives, traps, seines, and nets are prohibited within the parks and monuments, except upon written permission of the superintendent or custodian. Visitors entering or traveling through the parks and monuments to places beyond shall, at entrance, report and, if required to do so, surrender all such objects in their possession to the first park or monument officer, and, in proper cases, may obtain his written permission to carry them through the park or monument sealed. Failure to obtain such written permission shall be deemed a violation of this regulation. The Government assumes no responsibility for the loss of, or damage to, any such objects so surrendered to any park or monument officer, nor are park or monument officers authorized to accept the responsibility or custody of any other property for the convenience of the visitors.

1 *Federal Register* 672, 673-74 (June 27, 1936).

## APPENDIX A

### Original Rules and Regulations of Yellowstone National Park

1<sup>st</sup>. All hunting, fishing, or trapping within the limits of the Park, except for purposes of recreation, or to supply food for visitors or actual residents, is strictly prohibited; and no sales of fish or game taken within the park shall be made outside of its boundaries.

2<sup>nd</sup>. Persons residing within the park, or visiting it for any purpose whatever, are required under severe penalties to extinguish all fires which it may be necessary to make, before leaving them. No fires must be made within the park except for necessary purposes.

3<sup>rd</sup>. No timber must be cut in the park without a written permit from the superintendent.

4<sup>th</sup>. Breaking the siliceous or calcareous borders or deposits surrounding or in the vicinity of the springs or geysers for any purpose, and all removal, carrying away, or sale of specimens found within the park, without the consent of the superintendent, is strictly prohibited.

5<sup>th</sup>. No person will be permitted to reside permanently within the limit of the park without permission from the Department of the Interior, and any person now living within the park shall vacate the premises occupied by him within thirty days after having been served with a written notice so to do, by the superintendent or his deputy, said notice to be served upon him in person or left at his place of residence.

Source: *Report of the Secretary of the Interior; Being Part of the Message and Documents Communicated to the Two Houses of Congress at the Beginning of the Third Session of the Forty-Fifth Congress, in Two Volumes* (Washington: Gov't Printing Office, 1878), vol. I, pp. 993-94.



## APPENDIX B

### 1881 Rules and Regulations of Yellowstone National Park

\* \* \*

4. Hunting, trapping, and fishing, except for purposes of procuring food for visitors or actual residents, are prohibited by law; and no sales of game or fish taken inside the Park shall be made for purposes of profit within its boundaries or elsewhere.

\* \* \*

Approved by Sec'y of the Interior S.J. Kirkwood, May 4, 1881.

Source: *Annual Report of the Secretary of the Interior on the Operations of the Department for the Year Ended June 30, 1881, in Four Volumes* (Washington: Gov't Printing Office, 1882), vol. II, p. 819.

## APPENDIX C

### 1888 Rules and Regulations of Yellowstone National Park

\* \* \*

5. Hunting, capturing, injuring, or killing any bird or animal within the Park is prohibited. The outfits of persons found hunting or in possession of game killed in the Park will be subject to seizure and confiscation.

\* \* \*

Approved by Sec'y of the Interior William F. Vilas, July 1, 1888.

Source: *Report of the Secretary of the Interior for the Fiscal Year Ending June 30, 1888. In Six Volumes* (Washington: Gov't Printing Office, 1888), vol. III, p. 656.

Saturday, June 27, 1936

No. 76

## TREASURY DEPARTMENT.

## Bureau of Internal Revenue.

[T. D. 4649]

WITHHOLDING OF INCOME TAX UNDER SECTIONS 143 AND 144  
OF THE REVENUE ACT OF 1936

## Collectors of Internal Revenue and Others Concerned:

Paragraph A. The Revenue Act of 1936 (Public, No. 740, Seventy-fourth Congress, second session, H. R. 12395), was approved by the President, June 22, 1936, 9 p. m. eastern standard time.

Paragraph B. Section 143 (Title I, Income Tax) of the Act, relating to withholding of tax at the source, provides:

SEC. 143. WITHHOLDING OF TAX AT SOURCE.—(a) *Tax-Free Covenant Bonds.*—

(1) *Requirement of withholding.*—In any case where bonds, mortgages, or deeds of trust, or other similar obligations or a corporation, issued before January 1, 1934, contain a contract or provision by which the obligor agrees to pay any portion of the tax imposed by this title upon the obligee, or to reimburse the obligee for any portion of the tax, or to pay the interest without deduction for any tax which the obligor may be required or permitted to pay thereon, or to retain therefrom under any law of the United States, the obligor shall deduct and withhold a tax equal to 2 per centum of the interest upon such bonds, mortgages, deeds of trust, or other obligations, whether such interest is payable annually or at shorter or longer periods, if payable to an individual, a partnership, or a foreign corporation not engaged in trade or business within the United States and not having any office or place of business therein: *Provided*, That if the liability assumed by the obligor does not exceed 2 per centum of the interest, then the deduction and withholding shall be at the following rates: (A) 10 per centum in the case of a nonresident alien individual (except that such rate shall be reduced, in case of a resident of a contiguous country, to such rate, not less than 5 per centum, as may be provided by treaty with such country), or of any partnership not engaged in trade or business within the United States and not having any office or place of business therein and composed in whole or in part of nonresident aliens, (B) in the case of such a foreign corporation, 15 per centum, and (C) 2 per centum in the case of other individuals and partnerships: *Provided further*, That if the owners of such obligations are not known to the withholding agent the Commissioner may authorize such deduction and withholding to be at the rate of 2 per centum, or, if the liability assumed by the obligor does not exceed 2 per centum of the interest, then at the rate of 10 per centum.

(2) *Benefit of credits against net income.*—Such deduction and withholding shall not be required in the case of a citizen or resident entitled to receive such interest, if he files with the withholding agent on or before February 1 a signed notice in writing claiming the benefit of the credits provided in section 25 (b); nor in the case of a nonresident alien individual if so provided for in regulations prescribed by the Commissioner under section 215.

(3) *Income of obligor and obligee.*—The obligor shall not be allowed a deduction for the payment of the tax imposed by this title, or any other tax paid pursuant to the tax-free covenant clause, nor shall such tax be included in the gross income of the obligee.

(b) *Nonresident aliens.*—All persons, in whatever capacity acting, including lessees or mortgagors of real or personal property, fiduciaries, employers, and all officers and employees of the United States, having the control, receipt, custody, disposal, or payment of interest (except interest on deposits with persons carrying on the banking business paid to persons not engaged in business in the United States and not having an office or place of business therein), dividends, rent, salaries, wages, premiums, annuities, compensations, remunerations, emoluments, or other fixed or determinable annual or periodical gains, profits, and income (but only to the extent that any of the above items constitutes gross income from sources within the United States), of any nonresident alien individual, or of any partnership not engaged in trade or business within the United States and not having any office or place of business therein and composed in whole or in part of nonresident aliens, shall (except in the cases provided for in subsection (a) of this section and except as otherwise provided in regulations prescribed by the Commissioner under section 215) deduct and withhold from such annual or periodical gains, profits, and income a tax equal to 10 per centum thereof, except that such rate shall be reduced, in the case of a nonresident alien individual a resident of a contiguous country, to such rate (not less than 5 per centum) as may be provided by treaty with such country: *Provided*, That no such deduction or withholding shall be required in the case of dividends paid by a foreign corporation unless (1) such corporation is engaged in trade or business within the United States or has an office or

place of business therein, and (2) more than 85 per centum of the gross income of such corporation for the three-year period ending with the close of its taxable year preceding the declaration of such dividends (or for such part of such period as the corporation has been in existence) was derived from sources within the United States as determined under the provisions of section 119: *Provided further*, That the Commissioner may authorize such tax to be deducted and withheld from the interest upon any securities the owners of which are not known to the withholding agent. Under regulations prescribed by the Commissioner, with the approval of the Secretary, there may be exempted from such deduction and withholding the compensation for personal services of nonresident alien individuals who enter and leave the United States at frequent intervals.

(c) *Return and payment.*—Every person required to deduct and withhold any tax under this section shall make return thereof on or before March 15 of each year and shall on or before June 15, in lieu of the time prescribed in section 56, pay the tax to the official of the United States Government authorized to receive it. Every such person is hereby made liable for such tax and is hereby indemnified against the claims and demands of any person for the amount of any payments made in accordance with the provisions of this section.

(d) *Income of recipient.*—Income upon which any tax is required to be withheld at the source under this section shall be included in the return of the recipient of such income, but any amount of tax so withheld shall be credited against the amount of income tax as computed in such return.

(e) *Tax paid by recipient.*—If any tax required under this section to be deducted and withheld is paid by the recipient of the income, it shall not be re-collected from the withholding agent; nor in cases in which the tax is so paid shall any penalty be imposed upon or collected from the recipient of the income or the withholding agent for failure to return or pay the same, unless such failure was fraudulent and for the purpose of evading payment.

(f) *Refunds and credits.*—Where there has been an overpayment of tax under this section any refund or credit made under the provisions of section 322 shall be made to the withholding agent unless the amount of such tax was actually withheld by the withholding agent.

(g) *Withholding before enactment of act.*—Notwithstanding the provisions of subsections (a) and (b), the deduction and withholding for any period prior to the tenth day after the date of the enactment of this Act shall be upon the items of income and at the rates prescribed in section 143 (a) and (b) of the Revenue Act of 1934, as amended, in lieu of the items and rates prescribed in such subsections.

Paragraph C. Section 144 (Title I, Income Tax) of the Act, relating to payment of corporation income tax at the source, provides:

SEC. 144. PAYMENT OF CORPORATION INCOME TAX AT SOURCE.—(a) *General Rule.*—In the case of foreign corporations subject to taxation under this title not engaged in trade or business within the United States and not having any office or place of business therein, there shall be deducted and withheld at the source in the same manner and upon the same items of income as is provided in section 143 a tax equal to 15 per centum thereof, except that in the case of dividends the rate shall be 10 per centum, and except that in the case of corporations organized under the laws of a contiguous country such rate of 10 per centum with respect to dividends shall be reduced to such rate (not less than 5 per centum) as may be provided by treaty with such country; and such tax shall be returned and paid in the same manner and subject to the same conditions as provided in that section: *Provided*, That in the case of interest described in subsection (a) of that section (relating to tax-free covenant bonds) the deduction and withholding shall be at the rate specified in such subsection.

(b) *Withholding Before Enactment of Act.*—Notwithstanding the provisions of subsection (a), the deduction and withholding for any period prior to the tenth day after the date of the enactment of this Act shall be upon the items of income and at the rates prescribed in section 144 of the Revenue Act of 1934, as amended, in lieu of the items and rates prescribed in such subsection.

Paragraph D. Section 147 (b) (Title I, Income Tax) of the Act, relating to returns of information at the source, provides:

SEC. 147. INFORMATION AT SOURCE.— \* \* \*

(b) *Returns Regardless of Amount of Payment.*—Such returns may be required, regardless of amounts, (1) in the case of payments of interest upon bonds, mortgages, deeds of trust, or other similar obligations of corporations, and (2) in the case of collections of items (not payable in the United States) of interest upon the bonds of foreign countries and interest upon the bonds of and dividends from foreign corporations by persons undertaking as a matter of business or for profit the collection of foreign payments of such interest or dividends by means of coupons, checks, or bills of exchange.

Paragraph E. Section 62 (Title I, Income Tax) of the Act, relating to rules and regulations, provides:

SEC. 62. RULES AND REGULATIONS.—The Commissioner, with the approval of the Secretary, shall prescribe and publish all needful rules and regulations for the enforcement of this title.



Paragraph F. Pursuant to the above-quoted provisions of the Act, the following regulations are hereby prescribed with respect to withholding of tax at the source:

**ARTICLE 1. Domestic, foreign, resident, and nonresident persons.**—For the purpose of these regulations, a domestic corporation is one organized or created in the United States, including only the States, the Territories of Alaska and Hawaii, and the District of Columbia, or under the law of the United States or of any State or Territory, and a foreign corporation is one which is not domestic. A foreign corporation engaged in trade or business within the United States, or having an office or place of business therein, is referred to in these regulations as a resident foreign corporation, and a foreign corporation not engaged in trade or business within the United States and not having any office or place of business therein, as a nonresident foreign corporation. A partnership engaged in trade or business within the United States or having an office or place of business therein is referred to in these regulations as a resident partnership, and a partnership not engaged in trade or business within the United States, and not having any office or place of business therein, as a nonresident partnership. As used in these regulations, the term "nonresident alien" includes a nonresident alien, individual and a nonresident alien fiduciary.

**ART. 2. Withholding tax at source.**—(a) *Withholding in general.*—Withholding of a tax of 10 per cent is required in the case of fixed or determinable annual or periodical income paid to a nonresident alien or to a nonresident partnership, composed in whole or in part of nonresident alien individuals, except: (1) income from sources without the United States, including interest on deposits with persons carrying on the banking business paid to persons not engaged in business in the United States and not having any office or place of business therein, (2) interest upon bonds or other obligations of a corporation containing a tax-free covenant and issued before January 1, 1934, (3) dividends paid by a foreign corporation unless (a) such corporation is engaged in trade or business within the United States or has an office or place of business therein, and (b) more than 85 percent of the gross income of such corporation for the three-year period ending with the close of its taxable year preceding the declaration of such dividends (or for such part of such period as the corporation has been in existence) was derived from sources within the United States, as determined under the provisions of section 119, (4) dividends distributed by a corporation organized under the China Trade Act, 1922, to a resident of China, and (5) except that such rate of 10 per cent shall be reduced, in the case of a resident of a contiguous country, to such rate, not less than 5 per cent, as may be provided by treaty with such country.

A tax of 10 per cent must be withheld from interest on bonds or securities not containing a tax-free covenant, or containing a tax-free covenant and issued on or after January 1, 1934, if the owner is unknown to the withholding agent, except where such interest represents income from sources without the United States.

For withholding in the case of income paid to nonresident foreign corporations see article 11.

Resident or domestic fiduciaries are required to deduct the income tax at the source from all fixed or determinable annual or periodical gains, profits, and income paid to nonresident alien beneficiaries, to the extent that such items constitute gross income from sources within the United States. Income paid to a nonresident alien fiduciary which is otherwise subject to the withholding provisions of the Act is not exempt from withholding by reason of the fact that the beneficiaries of the income are citizens or residents of the United States.

A debtor corporation having an issue of bonds or other similar obligations which appoints a duly authorized agent to act in its behalf under the withholding provisions of the Act, is required to file notice of such appointment with the Commissioner of Internal Revenue, Sorting Section, Washington, D. C., giving the name and address of the agent.

If in connection with the sale of its property, payment of the bonds or other obligations of a corporation is assumed

by the assignee, such assignee, whether an individual, partnership, or corporation, must deduct and withhold such taxes as would be required to be withheld by the assignor had no such sale or transfer been made.

For withholding in the case of dividends distributed by a corporation organized under the China Trade Act, 1922, see articles 4 and 12.

(b) *Tax-free covenant bonds issued before January 1, 1934.*—The withholding provisions of section 143 (a) (1) are applicable only to bonds, mortgages, or deeds of trust, or other similar obligations of a corporation which were issued before January 1, 1934, and which contain a tax-free covenant. For the purpose of section 143 (a) (1) bonds, mortgages, or deeds of trust, or other similar obligations of a corporation are issued when delivered. If a broker or other person acts as selling agent of the obligor the obligation is issued when delivered by the agent to the purchaser. If a broker or other person purchases the obligation outright for the purpose of holding or reselling it, the obligation is issued when delivered to such broker or other person. In order that the date of issue of bonds, mortgages, or deeds of trust, or other similar obligations of corporations, containing a tax-free covenant may be readily determined by the owner, for the purpose of preparing the ownership certificates required under these regulations the "issuing" or debtor corporation shall indicate, by an appropriate notation, the date of issue or use the phrase, "Issued on or after January 1, 1934", on each such obligation or in a statement accompanying the delivery of such obligation.

In cases where on or after January 1, 1934, the maturity date of bonds or other obligations of a corporation is extended, the bonds shall be considered to have been issued on or after January 1, 1934. The interest on such obligations is not subject to the withholding provisions of section 143 (a) but falls within the class of interest described in section 143 (b).

In the case of interest upon bonds or other obligations of a corporation containing a tax-free covenant and issued before January 1, 1934, paid to an individual, fiduciary, or a partnership, whether resident or nonresident, withholding of a tax of 2 percent is required, except that if the liability assumed by the obligor in connection with such a covenant does not exceed 2 percent of the interest, withholding is required at the rate of 10 percent in the case of a nonresident alien, or a nonresident partnership composed in whole or in part of nonresident alien individuals, or if the owner is unknown to the withholding agent. The rates of withholding applicable to the interest on bonds or other obligations of a corporation containing a tax-free covenant, and issued before January 1, 1934, are applicable to interest on such obligations issued by a domestic corporation or a resident foreign corporation. However, withholding is not required in the case of interest payments on such bonds or obligations if such interest is not to be treated as income from sources within the United States under section 119 (a) (1) (B) of the Act, and the payments are made to a nonresident alien or a partnership composed in whole of nonresident aliens. A nonresident foreign corporation having a fiscal or paying agent in the United States is required to withhold a tax of 2 percent upon the interest on its tax-free covenant bonds issued before January 1, 1934, paid to a citizen or resident of the United States, individual, or fiduciary, or a partnership any member of which is a citizen or resident.

For withholding in the case of interest upon bonds or other obligations of a corporation containing a tax-free covenant and issued before January 1, 1934, paid to nonresident foreign corporations see article 11.

Bonds issued under a trust deed containing a tax-free covenant are treated as if they contain such a covenant. If neither the bonds nor the trust deeds given by the obligor to secure them contain a tax-free covenant, supplemental agreements executed by the obligor corporation and the trustee containing a tax-free covenant which modify the original trust deeds to that extent are of the same effect from the date of their proper execution as if they had been part of the original deeds of trust, and the bonds from such date are subject to the provisions of section 143 (a), provided ap-

propriate authority exists for the modification of the trust deeds in this manner. The authority must be contained in the original trust deeds or actually secured from the bondholders.

In the case of corporate bonds or other obligations containing a tax-free covenant, issued before January 1, 1934, the corporation paying a Federal tax, or any part of it, for someone else pursuant to its agreement is not entitled to deduct such payment from gross income on any ground nor shall the tax so paid be included in the gross income of the bondholder. The amount of the tax may nevertheless be claimed by the bondholder as a credit against the total amount of income tax due in accordance with section 143 (d). In the case, however, of corporate bonds or other obligations containing an appropriate tax-free covenant, the corporation paying for someone else, pursuant to its agreement, a State tax or any tax other than a Federal tax may deduct such payment as interest paid on indebtedness.

(c) *Withholding under Revenue Act of 1934, as amended.*—The withholding provisions of section 143 and section 144 of the Revenue Act of 1936 (which are merely administrative provisions providing for the collection at the source of the tax imposed under other sections of the Act) do not apply for any period prior to the tenth day after the date of the enactment of that Act, that is, for any period prior to July 2, 1936. For such prior period withholding shall be upon the items of income and at the rates provided by the Revenue Act of 1934, as amended.

ART. 3. *Fixed or determinable, annual or periodical income.*—Only fixed or determinable annual or periodical income is subject to withholding. The Act specifically includes in such income, interest, dividends, rent, salaries, wages, premiums, annuities, compensations, remunerations, and emoluments. But other kinds of income are included, as, for instance, royalties.

Income is fixed when it is to be paid in amounts definitely predetermined. Income is determinable whenever there is a basis of calculation by which the amount to be paid may be ascertained. The income need not be paid annually if it is paid periodically; that is to say, from time to time, whether or not at regular intervals. That the length of time during which the payments are to be made may be increased or diminished in accordance with someone's will or with the happening of an event does not make the payments any the less determinable or periodical. A salesman working by the month for a commission on sales which is paid or credited monthly receives determinable periodical income. The distributable share of the income of an estate or trust from sources within the United States paid by a fiduciary to a nonresident alien beneficiary constitutes fixed or determinable annual or periodical income within the meaning of section 143 (b). The income derived from the sale in the United States of property, whether real or personal, is not fixed or determinable annual or periodical income.

ART. 4 (a). *Exemption from withholding.*—Withholding from interest on corporate bonds or other obligations issued prior to January 1, 1934, containing a tax-free covenant shall not be required in the case of a citizen or resident if he files with the withholding agent when presenting interest coupons for payment, or not later than February 1 following the taxable year, an ownership certificate on Form 1000 stating that his net income does not exceed his personal exemption and credit for dependents. To avoid inconvenience a resident alien should file a certificate of residence on Form 1078 with withholding agents, who shall forward such certificates to the Commissioner of Internal Revenue, Sorting Section, Washington, D. C., with a letter of transmittal.

The income of domestic corporations and of resident foreign corporations is free from withholding.

No withholding from dividends paid by a corporation organized under the China Trade Act, 1922, is required unless the dividends are treated as income from sources within the United States under section 119 of the Act and are distributed to—

(1) A nonresident alien other than a resident of China at the time of such distribution;

(2) A nonresident partnership composed in whole or in part of nonresident aliens (other than a partnership resident in China); or

(3) A nonresident foreign corporation (other than a corporation resident in China).

The salary or other compensation for personal services of a nonresident alien individual who enters and leaves the United States at frequent intervals, shall not be subject to deduction and withholding of income tax at the source, provided he is a resident of Canada or Mexico. Such a nonresident alien shall file on Form 1040B, with the collector of internal revenue for the district in which he is employed, a true and accurate return of his total income from all sources within the United States, including the compensation for personal services rendered in the United States.

The following items of fixed or determinable annual or periodical income from sources within the United States received by a citizen of France residing in France, or a corporation organized under the laws of France, are not subject to the withholding provisions of the Revenue Act of 1936, since such income is exempt from Federal income tax under the provisions of the convention and protocol between the United States and France, signed April 27, 1932, and effective January 1, 1936 (C. B. XIV-2, 535):

(1) Amounts paid as consideration for the right to use patents, secret processes and formulas, trade marks and other analogous rights;

(2) Income received as copyright royalties; and

(3) Private pensions and life annuities.

The items of fixed and determinable income enumerated above paid to citizens of France residing in France and corporations organized under the laws of France are not subject to the withholding provisions of the Revenue Act of 1936. The person paying such income should be notified by letter from the French citizen or corporation, as the case may be, that the income is exempt from taxation under the provisions of the convention and protocol referred to above. Such letter from a citizen of France shall contain his address and a statement that he is a citizen of France residing in France. The letter from such corporation shall contain the address of its office or place of business and a statement that it is a corporation organized under the laws of the Republic of France, and shall be signed by an officer of the corporation giving his official title. The letter of notification or a copy thereof should be immediately forwarded by the recipient to the Commissioner of Internal Revenue, Sorting Section, Washington, D. C.

(b) *Discontinuance of exemption certificates.*—A nonresident alien individual not engaged in trade or business within the United States and not having an office or place of business therein is subject to the tax imposed by section 211 (a) of the Act on gross income and is not entitled to any personal exemption or credit for dependents. Although a nonresident alien individual who is engaged in trade or business within the United States or has an office or place of business therein is entitled to the personal exemption of \$1,000 (and a credit for dependents if he is a resident of Canada or Mexico), he is subject to the normal tax and the surtax imposed by sections 11 and 12 of the Act by reason of the provisions of section 211 (b) and the benefit of the personal exemption and credit for dependents may not be received by filing a claim therefor with the withholding agent. Accordingly, the use of exemption certificates by nonresident alien individuals as provided for in prior regulations is hereby discontinued. For relief from withholding with respect to compensation for personal services in the case of nonresident aliens, residents of Canada or Mexico, who enter and leave the United States at frequent intervals, see article 4 (a).

ART. 5. *Ownership certificates for bond interest.*—In accordance with the provisions of section 147 (b), citizens and resident individuals and fiduciaries, resident partnerships



and nonresident partnerships all of the members of which are citizens or residents, owning bonds, mortgages, or deeds of trust, or other similar obligations issued by a domestic corporation, a resident foreign corporation, or a nonresident foreign corporation having a fiscal agent or a paying agent in the United States, when presenting interest coupons for payment shall file ownership certificates for each issue of such obligations regardless of the amount of the coupons.

In the case of interest payments on overdue coupon bonds, the interest coupons of which have been exhausted, ownership certificates are required to be filed when collecting the interest in the same manner as if interest coupons were presented for collection.

In all cases where the owner of bonds, mortgages, or deeds of trust, or other similar obligations of a corporation is a nonresident alien, a nonresident partnership composed in whole or in part of nonresident aliens, a nonresident foreign corporation, or where the owner is unknown, an ownership certificate for each issue of such obligations shall be filed when interest coupons for any amount are presented for payment. The ownership certificate is required whether or not the obligation contains a tax-free covenant. However, ownership certificates need not be filed by a nonresident alien, a partnership composed in whole of nonresident aliens, or a nonresident foreign corporation in connection with interest payments on such bonds, mortgages, or deeds of trust or other similar obligations of a domestic or resident foreign corporation qualifying under section 119 (a) (1) (B) of the Revenue Act of 1936, or of a nonresident foreign corporation.

The ownership certificate shall show the name and address of the debtor corporation, the name and address of the owner of the obligations, a description of the obligations, the amount of interest and its due date, the rate at which tax is to be withheld, and the date upon which the interest coupons were presented for payment.

Ownership certificates need not be filed in the case of interest payments on obligations of a State, Territory, or any political subdivision thereof, or the District of Columbia; or obligations of a corporation organized under Act of Congress, if such corporation is an instrumentality of the United States; or the obligations of the United States or its possessions. (See section 22 (b) (4) of the Act.) Ownership certificates are not required to be filed in connection with interest payments on bonds, mortgages, or deeds of trust, or other similar obligations issued by an individual or a partnership. Ownership certificates are not required where the owner is a domestic corporation, a resident foreign corporation, or a foreign government.

When interest coupons detached from corporate bonds are received unaccompanied by ownership certificates, unless the owner of the bonds is known to the first bank to which the coupons are presented for payment, and the bank is satisfied that the owner is a person who is not required to file an ownership certificate, the bank shall require of the payee a statement showing the name and address of the person from whom the coupons were received by the payee, and alleging that the owner of the bonds is unknown to the payee. Such statement shall be forwarded to the Commissioner with the monthly return on Form 1012. The bank shall also require the payee to prepare a certificate on Form 1001, crossing out "owner" and inserting "payee" and entering the amount of the interest on line 3, and shall stamp or write across the face of the certificate "Statement furnished", adding the name of the bank.

Ownership certificates are required in connection with interest payments on registered bonds as in the case of coupon bonds, except that if ownership certificates are not furnished by the owner of such bonds, ownership certificates must be prepared by the withholding agent.

**ART. 6. Form of certificate for citizens or residents.**—For the purpose of article 5, Form 1000 shall be used in preparing ownership certificates of citizens or residents of the United States (individual or fiduciary), resident partnerships, and nonresident partnerships all of the members of which are citizens or residents. If the obligations are issued

by a nonresident foreign corporation having a fiscal or paying agent in the United States, Form 1000 should be modified to show the name and address of the fiscal agent or the paying agent in addition to the name and address of the debtor corporation.

**ART. 7. Form of certificate for nonresident aliens, nonresident foreign corporations, and unknown owners.**—For the purpose of article 5, Form 1001 shall be used in preparing ownership certificates (a) of nonresident aliens, (b) of nonresident partnerships composed in whole or in part of nonresident aliens, (c) or nonresident foreign corporations, and (d) where the owner is unknown.

For the purpose of this article and articles 5, 6, and 9, existing ownership certificate forms, properly modified, may be used pending the issuance of revised forms.

**ART. 8. Return and payment of tax withheld.**—Every withholding agent shall make on or before March 15 an annual return on Form 1013 of the tax withheld from interest on corporate bonds or other obligations. This return should be filed with the collector for the district in which the withholding agent is located. The withholding agent shall also make a monthly return on Form 1012 on or before the 20th day of the month following that for which the return is made. The ownership certificates, Forms 1000 and 1001, must be forwarded to the Commissioner with the monthly return. Such of the forms as report interest from which the tax is to be withheld should be listed on the monthly return. While the forms reporting interest from which no tax is to be withheld need not be listed on the return, the number of such forms submitted should be entered in the space provided. If Form 1000 is modified to show the name and address of a fiscal or paying agent in the United States (see article 6), Forms 1012 and 1013 should be likewise modified.

Every person required to deduct and withhold any tax from income other than such bond interest shall make an annual return thereof to the collector on or before March 15 on Form 1042, showing the amount of tax required to be withheld for each nonresident alien, nonresident partnership composed in whole or in part of nonresident aliens, or nonresident foreign corporation to which income other than bond interest was paid during the previous taxable year. Form 1042 should be filed with the collector for the district in which the withholding agent is located. In every case of both classes the tax withheld must be paid on or before June 15 of each year to the collector. For penalties and additions to the tax attaching upon failure to make such returns or such payment, see sections 145 and 291 of the Act.

If a debtor corporation has designated a bank to act for it as withholding agent, and the bank has not collected any tax from the bondholders nor received any funds from the debtor corporation to pay the tax which the debtor corporation assumed in connection with its tax-free covenant bonds, the bank cannot be held liable for the tax merely by reason of its appointment as withholding agent. If a duly authorized withholding agent has become insolvent or for any other reason fails to make payment to the collector of internal revenue of money deposited with it by the debtor corporation to pay taxes, or money withheld from bondholders, the debtor corporation is not discharged of its liability under section 143 (a) (1), since the withholding agent is merely the agent of the debtor corporation.

**ART. 9. Ownership certificates in the case of fiduciaries and joint owners.**—If fiduciaries have the control and custody of more than one estate or trust, and such estates and trusts have as assets bonds of corporations and other securities, a certificate of ownership shall be executed for each estate or trust, regardless of the fact that the bonds are of the same issue. The ownership certificate should show the name of the estate or trust, in addition to the name and address of the fiduciary. If bonds are owned jointly by two or more persons, a separate ownership certificate must be executed in behalf of each of the owners.

**ART. 10. Return of income from which tax was withheld.**—The entire amount of the income from which the tax was withheld shall be included in gross income in the return made by the recipient of the income without deduction for such payment of the tax. But any tax so withheld shall be

credited against the total income tax as computed in the taxpayer's return. If the tax is paid by the recipient of the income or by the withholding agent it shall not be re-collected from the other, regardless of the original liability therefor, and in such event no penalty will be asserted against either person for failure to return or pay the tax where no fraud or purpose to evade payment is involved.

ART. 11. *Withholding in the case of nonresident foreign corporations.*—A tax of 15 per cent is required to be withheld in the case of fixed or determinable annual or periodical income paid to a nonresident foreign corporation except (1) income from sources without the United States, including interest on deposits by persons carrying on the banking business paid to persons not engaged in business in the United States and not having any office or place of business therein, (2) interest upon bonds or other obligations of a corporation containing a tax-free covenant and issued before January 1, 1934, where the liability assumed by the obligor does not exceed 2 per cent of the interest, and (3) dividends.

Withholding of a tax at the rate of 2 per cent is required in the case of interest payments made to a nonresident foreign corporation, representing income from sources within the United States, paid upon corporate bonds or other obligations containing a tax-free covenant, issued before January 1, 1934, where the liability assumed by the obligor exceeds 2 per cent of the interest.

A tax of 10 per cent is required to be withheld from income from sources within the United States paid to a nonresident foreign corporation which consists of dividends (other than dividends distributed by a corporation organized under the China Trade Act, 1922, to a resident of China) except that such rate of 10 per cent shall be reduced, in the case of corporations organized under the laws of a contiguous country, to such rate (not less than 5 per cent) as may be provided by treaty with such country. Dividends paid by a foreign corporation are not, however, subject to withholding unless such corporation is engaged in trade or business within the United States or has an office or place of business therein and more than 85 per cent of the gross income of such foreign corporation for the three-year period ending with the close of its taxable year, preceding the declaration of such dividends (or for such part of such period as the corporation has been in existence) was derived from sources within the United States as determined under the provisions of section 119 of the Act.

For withholding in the case of dividends distributed by a corporation organized under the China Trade Act, 1922, see articles 4 and 12.

ART. 12. *Withholding by a China Trade Act corporation.*—Dividends distributed by a corporation organized under the China Trade Act, 1922, which are treated as income from sources within the United States under the provisions of section 119 of the Act are subject to withholding at the rate of 10 per cent when paid to persons (other than residents of China) who are (1) nonresident aliens, (2) nonresident partnerships composed in whole or in part of nonresident aliens, or (3) nonresident foreign corporations. The 10 per cent rate of withholding specified in this article with respect to dividends shall be reduced in the case of shareholders who are (a) nonresident aliens residents of a contiguous country or (b) nonresident foreign corporations organized under the laws of a contiguous country, to such rate (not less than 5 per cent), as may be provided by treaty with such country.

ART. 13. *Aids to withholding agents in determining liability for withholding of tax.*—Since no withholding of tax on bond interest or other income is required in the case of a resident foreign corporation, the person paying such income should be notified by a letter from such corporation that it is not subject to the withholding provisions of the Act. The letter from the corporation shall contain the address of its office or place of business in the United States and be signed by an officer of the corporation giving his official title. Such letter of notification, or copy thereof, should be immediately forwarded by the recipient to the Commissioner of Internal Revenue, Sorting Section, Washington, D. C.

Although the burden of withholding tax from dividends is placed upon the payor corporation, or any other person (including a nominee), having the control, receipt, custody, disposal, or payment of dividends, if such payor corporation or person has no other reason to believe that the dividends are subject to withholding, the following procedure in general may be adopted:

(1) As to those stockholders whose name and style indicate that they are nonresident aliens, foreign partnerships, or foreign corporations, the tax shall be withheld in all cases if the address of any such stockholder is without the United States.

(2) If the address of such stockholders is in care of an individual, a partnership, or a corporation within the United States, the tax shall likewise be withheld, but as to any stockholder whose address is within the United States, the tax need not be withheld.

[SEAL]

CHAS. T. RUSSELL,  
Acting Commissioner of Internal Revenue.

Approved, June 25, 1936.

HENRY MORGENTHAU, JR.,  
Secretary of the Treasury.

[F. R. Doc. 1015—Filed, June 26, 1936; 12:39 p. m.]

## DEPARTMENT OF THE INTERIOR.

### National Park Service.

#### RULES AND REGULATIONS

Made, published, and approved by the Secretary of the Interior on the 18th day of June 1936, and to continue in force and effect until otherwise directed by the said Secretary.

#### GENERAL PROVISIONS

Pursuant to the authority granted to the Secretary of the Interior by the Act of August 25, 1916 (ch. 408, sec. 3, 39 Stat. 535), as amended by the Act of June 2, 1920 (ch. 218, sec. 5, 41 Stat. 731), and by the Act of March 7, 1928 (ch. 137, sec. 1, 45 Stat. 200, 235); and pursuant to the authority granted to the Secretary of War by the Act of March 2, 1933 (ch. 180, 47 Stat. 1420); and transferred to the Secretary of the Interior by Executive Order No. 6166, June 10, 1933, as interpreted by Executive Order No. 6228, July 28, 1933, under the authority of the Act of March 3, 1933 (ch. 212, sec. 403, 47 Stat. 1489, 1518); and pursuant to the authority granted to the Secretary of the Interior by various Acts of Congress relating to particular parks, monuments, and reservations: the following regulations are hereby made and published for the proper use, management, government, and protection of, and maintenance of good order in all the National Parks, National Monuments, National Military Parks, National Historical Parks, Battlefield Sites, and miscellaneous memorials which are, or hereafter may be, under the administrative jurisdiction of the National Park Service of the Department of the Interior: *Provided, however*, That these rules and regulations shall not apply to National Cemeteries or to National Capital Parks. All previous rules and regulations (except the uniform rules and regulations prescribed December 28, 1906, by the Secretaries of the Interior, Agriculture, and War, to carry out the provisions of the "Act for the Preservation of American Antiquities", approved June 8, 1906 (34 Stat. 225), and except such local subsidiary regulations as are continued in force under the provisions hereof), for such National Parks, National Monuments, National Military Parks, National Historical Parks, Battlefield Sites, and miscellaneous memorials, are hereby repealed.

*Definitions.*—The term "park", when used in these rules and regulations, unless otherwise indicated, shall be construed to include National Parks, National Military Parks, and National Historical Parks; and the term "monument", when used in these rules and regulations, unless otherwise indicated, shall be construed to include National Monuments,



Battlefield Sites, and miscellaneous memorials. The term "superintendent", when used in these rules and regulations, shall be construed to include a custodian, caretaker, or other person in charge of a National Park, National Monument, National Military Park, National Historical Park, Battlefield Site, or miscellaneous memorial.

1. *Preservation of public property, natural features and curiosities.*—The destruction, injury, defacement, removal, or disturbance in any way of any public building, sign, equipment, monument, statue, marker, or other structure, or of any tree, flower, vegetation, rock, mineral, formation, stalactite, stalagmite, phenomenon of crystallization, incrustation in any lava tube, cave, steam vent, or cone, or of any animal, bird, or other wildlife, or of any ruins or relics, or of any other public property of any kind is prohibited: *Provided*, That flowers may be gathered in small quantities when, in the judgment of the superintendent or custodian, their removal will not impair the beauty of the park or monument. Before any flowers are picked, permit must be secured from the superintendent or custodian.

Sequoia cones shall not be disturbed, or removed from any national park or monument.

No canes, umbrellas, or sticks of any kind may be taken into caves or caverns. The tossing or throwing of rocks or other material inside the caves or caverns is prohibited.

Collections for scientific or educational purposes shall be permitted only in accordance with written permits first had and obtained from the superintendent.

Bona-fide claimants or entrymen claiming or owning land reasonably adjacent to Grand Teton National Park must secure written permits before cutting any dead or down timber within the park, and are restricted to cutting such timber for firewood for their own consumption.

Visitors in Hawaii National Park may, with the permission of the park superintendent, pick and eat, or carry away, such fruits as the superintendent may designate.

2. *Camping.*—(a) No camping is permitted outside the specially designated camp sites, except when necessary in connection with trips to isolated sections of the parks and monuments.

(b) No person, party, or organization shall be permitted to camp in any public camping area in the parks or monuments more than 30 days in any calendar year.

(c) Campers shall keep their campgrounds clean. Combustible rubbish shall be burned on camp fires and all other garbage and refuse of all kinds shall be placed in garbage cans provided for the purpose. At new or unfrequented camps, garbage shall be burned or buried.

(d) Campers and others shall not wash clothing or cooking utensils in, or pollute in any other manner, the waters of the parks or monuments. Bathing in any of the streams or lakes near the regularly travelled thoroughfares in the parks and monuments is not permitted without suitable bathing clothes.

(e) Saddle, pack, or draft animals shall not be kept in or near any camping area. No such animals shall be kept on the floor of Yosemite Valley except in the operator's corral.

(f) Only in areas designated by the park superintendent may campers use any dead or fallen timber for fuel, except that Sequoia wood or bark shall not be disturbed for any purpose.

(g) The installation of permanent camping facilities by visitors is prohibited in all parks and monuments. The digging or leveling of the ground in any camp site without a ranger's permission is prohibited.

(h) Camps must be completely razed and the sites cleaned before the departure of campers. In dismantling camps, all material, such as poles, bark, planks, platforms, etc., used in construction of temporary camps must be removed, and, if combustible, must be piled on the public camp woodpiles.

(i) Campers shall not leave their camps unattended for more than 48 hours without special permission of the superintendent, obtained in advance. Camping equipment left unattended in any public camping area for 48 hours or more is subject to removal by order of the superintendent,

the expense of such removal to be paid by the person or persons leaving such equipment.

(j) No camp may be established in a park or monument and used as a base for hunting outside such park or monument.

(k) No camp shall be placed within 25 feet of any well-defined water course, water hydrant, or main road.

(l) Any article likely to frighten horses shall not be hung near a road or trail used by horses.

(m) The superintendents or custodians may, with the approval of the Director of the National Park Service, establish hours during which quiet must be maintained at any camp, and prohibit the running of motors at or near a camp during such hours.

(In Hot Springs National Park, the superintendent may establish the hours during which bathing will be permitted in the pool.)

(n) No visitors shall be permitted to camp within the canyon in Canyon de Chelly National Monument.

(o) No camping is permitted in any part of the Muir Woods National Monument, and no hikers or visitors shall enter or remain therein between one-half hour after sunset and one-half hour before sunrise.

3. *Picnicking.*—Picnicking or the eating of lunches is prohibited in restricted areas designated by the superintendent.

4. *Use of park waters.*—In Platt National Park the superintendent may, whenever it becomes necessary to do so, restrict the use of the waters of any of the springs in the park to immediate drinking purposes at such springs.

5. *Sanitation.*—(a) Garbage, papers, or refuse of any kind shall not be thrown or left on or along roads, in camping or picnic areas, or on any other park or monument lands.

(b) All comfort stations shall be used in a clean and sanitary manner.

(c) Contamination of watersheds, of water supplies, or of any water used for drinking purposes is strictly prohibited.

6. *Fires.*—Fires shall not be kindled near or on the roots of trees, dead wood, moss, dry leaves, forest mold, or other vegetable refuse, but in some open space on rocks or earth. On public campgrounds the regular fireplaces constructed for the convenience of visitors must be used. Should camp be made in a locality where no such open space exists or is provided, the dead wood, moss, dry leaves, etc., shall be scraped away to the rock or earth over an area considerably larger than that required for the fire.

Fires shall be lighted only when necessary and, when no longer needed, shall be completely extinguished, and all embers and beds smothered with earth or water, so that there remains no possibility of reignition.

Permission to burn on any cleanup operation within the parks or monuments must first be obtained in writing from the office of the superintendent or custodian, and in such cases as it is deemed advisable such burning will be under Government supervision. All costs of suppression and all damage caused by reason of loss of control of such burning operations shall be paid by the person or persons to whom such permit has been granted.

No lighted cigarette, cigar, pipe heel, match, or other burning material shall be thrown from any vehicle or saddle horse or dropped into any grass, leaves, twigs, tree mold, or other combustible or inflammable material.

Smoking or the building of fires on any lands within the parks or monuments may be prohibited or limited by the superintendent or custodian when, in his judgment, the hazard makes such action necessary.

All persons making trips away from established camps are required to obtain written fire permits from the nearest ranger before building camp fires.

The use of fireworks or firecrackers in the parks and monuments is prohibited, except with the written permission of the superintendent or custodian.

7. *Protection of wildlife.*—The parks and monuments are sanctuaries for wildlife of every sort, and all hunting, or the killing, wounding, frightening, capturing, or attempting to

capture at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the parks and monuments.

Unauthorized possession within a part or monument of the dead body or any part thereof of any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season arrangements must be made at entrance stations to identify and transport through the parks and monuments, where necessary, the carcasses of birds or animals legally killed outside the parks and monuments. Failure to make such arrangements shall be deemed a violation of this regulation.

8. *Firearms, etc.*—Firearms, explosives, traps, seines, and nets are prohibited within the parks and monuments, except upon written permission of the superintendent or custodian. Visitors entering or traveling through the parks and monuments to places beyond shall, at entrance, report and, if required to do so, surrender all such objects in their possession to the first park or monument officer, and, in proper cases, may obtain his written permission to carry them through the park or monument sealed. Failure to obtain such written permission shall be deemed a violation of this regulation. The Government assumes no responsibility for the loss of, or damage to, any such objects so surrendered to any park or monument officer, nor are park or monument officers authorized to accept the responsibility or custody of any other property for the convenience of the visitors.

9. *Fishing.*—Persons desiring to fish in the waters of the Yosemite, Sequoia, Lassen, General Grant, Grand Canyon, Grand Teton, Acadia, Wind Cave, Great Smoky Mountains, Mammoth Cave, and Zion National Parks, and the national monuments under the jurisdiction of the National Park Service must secure a sporting fishing license, as required by the laws of the state in which such park or monument is situated. All fishing in such parks and monuments must be done in conformity with the laws of the state regarding open seasons, size of fish, and the limit of catch, except as otherwise provided in the following paragraphs, which are applicable to all parks and monuments:

Fishing with nets, seines, traps, or by the use of drugs or explosives, or for merchandise or profit, or in any other way than with hook and line, the rod or line being held in hand, is prohibited.

Fishing in particular waters may be suspended, or restricted in regard to the use of particular kinds of bait, when the superintendent or custodian, with the approval of the Director of the National Park Service, shall determine such suspension or restriction necessary and shall post such restrictions or suspensions.

The number of fish that may be taken by one person in any one day from the various lakes and streams may be regulated by the superintendent or custodian, with the approval of the Director of the National Park Service. Unless otherwise determined and posted, the number shall be limited to 10 fish. Possession of more than two days' catch by any person at any one time shall be construed as a violation of this regulation.

No fish less than six inches long may be retained, unless a different limit be determined by the superintendent with the approval of the Director of the National Park Service and posted in the particular park or monument. All fish hooked less than such limit in length shall be carefully handled with moist hands and returned at once to the water if not seriously injured. Undersized fish retained because seriously injured shall be counted in the number of fish which may be taken in one day.

The possession of live minnows, chubs, or other bait fish, or the use thereof as bait, is prohibited in all the national parks and monuments, except Acadia National Park and Fort Jefferson National Monument.

The digging of worms for bait is prohibited in all parks and monuments.

The canning or curing of fish for the purpose of transporting them out of a national park or monument is prohibited.

The possession of fishing tackle upon or along any waters closed to fishing shall be prima facie evidence that the person or persons having such fishing tackle are guilty of unlawful fishing in such closed waters.

Fishing is prohibited in the Muir Woods National Monument.

All waters of the Shenandoah National Park are closed to fishing until further notice. This, however, shall not apply to occupants of or guests at the President's Camp on the Rapidan.

10. *Private operations.*—No person shall reside permanently in a national park or monument. No person, firm, or corporation shall engage in or solicit any business, or erect buildings in the parks or monuments without permission in writing from the Director of the National Park Service, Washington, D. C. Applications for such permission may be addressed to the Director through the superintendents and custodians of the parks and monuments.

In Mount McKinley National Park, prospectors and miners may erect necessary shelter cabins or other structures necessary in mining operations on bona fide locations in the park.

11. *Public speeches.*—No person shall make or deliver any address, speech, or sermon upon any subject whatever in Platt National Park without first obtaining a permit in writing from the superintendent, which permit the superintendent is hereby authorized to issue in proper cases and which shall designate the time and locality where such address, speech, or sermon may be given.

12. *Radios.*—The use of radios in public camps, hotels, or other buildings, or in automobiles is prohibited when audible beyond the immediate vicinity of the radio set. Radios shall not be operated to the annoyance of other persons nor so as to disturb the quiet of camps or other public places. The erection of aerials or other radio installations is prohibited.

13. *Cameras.*—Before still pictures may be taken for commercial purposes and before a motion or sound picture requiring the use of artificial or special settings, or special equipment, or involving the performance of a professional cast, may be filmed in any of the parks or monuments, authority must first be obtained, in writing, from the Secretary of the Interior. Still and motion picture cameras may be freely used by amateurs in the parks and monuments for general scenic purposes.

Superintendents may issue permits to take still and motion pictures in the parks and monuments under their supervision without such previous authorization by the Secretary of the Interior, in the following circumstances, and on condition that the permittees shall refrain from offering any gratuity of whatsoever nature to any employee of the Government in connection with the exercise of the privilege herein authorized to be granted:

1. Professional photographers and motion-picture cameramen desiring to take scenes of, or events in, the national parks as representatives of news concerns and for bona fide news publication;

2. Professional photographers and motion-picture cameramen desiring to take scenes of, or events in, the national parks, not for sale or for exhibition when paid admissions are charged, but for the purpose of stimulating general or park travel;

3. Professional photographers and motion-picture cameramen desiring to take scenes of, or events in, the national parks, for non-profit educational purposes;

4. Professional photographers desiring to take park scenes for general artistic purposes.

14. *Gambling.*—Gambling in any form, or the operation of gambling devices, whether for merchandise or otherwise, is prohibited.

15. *Advertisements.*—Private notices or advertisements shall not be posted, distributed, or displayed in the parks or monuments, excepting such as the superintendent or custodian may deem necessary for the convenience and guidance of the public.

16. *Mining claims.*—The location of mining claims on lands within the parks and monuments is prohibited, except



in Mount McKinley National Park and in Death Valley National Monument. This regulation is subject to the further exception contained in the Act of Congress approved February 14, 1931 (46 Stat. 1161), reserving to the Navajo Tribe of Indians the mineral rights in the Canyon de Chelly National Monument.

Mining in Mount McKinley National Park may be regulated by the Secretary of the Interior as to surface use of locations under the Act of January 26, 1931 (46 Stat. 1043).

Mining in Death Valley National Monument is subject to the following special regulations, which are prescribed to govern the surface use of claims therein:

(a) The claim shall be occupied and used exclusively for mineral exploration and development and for no other purpose; except that, upon written permission of the Director of the National Park Service, the surface of the claim may be used for other specified purposes, the use to be on such conditions and for such period as may be prescribed when permission is granted.

(b) The owner of the claim and all persons holding under him shall conform to all rules now prescribed or which may be made applicable by the Director of the National Park Service, governing occupancy of lands within the national monument.

(c) The use and occupancy of the surface of mining claims as prescribed above shall apply to all such claims located after the date of the Act of June 13, 1933, within the limits of the national monument as fixed by the proclamation of February 11, 1933, and to all mining claims on lands hereafter included in the National monument, located after such inclusion, so long as such claims are within the boundaries of said monument.

(d) Prospectors or miners shall not open or construct roads or vehicle trails without first obtaining a permit from the Director of the National Park Service. Applications for permits may be made through the custodian of the monument, upon submitting a map or sketch showing the location of the mining property to be served and the location of the proposed road or vehicle trail. The permit may be conditioned upon the permittee's maintaining the road or trail in a passable condition as long as it is used by the permittee or his successors.

17. *Archeologic ruins and objects.*—Visitors shall not be permitted to visit the ruins in Mesa Verde National Park nor to enter the canyon in Canyon de Chelly National Monument unless accompanied by National Park Service employees. The superintendent may waive this requirement in Mesa Verde National Park by issuing a special written permit to persons engaged in scientific studies.

Visitors shall not remove any artifacts or other objects of archeological or historical significance from the place where they may be found, nor purchase any such objects from Indians or others. Any such objects purchased or removed in violation of this regulation shall be delivered to the superintendent or his representative on demand.

18. *Lost articles.*—Persons finding lost articles, other than relics, should deposit them at the office of the superintendent or custodian, or at the nearest ranger station, leaving their own names and addresses, so that if the articles are not claimed by the owners within 60 days, they may be turned over to those who found them.

19. *Private lands.*—Owners of private lands within the limits of any park or monument are entitled to the full use and enjoyment thereof; the boundaries of such lands, however, shall be determined, and marked and defined, so they may be readily distinguished from the park or monument lands. While no limitations or conditions are imposed upon the use of private lands so long as such use does not interfere with or injure the Government lands, private owners shall provide against trespass by their livestock upon lands of the parks or monuments, and all trespasses committed will be punished to the full extent of the law. Stock may be taken over the lands of parks and monuments with the written permission and under the supervision of the superintendent or custodian, but such permission and super-

vision are not required when access to such private lands is had wholly over roads or lands not owned or controlled by the United States.

20. *Grazing.*—The running at large, herding, or grazing of livestock of any kind on the Government lands in the parks and monuments, as well as the driving of livestock over the same, is prohibited, except where authority therefor has been granted by the superintendent or custodian, with the approval of the Director of the National Park Service. The owners of livestock found improperly on the park or monument lands will be prosecuted.

The above regulation is subject to the exception contained in the provisions of the Act of Congress approved February 26, 1929 (45 Stat. 1314), relating to grazing in Grand Teton National Park, and to the exception contained in the Act of Congress approved February 14, 1931 (46 Stat. 1161), reserving to the Navajo Tribe of Indians the right to the surface use of the lands in the Canyon de Chelly National Monument for agricultural, grazing, or other purposes.

No authority may be granted for grazing in the Yellowstone National Park.

21. *Authorized operators.*—All persons, firms, or corporations holding franchises in the parks and monuments shall keep the grounds used by them properly policed and shall maintain the premises in a sanitary condition to the satisfaction of the superintendent or custodian. No operator shall retain in his employment a person whose presence in the park or monument may be deemed by the superintendent or custodian subversive to the good order and management of the park or monument.

All operators shall require each of their public contact employees to wear a metal badge with a number thereon, or other mark of identification. The name and number corresponding therewith, or the identification mark, shall be registered in the office of the superintendent or custodian. These badges must be worn in plain sight.

22. *Fraudulently obtaining accommodations.*—The obtaining of food, lodging, or other accommodations in the national parks and monuments with intent to defraud is forbidden, and such fraudulent intent will be presumed from refusal or neglect to pay therefor on demand, or payment therefor with negotiable paper on which payment is refused, or absconding without paying or offering to pay therefor, or false or fictitious showing or pretense of baggage or other property, or surreptitious removal or attempted removal of baggage.

23. *Dogs and cats.*—(a) Dogs and cats are prohibited on the Government lands in the parks and monuments, except that upon written permission of the superintendent or custodian, secured upon entrance, they may be transported over through roads by persons passing through the parks and monuments provided they are kept under leash, crated, or otherwise under restrictive control of the owner at all times while in the park or monument: *Provided, however,* That employees and others may be authorized by the superintendent or custodian to keep dogs for official purposes in the administrative area of a park or monument, and subject to such further conditions as may be determined by the superintendent or custodian.

(b) Stray dogs or cats running at large in the parks and monuments may be killed to prevent molestation of the wildlife therein.

(c) In Mount McKinley National Park, dogs may be used for hauling, with the permission of the superintendent and subject to the following rights and restrictions: In the winter, prospectors and miners may use such dogs as may be necessary for a reasonable time for heavy hauling of supplies, fuel, timber, and other objects; thereafter each person is limited to seven dogs. In the summer, no dogs are allowed except in special cases. In no case nor at any time shall litters of pups be raised in the park except by special permission of the superintendent. Persons entering the park with dogs must register at McKinley Park entrance, Katishna entrance, or the nearest ranger station, giving such information as may be required by the superintendent.



24. *Bears.*—Feeding of bears in campgrounds and populated areas is prohibited; feeding directly from the hand, touching, teasing, or molesting of bears is prohibited.

25. *Dead animals.*—All domestic or grazed animals that may die on any Government lands in the parks or monuments shall be buried immediately by the owner or person having charge of such animals, at least two feet beneath the ground, and in no case less than one-fourth mile from any camp or thoroughfare.

26. *Pack trains and saddle horse parties.*—(a) No pack train or saddle horse party shall be allowed in Crater Lake, General Grant, Glacier, Grand Canyon, Hawaii, Lassen Volcanic, Mesa Verde, Mount McKinley, Mount Rainier, Rocky Mountain, Yellowstone, Yosemite, Zion, and Bryce Canyon National Parks, unless in charge of an approved guide. Guides may be required to pass on examination prescribed by the superintendent. At the discretion of the superintendent, guides will be permitted to carry unsealed firearms. Prospectors and miners in Mount McKinley National Park are excepted from the operation of this regulation.

(b) No persons may pass through or camp in any of the national parks, except Sequoia and Grand Teton National Parks, using animals or camp equipment not hired from the authorized operators of saddle horse service, where such service is established at the park under contract with the Secretary of the Interior, unless the animals and equipment belong to a member or members of the party, and unless the other members are not renting, or in any way paying for the use of the animals or equipment, and unless the owners are not making the trip under any lease arrangement, and shall satisfy the superintendent that such are the facts.

(c) To conduct or operate, or to cause to be conducted or operated, a saddle horse party into, or to act as guide for any purpose within any of the parks mentioned in paragraph (a) of this regulation, without the written permission of the Director of the National Park Service or the superintendent of the park, is prohibited; and the person or persons so conducting, operating, or causing to be conducted or operated, or acting as guide, shall be subject to the penalties prescribed by law for a violation of these regulations.

No saddle horses shall be permitted in the Muir Woods National Monument on Sundays or holidays.

27. *Begging, soliciting, etc.*—Begging is prohibited within the parks and monuments.

Hitch-hiking is prohibited within the parks and monuments.

Drumming and soliciting within the Hot Springs National Park for any physician, surgeon, or any person publicly professing to relieve, cure, or heal, or for any bathhouse receiving water from the Hot Springs National Park, are prohibited.

28. *Disorderly conduct.*—Persons who render themselves obnoxious by disorderly conduct or bad behavior shall be subject to the punishment hereinafter prescribed for violation of these regulations, and may be summarily removed from the park or monument by the superintendent or custodian.

29. *Improper clothing.*—The wearing of bathing suits, scanty or objectionable clothing, without proper covering, is prohibited in automobiles, on bicycles, in public places, hotels, camps, lodges, villages, or stores. Proper covering is hereby defined as such covering as will be at least the equivalent of sleeveless upper shirt and shorts.

30. *Abandonment of property.*—The abandonment of any personal property in the parks and monuments is prohibited.

31. *Mountain summit climbing.*—In Mount McKinley and Mount Rainier National Parks, mountain climbing shall be undertaken only with the permission of the superintendent of the park. To insure reasonable chances of success, he shall not grant such permission until he is satisfied that all members of the party are properly clothed, equipped, and shod, are qualified physically and through previous experience to make the climb, and that the necessary supplies are carried. No individual will be permitted to start alone for the summit of Mount McKinley or Mount Rainier.

While the Government assumes no responsibility in connection with any kind of accident to mountain-climbing parties, all persons starting to ascend Mount McKinley or

Mount Rainier will fill out an information blank furnished by the superintendent and shall report to him upon return.

When the superintendent deems such action necessary he may prohibit all mountain climbing in the park.

32. *Reports of accidents.*—All accidents of whatever nature shall be reported as soon as possible by the person or persons involved, to the superintendent or at the nearest ranger station.

33. *Guide and elevator fees for Carlsbad caverns.*—In Carlsbad Caverns National Park, no person or persons shall be permitted to enter the caverns unless accompanied by National Park Service employees. Competent guide service is provided for the public by the Government, for which a fee of \$1.50 shall be charged each person entering the caverns: *Provided*, That in proper cases and upon application made in advance, the Director of the National Park Service may authorize admission without charge for service to persons from reputable educational institutions for the purpose of prosecuting class work or studies, or to persons under the support and care of charitable institutions and their attendants. No charge shall be made for children 16 years of age, or under, when accompanied by adults taking responsibility for their safety and orderly conduct while in the caverns.

For the use of the elevator in the caverns, a fee of \$0.50 in each direction shall be charged each person using the same, except children between the ages of five and twelve years, for which half-fare, or \$0.25 in each direction shall be charged. No charge for this service shall be made for children five years of age, or under, when accompanied by adults assuming responsibility for their safety.

34. *Guide and elevator fees for Wind Cave.*—In Wind Cave National Park, no person or persons shall be permitted to enter the cave, unless accompanied by National Park Service employees. Competent guide service is provided for the public by the Government for which a fee of 75¢ shall be charged each adult person entering the cave. The 75¢ fee for adults shall include the use of the elevator: *Provided*, That, in proper cases and upon application made in advance, the Director of the National Park Service may authorize admission without charge for guide and elevator service to persons from reputable educational institutions for the purpose of prosecuting class work or studies, or to persons under the support and care of charitable institutions and their attendants.

Children 16 years of age, or under, when accompanied by adults taking responsibility for their safety and orderly conduct while in the cave shall be charged 25¢ each, including the use of the elevator, except children between the ages of five and twelve years who shall be charged 15¢ each, including the use of the elevator. No charge whatever shall be made for children five years of age, or under, when accompanied by adults assuming responsibility for their safety.

35. *Carrying of firearms by park employees.*—The superintendent or custodian of a park or monument may, in his discretion, permit the carrying of firearms by employees under his administrative jurisdiction when such possession is deemed necessary in the performance of official duties.

36. *Guide fees for Lehman Caves.*—In Lehman Caves National Monument, no person or persons shall be permitted to enter the caves unless accompanied by National Park Service employees. Competent guide service is provided for the public by the Government, for which a fee of \$0.50 shall be charged each person entering the caves, except that when a group of ten or more persons over 16 years of age is guided through the caves at one time, the fee shall be \$0.25 for each person: *Provided*, That in proper cases and upon application made in advance, the Director of the National Park Service may authorize admission without charge for guide service to persons from reputable educational institutions for the purpose of prosecuting class work or studies, or to persons under the support and care of charitable institutions and their attendants. No charge shall be made for children 16 years of age, or under, when accompanied by adults assuming responsibility for their safety and orderly conduct while in the caves.

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## TRAFFIC

37. *Travel on trails.*—Pedestrians on trails shall remain quiet when saddle or pack animals are passing.

Persons traveling on the trails of the parks or monuments, either on foot or on saddle animals, shall not make short cuts, but shall confine themselves to the main trails. Any or all roads and trails in the parks and monuments may be closed to public use by order of the superintendent or custodian when, in his judgment, conditions make travel thereon hazardous or dangerous, or when such action is necessary to protect the parks or monuments.

Motorcycles shall not be operated upon trails.

38. *Travel on roads.*—(a) Saddle horses, pack trains, and horse-drawn vehicles have right-of-way over motor-propelled vehicles at all times.

(b) Horseback travel over automobile roads is prohibited except where such travel is necessary for ingress to and egress from privately owned property in the parks or monuments, or incidental to authorized trail trips.

(c) Pack trains and saddle horse parties are prohibited from using oil surfaced roads. Where, in emergencies, it becomes necessary for such pack trains or saddle horse parties to travel along oil surfaced roads, such travel shall be confined to the unrolled shoulders of the roads.

(d) All vehicles shall be equipped with lights for night travel. At least one light must be carried on the left front side of all horse-drawn vehicles in a position so as to be visible from both front and rear.

(e) Any person or persons riding saddle animals, or leading animals of any kind through any tunnel, shall display a light upon the approach of any vehicle.

(f) No vehicles may be operated in the parks or monuments outside the roadways or designated parking areas.

(g) Load and weight limitations shall be those prescribed from time to time by the superintendents or custodians, and shall be complied with by the operators of all vehicles using the roads of the parks and monuments. Schedules showing weight limitations for the different roads may be seen at the offices of the superintendents and custodians and at ranger stations at the park entrances.

(h) There shall not be operated or moved upon any road within the boundaries of any national park or monument any vehicle of any kind the face of wheels or tracks of which are fitted with flanges, ribs, clamps, cleats, lugs, spikes, or any device which may tend to injure the roadway. This regulation applies to all rings or flanges upon guiding or steering wheels on any such vehicle, but it shall not be construed as preventing the use of ordinary detachable tire or skid chains.

(i) The superintendent or custodian may, with the approval of the Director of the National Park Service, establish the hours during which any of the roads within the parks and monuments shall be open to the public, and the direction of travel thereon. Information regarding such hours and direction of travel may be had upon application at the office of the superintendent or custodian, or at the ranger stations.

(j) In Acadia National Park, no motor vehicles are permitted on any road specially marked, designated, or constructed for horse-drawn vehicular traffic except for general road and roadside maintenance, repair and construction purposes, fire fighting, or in case of accident.

39. *Automobiles.*—The parks and monuments where common carrier service is established under authorization and supervision of the Government are open to automobiles operated for pleasure but not to those carrying passengers who are paying, either directly or indirectly, for the use of machines (excepting, however, automobiles used by transportation lines operating under Government franchise). Any person operating an automobile in contravention of the provisions of this regulation shall be deemed guilty of its violation.

40. *Motor trucks and busses.*—Motor trucks and busses are admitted to the parks and monuments under the same conditions as automobiles, except that the superintendents or

custodians may establish limits of size, weight, and capacity, which limits may vary, according to the different roads, tunnels, and bridges. No motor trucks are permitted in Acadia National Park, except those used in connection with road maintenance or other authorized park projects.

Commercial truck trailers will be required to secure permits at entrance stations to use park roads.

Trucking over roads in the parks and monuments which are officially posted indicating no trucking is allowed shall be a violation of these regulations.

41. *Motorcycles.*—Motorcycles are admitted to the parks and monuments under the same conditions as automobiles and are subject to the same regulations, so far as they are applicable.

42. *Permits.*—Where required, no motor vehicle may be operated in the national parks without a permit, which is good only in the park or parks for which issued. The permit must be carried in the car and exhibited to the park rangers on request.

*Exceptions.*—Regulations No. 37, 38, 39, and 40 are not applicable to traffic on the Mineral King Road in Sequoia National Park or on the Kennedy Creek cut-off in Glacier National Park.

43. *Fees.*—Fees for automobile permits are as follows:

|                                               |        |
|-----------------------------------------------|--------|
| Crater Lake National Park.....                | \$1.00 |
| Glacier National Park.....                    | 1.00   |
| Grand Canyon National Park.....               | 1.00   |
| Lassen Volcanic National Park.....            | 1.00   |
| Mesa Verde National Park.....                 | 1.00   |
| Mount Rainier National Park.....              | 1.00   |
| Sequoia and General Grant National Parks..... | 1.00   |
| Yellowstone National Park.....                | 3.00   |
| Yosemite National Park.....                   | 2.00   |
| Zion National Park.....                       | 1.00   |

Fees for motorcycle permits are as follows:

|                                               |        |
|-----------------------------------------------|--------|
| Crater Lake National Park.....                | \$1.00 |
| Glacier National Park.....                    | 1.00   |
| Grand Canyon National Park.....               | 1.00   |
| Lassen Volcanic National Park.....            | 1.00   |
| Mesa Verde National Park.....                 | 1.00   |
| Mount Rainier National Park.....              | 1.00   |
| Sequoia and General Grant National Parks..... | 1.00   |
| Yellowstone National Park.....                | 1.00   |
| Yosemite National Park.....                   | 1.00   |
| Zion National Park.....                       | 1.00   |

No fee shall be charged residents of Coconino County, Arizona, or Kanab, Utah, entering Grand Canyon National Park, nor residents of Washington and Kane Counties, Utah, or residents of that part of Coconino County, Arizona, lying north and west of the Colorado River, entering Zion National Park, in the conduct of their usual occupation or business.

44. *Entrances.*—Automobiles, trucks, and other vehicles permitted in the parks and monuments may enter and leave by such entrances and between such hours as shall be determined by the superintendent or custodian with the approval of the Director of the National Park Service, and indicated by official signs posted for that purpose.

All vehicles shall come to a full stop at entrance stations.

45. *Speed.*—Automobiles and other vehicles shall be so operated as to be under the safe control of the driver at all times. The speed shall be kept within such limits as may be necessary to avoid accidents. Speed of automobiles and other vehicles except ambulances and Government cars on emergency trips is limited to 35 miles per hour on all roads in the parks and monuments unless a different limit be determined by the superintendent or custodian with the approval of the Director of the National Park Service, and indicated by official signs posted for that purpose.

46. *Teams.*—When teams, saddle horses, or pack trains approach, motor vehicles shall be so manipulated as to allow safe passage for the other party. In no case shall motor vehicles pass such animals on the road at a greater speed than 10 miles per hour, or in such a manner or with such noise as to frighten them.

47. *Right-of-way.*—Any vehicle traveling slowly on any of the roads in the parks or monuments, when overtaken by a faster-moving motor vehicle, and upon suitable signal from



such overtaking vehicle, shall move to the right to allow a safe passage.

When automobiles going in opposite directions meet on a grade, the ascending machine has the right-of-way, and the descending machine shall be backed or otherwise handled as may be necessary to enable the ascending machine to pass in safety.

48. *Following vehicles*.—Except in slow-moving traffic, a vehicle shall not follow another vehicle closer than 50 feet, nor closer than 15 feet at any time.

49. *Clutches and gears*.—No motor vehicle shall be operated on any highway with clutch disengaged or gear out of mesh except for the purpose of changing or shifting gears or stopping or while being towed, or when such vehicle is equipped with commercial free-wheeling devices.

50. *Lights*.—All motor vehicles except motorcycles shall be equipped with two headlights and one or more red tail-lights, the headlights to be of sufficient brilliancy to insure safety in driving at night, and all lights shall be kept lighted after sunset when the vehicle is on a road, and at all times when passing through unlighted tunnels. Headlights shall be dimmed when meeting other vehicles, riding or driving animals, or pedestrians.

51. *Sounding horn*.—The horn shall be sounded on approaching sharp curves or other places where the view ahead is obstructed, or before passing other vehicles or pedestrians, or, if necessary, before passing riding or driving animals.

52. *Muffler cut-outs*.—Muffler cut-outs shall be kept closed at all times within the limits of the parks and monuments.

53. *Accidents—stop-overs*.—If vehicles stop because of accident or for any other reason, they shall be immediately parked in such a way as not to interfere with travel on the road.

54. *Parking*.—The superintendent may limit the time allowed for parking in any parking area upon the posting of signs indicating such limit.

55. *Traffic signs*.—Drivers of all vehicles shall comply with the directions of all official traffic signs posted in the parks or monuments.

56. *Intoxication*.—No person who is under the influence of intoxicating liquor or narcotic drugs shall operate or drive a motor-driven vehicle of any kind on the roads of the parks or monuments.

#### LOCAL SUBSIDIARY REGULATIONS

Subsidiary regulations necessary to cover local situations and promulgated under general provisions contained in these regulations will be published in the *FEDERAL REGISTER* and may be seen at the headquarters of the parks or monuments in which they are operative.

All subsidiary regulations promulgated under general provisions contained in the Rules and Regulations approved by the Secretary of the Interior June 6, 1935, are hereby continued in force and effect until amended or repealed.

#### PENALTIES

(a) Any person who violates any of the foregoing rules or regulations in regard to any park or monument not specified in paragraph (b) hereof shall be deemed guilty of a misdemeanor and shall be punished by a fine of not more than \$500 or imprisonment for not exceeding six months, or both.

(b) Any person who knowingly and willfully violates any of the foregoing rules or regulations in regard to any of those national military parks, battlefield sites, national monuments, or miscellaneous memorials transferred to the jurisdiction of the Secretary of the Interior from that of the Secretary of War by Executive Order No. 6166, June 10, 1933, and enumerated in Executive Order No. 6228, July 28, 1933, shall be deemed guilty of a misdemeanor and punished by a fine of not more than \$100 or by imprisonment for not more than three months, or by both such fine and imprisonment.

Approved: June 18, 1936.

HAROLD L. ICKES,  
Secretary of the Interior.

[F. R. Doc. 1006—Filed, June 26, 1936; 10:40 a. m.]

#### DEPARTMENT OF AGRICULTURE.

##### Agricultural Adjustment Administration.

#### ORDER TERMINATING OPERATION OF LICENSE FOR MILK— ATLANTA, GEORGIA, SALES AREA

Whereas, W. R. Gregg, Acting Secretary of Agriculture of the United States of America, acting under the provisions of the Agricultural Adjustment Act, as amended, for the purpose and within the limitations therein contained, and pursuant to the applicable general regulations issued thereunder, did, on the 15th day of November 1934, issue under his hand and the official seal of the Department of Agriculture a License for Milk—Atlanta, Georgia, Sales Area, effective the 1st day of December 1934, which license was subsequently amended on August 12, 1935, and suspended on the 25th day of January 1936, said suspension being effective on and after 12:01 a. m., January 27, 1936; and

Whereas, the Secretary of Agriculture has determined to terminate the said license, as amended;

Now, therefore, the undersigned, acting under the authority vested in the Secretary of Agriculture under the terms and conditions of the said act, as amended, and pursuant to the applicable general regulations issued thereunder, hereby terminate the said license, as amended.

In-witness whereof, H. A. Wallace, Secretary of Agriculture of the United States of America, has executed this Order of Termination in duplicate, and has hereunto set his hand and caused the official seal of the Department of Agriculture to be affixed in the city of Washington, District of Columbia, this 25th day of June 1936, and hereby declares that this termination shall be effective on and after 12:01 a. m. July 1, 1936.

[SEAL]

H. A. WALLACE,  
Secretary of Agriculture.

[F. R. Doc. 1012—Filed, June 26, 1936; 11:58 a. m.]

#### FEDERAL TRADE COMMISSION.

Commissioners: Charles H. March, Chairman; Garland S. Ferguson, Jr., Ewin L. Davis, W. A. Ayres, Robert E. Freer.

[File No. 21-267]

#### IN THE MATTER OF APPLICATION FOR TRADE PRACTICE RULES FOR THE SCHOOL SUPPLIES AND EQUIPMENT DISTRIBUTING INDUSTRY

##### NOTICE OF OPPORTUNITY TO BE HEARD

This matter now being before the Federal Trade Commission under its Trade Practice Conference procedure, in pursuance of the Act of Congress approved September 26, 1914, (38 Stat. 717; 15 USCA, Section 41);

Opportunity is hereby extended by the Federal Trade Commission to any and all persons affected by or having an interest in the proposed trade practice rules for the School Supplies and Equipment Distributing Industry to present to the Commission their views upon the same, including suggestions or objections, if any. For this purpose they may, upon application to the Commission, obtain copies of the proposed rules. Communications of such views should be made to the Commission not later than Wednesday, July 15, 1936. Opportunity for oral hearing will be afforded July 15, 1936, at 10 a. m., Room 101, Federal Trade Commission Building, 815 Connecticut Avenue, Washington, D. C., to such persons as may desire to appear, and who have made prior written or telegraphic request to be heard orally. All briefs or other communications received concerning the proposed rules will become part of the public record subject to inspection by interested parties. After giving due consideration to such suggestions or objections as may be received concerning the rules proposed by the industry, the Commission will proceed to their final consideration.

By the Commission.

[SEAL]

OTIS B. JOHNSON, Secretary.

Entered June 24, 1936.

[F. R. Doc. 1007—Filed, June 26, 1936; 11:15 a. m.]

## FEDERAL REGISTER, Saturday, June 27, 1936

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*United States of America—Before Federal Trade Commission*

At a regular session of the Federal Trade Commission, held at its office in the City of Washington, D. C., on the 24th day of June A. D. 1936.

Commissioners: Charles H. March, Chairman; Garland S. Ferguson, Jr., Ewin L. Davis, William A. Ayres, Robert E. Freer.

[Docket No. 2329]

IN THE MATTER OF A. KIMBALL COMPANY, ET AL.

## ORDER APPOINTING EXAMINER AND FIXING TIME AND PLACE FOR TAKING TESTIMONY

This matter being at issue and ready for the taking of testimony, and pursuant to authority vested in the Federal Trade Commission, under an Act of Congress (38 Stat. 717; 15 U. S. C. A., Section 41),

It is ordered that John L. Hornor, an examiner of this Commission be, and he hereby is, designated and appointed to take testimony and receive evidence in this proceeding and to perform all other duties authorized by law.

It is further ordered that the taking of testimony in this proceeding begin on Monday, July 13, 1936, at nine o'clock in the forenoon of that day, eastern standard time, at Room No. 313, United States Post Office, 9th Street, Philadelphia, Pennsylvania.

Upon completion of testimony for the Federal Trade Commission, the Examiner is directed to proceed immediately to take testimony and evidence on behalf of the respondent. The Examiner will then close the case and make his report.

By the Commission.

[SEAL]

OTIS B. JOHNSON, *Secretary*.

[F. R. Doc. 1008—Filed, June 26, 1936; 11:15 a. m.]

*United States of America—Before Federal Trade Commission*

At a regular session of the Federal Trade Commission, held at its office in the City of Washington, D. C., on the 24th day of June A. D. 1936.

Commissioners: Charles H. March, Chairman; Garland S. Ferguson, Jr., Ewin L. Davis, W. A. Ayres, Robert E. Freer.

[Docket No. 2767]

IN THE MATTER OF INTERNATIONAL ART COMPANY, A CORPORATION, ET AL.

## ORDER APPOINTING EXAMINER AND FIXING TIME AND PLACE FOR TAKING TESTIMONY

This matter being at issue and ready for the taking of testimony, and pursuant to authority vested in the Federal Trade Commission, under an Act of Congress (38 Stat. 717; 15 U. S. C. A., Section 41),

It is ordered that W. W. Sheppard, an examiner of this Commission, be, and he hereby is, designated and appointed to take testimony and receive evidence in this proceeding and to perform all duties authorized by law.

It is further ordered that the taking of testimony in this proceeding begin on Wednesday, July 8, 1936, at ten o'clock in the forenoon of that day, in room 424 of the Federal Trade Commission building, 815 Connecticut Avenue NW., Washington, D. C.

Upon completion of testimony for the Federal Trade Commission, the examiner is directed to proceed immediately to take testimony and evidence on behalf of the respondent. The Examiner will then close the case and make his report.

By the Commission.

[SEAL]

OTIS B. JOHNSON, *Secretary*.

[F. R. Doc. 1009—Filed, June 26, 1936; 11:16 a. m.]

*United States of America—Before Federal Trade Commission*

At a regular session of the Federal Trade Commission, held at its office in the City of Washington, D. C., on the 24th day of June A. D. 1936.

Commissioners: Charles H. March, Chairman; Garland S. Ferguson, Jr., Ewin L. Davis, William A. Ayres, Robert E. Freer.

[Docket No. 2826]

IN THE MATTER OF CHARLES N. MILLER COMPANY, A CORPORATION

## ORDER APPOINTING EXAMINER AND FIXING TIME AND PLACE FOR TAKING TESTIMONY

This matter being at issue and ready for the taking of testimony, and pursuant to authority vested in the Federal Trade Commission, under an Act of Congress (38 Stat. 717; 15 U. S. C. A., Section 41),

It is ordered that Miles J. Furnas, an examiner of this Commission, be, and he hereby is, designated and appointed to take testimony and receive evidence in this proceeding and to perform all other duties authorized by law.

It is further ordered that the taking of testimony in this proceeding begin on Monday, July 13, 1936, at one o'clock in the afternoon of that day, eastern standard time, at Court Room No. 4, Federal Building, Boston, Massachusetts.

Upon completion of testimony for the Federal Trade Commission, the Examiner is directed to proceed immediately to take testimony and evidence on behalf of the respondent. The Examiner will then close the case and make his report.

By the Commission.

[SEAL]

OTIS B. JOHNSON, *Secretary*.

[F. R. Doc. 1010—Filed, June 26, 1936; 11:16 a. m.]

## INTERSTATE COMMERCE COMMISSION.

## ORDER

## RECORDING AND REPORTING OF STEAM RAILWAY ACCIDENTS

At a Session of the Interstate Commerce Commission, Division 4, held at its office in Washington, D. C., on the 8th day of June A. D. 1936.

The subject of the recording and reporting of steam railway accidents being under consideration:

It is ordered, That the order of October 24, 1935, requiring the keeping of a special record of accidents to employees and a monthly report of such accidents, be and it is hereby amended by extending the period for the recording and the reporting thereof to December 31, 1936.

By the Commission, division 4.

[SEAL]

GEORGE B. MCGINTY, *Secretary*.

[F. R. Doc. 1011—Filed, June 26, 1936; 11:57 a. m.]

## SECURITIES AND EXCHANGE COMMISSION.

## SECURITIES ACT OF 1933

## CONTRACTS WITH UNITED STATES GOVERNMENT

The Securities and Exchange Commission, acting pursuant to authority conferred upon it by the Securities Act of 1933, as amended, particularly Sections 7 and 19 (a) thereof, and finding that the information specified in Schedule A of the Act which is permitted by the rule hereby adopted to be omitted from any registration statement in respect of a specified class of issuers is inapplicable to such class, and that disclosure fully adequate for the protection of investors is otherwise required to be included in the registration statement; and that any information not specified in Schedule A which is required by such rule to be set forth in the registration statement is necessary and appropriate in the public interest and for the protection of investors; and that the rule hereby adopted is necessary to carry out the provisions

of the Act and is necessary and appropriate in the public interest and for the protection of investors, hereby adopts the following rule under the Securities Act of 1933:

**RULE 581. Contracts with United States Government.—**

(a) Notwithstanding any particular provision in any form for registration or instruction pertaining thereto, the registrant need not file as an exhibit to the registration statement a copy of any contract as to which all the following conditions are satisfied:

(1) The contract is one to which the United States is a party, and involves the constructing or supplying of equipment or materials, or the furnishing of experimental facilities, services, or information for the Army, Navy, Marine Corps, or Coast Guard in connection with the national defense;

(2) A copy of the contract is on file with an executive department of the United States; and

(3) The registrant has been notified in writing that such executive department has administratively determined that the subject of such contract relates to and affects the national defense and that disclosure thereof would be contrary to the public interest.

The registrant shall file, as an exhibit to the registration statement, in lieu of the copy of the contract omitted pursuant to this paragraph, a copy of each notification received from such executive department with respect to the filing of copies of the contract or of information as to its terms.

(b) Notwithstanding any particular provision in any form for registration or instruction pertaining thereto, the registrant need not, in answering any item in the form for registration calling for a summary of the terms of any contract of the type described in paragraph (a), furnish any information as to any terms of the contract relating directly or indirectly to any of the following subjects as to which the registrant has been notified in writing that the executive department, with which a copy of the contract is on file, has administratively determined that such subjects relate to and affect the national defense and that disclosure thereof would be contrary to the public interest:

(1) Quantity of equipment or materials to be constructed or supplied;

(2) Designations of type, descriptions, specifications, deliveries, tests, or guarantees of performance with respect to such equipment or materials; or

(3) Nature and extent of experimental facilities, services, or information to be furnished.

The answer to the item shall include a statement in approximately the following form:

Information as to certain terms of the contract(s) has been omitted pursuant to the Rules and Regulations of the Securities and Exchange Commission, the registrant having been notified that the \_\_\_\_\_ Department (naming the executive department) has determined that such information relates to and affects the national defense and that disclosure thereof would be contrary to the public interest. Such notification is filed as Exhibit \_\_\_\_\_.

(c) Public disclosure will not be made of the contents of any notification filed pursuant to paragraph (a), or of any portion of the information as to the terms of the contract required to be furnished notwithstanding the provisions of paragraph (b), if the Commission determines that such disclosure would impair the value of the contract and is not necessary for the protection of investors. In any case where the registrant desires the Commission to make such a determination, the procedure set forth in Rule 580 shall be followed, except that there shall be filed, in lieu of the three copies of the contract or portion thereof required by paragraph (b) (1) of such Rule, three copies of the notification and three copies of the information as to the terms of the contract which the registrant desires to keep undisclosed, all clearly marked "Confidential."

The foregoing rule shall be effective immediately upon publication.

By the Commission:

[SEAL] FRANCIS P. BRASSOR, *Secretary*.

[F. R. Doc. 1014—Filed, June 26, 1936; 12:37 p. m.]

*United States of America—Before the Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 25th day of June A. D. 1936.

[File No. 32-23]

IN THE MATTER OF THE DECLARATION OF SOUTHWESTERN DEVELOPMENT COMPANY

NOTICE OF OPPORTUNITY FOR HEARING AND ORDER DESIGNATING OFFICER TO CONDUCT PROCEEDINGS

A declaration under Section 7 (a) of the Public Utility Holding Company Act of 1935 having been duly filed with this Commission whereby the Southwestern Development Company proposes to issue to the Guaranty Trust Company of New York promissory notes payable within five years, pursuant to an agreement to renew and extend an existing and matured indebtedness of approximately \$6,300,000.

It is ordered, that the matter be set down for opportunity for hearing on the 10th day of July 1936, at 10:00 o'clock in the forenoon of that day at Room 726-C, Securities and Exchange Building, 1778 Pennsylvania Avenue NW., Washington, D. C.; and

It is further ordered, that John H. Small, an officer of the Commission, be and he hereby is designated to preside at such hearing, and authorized to adjourn said hearing from time to time, to administer oaths and affirmations, subpoena witnesses, compel their attendance, take evidence and require the production of any books, papers, correspondence, memoranda or other records deemed relevant or material to the inquiry, and to perform all other duties in connection therewith authorized by law; and

It is further ordered, that any interested state, state commission, state securities commission, municipality, or other political subdivision of a state, or any representative of interested consumers or security holders, or any other person, desiring to be admitted as a party in this proceeding or to offer evidence in this matter, shall give notice of such intention to the Commission, such notice to be received by the Commission not later than July 5, 1936.

Upon the completion of the taking of testimony in this matter, the officer conducting said hearing is directed to close the hearing and make his report to the Commission.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR, *Secretary*.

[F. R. Doc. 1016—Filed, June 26, 1936; 12:54 p. m.]

*United States of America—Before the Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 26th day of June A. D. 1936.

[File 36-22]

IN THE MATTER OF THE APPLICATION OF THE MIDDLE WEST CORPORATION

NOTICE OF OPPORTUNITY FOR HEARING AND ORDER DESIGNATING TRIAL EXAMINER

An application having been duly filed with this Commission by The Middle West Corporation, pursuant to Section 10(a) (1) of the Public Utility Holding Company Act of 1935, for approval of the acquisition of 9,000 shares of \$3 Cumulative Preferred Stock, without par value, of Copper District Power Company, which securities applicant proposes to acquire, at the price of \$45 per share, in exchange for \$405,000 principal amount of 5% notes payable of said Copper District Power Company now held by applicant;

It is ordered, that the matter be set down for hearing on July 13, 1936, at two o'clock in the afternoon of that day, at Room 1101, Securities and Exchange Building, 1778 Pennsylvania Avenue, NW., Washington, D. C.; and

It is further ordered, that Charles S. Lobingier, an officer of the Commission, be and he hereby is designated to preside



at such hearing, and authorized to adjourn said hearing from time to time, to administer oaths and affirmations, subpoena witnesses, compel their attendance, take evidence, and require the production of any books, papers, correspondence, memoranda or other records deemed relevant or material to the inquiry, and to perform all other duties in connection therewith authorized by law; and

It is further ordered, that any interested state, state commission, state securities commission, municipality, or other political subdivision of a state, or any representative of interested consumers or security holders, or any other person desiring to be admitted as a party in this proceeding or to offer evidence in this matter, shall give notice of such intention to the Commission, such notice to be received by the Commission not later than July 8, 1936.

Upon the completion of the taking of testimony in this matter, the officer conducting said hearing is directed to close the hearing and make his report to the Commission.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR, *Secretary*.

[F. R. Doc. 1013—Filed, June 26, 1936; 12:37 p. m.]

*United States of America—Before the Securities and Exchange Commission*

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 26th day of June A. D. 1936.

[File No. 32-24]

IN THE MATTER OF THE APPLICATION OF THE NARRAGANSETT ELECTRIC COMPANY

NOTICE OF OPPORTUNITY FOR HEARING AND ORDER DESIGNATING TRIAL EXAMINER

An application, pursuant to Section 6 (b) of the Public Utility Holding Company Act of 1935, having been filed with this Commission by The Narragansett Electric Company, a subsidiary of a registered holding company, to exempt, from the provisions of Section 6 (a), the issue and sale of \$34,000,000 principal amount of First Mortgage Bonds, Series A, 3½%, due July 1, 1966, the proceeds of such issue to be applied on or about July 22, 1936, toward the payment of \$34,000,000 of notes evidencing bank loans made on June 25, 1936, under a bank credit agreement dated May 28, 1936.

It is ordered that the matter be set down for hearing on the 13th day of July 1936, at 2:30 p. m., at the Securities and Exchange Commission, 1778 Pennsylvania Avenue NW., Washington, D. C., and

It is further ordered that John H. Small, an officer of the Commission, be and he hereby is designated to preside at such hearing and is authorized to adjourn said hearing from time to time, to administer oaths and affirmations, subpoena witnesses, compel their attendance, take evidence and require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, and to perform all other duties in connection therewith authorized by law; and

It is further ordered that any interested state, state commission, state securities commission, municipality, or other political subdivision of a state, or any representative of interested consumers or security holders, or any other person, desiring to be admitted as a party in this proceeding or to offer evidence in this matter, shall give notice of such intention to the Commission. It is requested that all such notices shall be delivered to the Commission by mail or telegraph not later than July 10, 1936.

Upon the completion of the taking of testimony in this matter, the officer conducting said hearing is directed to close the hearing and make this report to the Commission.

By the Commission.

[SEAL]

FRANCIS P. BRASSOR, *Secretary*.

[F. R. Doc. 1017—Filed, June 26, 1936; 1:47 p. m.]

Vol. I—pt. 1—37—44

Tuesday, June 30, 1936

No. 77

PRESIDENT OF THE UNITED STATES.

EXECUTIVE ORDER

MODIFICATION OF EXECUTIVE ORDER NO. 6910 OF NOVEMBER 26, 1934, AS AMENDED, WITHDRAWING PUBLIC LANDS IN CERTAIN STATES

By virtue of and pursuant to the authority vested in me by the act of June 25, 1910, ch. 421, 36 Stat. 837, as amended by the act of August 24, 1912, ch. 369, 37 Stat. 497, it is ordered that Executive Order No. 6910 of November 26, 1934, as amended, temporarily withdrawing all public lands in certain States for classification and other purposes, be, and it is hereby, modified to the extent necessary to enable the Secretary of the Interior to withdraw the following-described tracts of public land for reclamation purposes under and pursuant to the provisions of section 3 of the act of June 17, 1902, ch. 1093, 32 Stat. 388:

CALIFORNIA

Mount Diablo Meridian

- T. 33 N., R. 2 W.:  
Sec. 4, lots 1, 2, 3, 5, 6, 7, 8, S½N½, and SE¼;  
Sec. 6, SE¼;  
T. 34 N., R. 2 W.:  
Sec. 23, NE¼NE¼;  
Sec. 30, lots 1, 2, E½NW¼, and W½E½;  
T. 33 N., R. 3 W.:  
Sec. 6, NE¼SE¼ and SW¼SE¼;  
Sec. 8, E½NE¼, SW¼NE¼, W½, and SE¼;  
Sec. 10, N½SE¼ and SE¼SE¼;  
Sec. 12, NE¼NE¼, W½SW¼, SE¼SW¼, NE¼SE¼, and S½SE¼;  
T. 34 N., R. 3 W.:  
Sec. 6, N½NE¼ and S½SE¼;  
Sec. 14, NW¼NW¼;  
Sec. 15, lots 1, 2, 3, 4, and 6, NE¼, NE¼NW¼, SE¼NW¼, N½NW¼SE¼, N½NE¼SE¼, SE¼NE¼SE¼, and NE¼SE¼SE¼;  
Sec. 20, N½NE¼, SW¼NE¼, NW¼SE¼, and W½;  
Sec. 21, lot 12 and W½NW¼;  
Sec. 24, E½ and S½SW¼;  
Sec. 28, E½ and SW¼;  
Sec. 30, N½NE¼;  
Sec. 34, SW¼;  
T. 35 N., R. 3 W.:  
Sec. 32, NE¼NE¼NE¼, S½NE¼NE¼, S½NE¼, S½NW¼, and S½;  
T. 33 N., R. 4 W.:  
Sec. 1, lots 9, 10, 11, and 12;  
Sec. 2, lot 1 and 4;  
Sec. 30, SE¼NW¼ and lot 1;  
T. 34 N., R. 4 W.:  
Sec. 4, NW¼NW¼, NE¼, N½SE¼, and SE¼SE¼;  
Sec. 6, lots 2, 3, S½NE¼, and SE¼NW¼;  
Sec. 10, NE¼;  
Sec. 12, NE¼SE¼ and S½S½;  
Sec. 16, N½NE¼ and W½;  
Sec. 20, N½NE¼, SE¼NE¼ and N½NW¼;  
Sec. 23, N½SE¼;  
Sec. 24, all;  
Sec. 25, W½NE¼ and NW¼;  
Sec. 30, lots 1, 2, 3, 4, NW¼, W½SW¼, and SE¼SW¼;  
T. 35 N., R. 4 W.:  
Sec. 26, W½NE¼, W½, and SE¼;  
Sec. 30, NW¼NW¼;  
T. 32 N., R. 5 W.:  
Sec. 4, lots 1, 2, 3, 4, 6, 7, 8, E½ lot 9, E½ lot 11, and lot 12, SW¼NW¼SW¼, N½SW¼NW¼ and W½SW¼SW¼;  
Sec. 8, NE¼, N½NW¼, SE¼NW¼, E½SW¼, and lots 1, 2, and 3;  
Sec. 9, NE¼, NW¼NW¼NW¼, E½SE¼NW¼, W½NE¼SW¼, and N½NE¼SE¼;  
Sec. 14, N½NE¼SE¼NW¼, SW¼NW¼, N½NW¼, N½SW¼, and SW¼SW¼;  
Sec. 17, lots 3, 4, and 8;  
Sec. 23, lots 1, 2, 3, 4, 6, 7, NE¼NE¼, SE¼SE¼, and W½SW¼;  
T. 33 N., R. 5 W.:  
Sec. 4, lot 3, and SE¼NW¼;  
Sec. 6, N½, SW¼, and N½SE¼;  
Sec. 7, lots 1, 2, 4, 6, 7, 8, 9, 10, and 11;  
Sec. 12, SE¼;  
Sec. 14, SE¼;  
Sec. 22, NE¼, N½NW¼, SW¼SW¼, N½SE¼, SE¼SE¼, and lots 1 to 9 incl.;

# A Year in Review

## 2020 GUN DEATHS IN THE U.S.

The Johns Hopkins Center for Gun Violence Solutions

April 28, 2022



JOHNS HOPKINS  
BLOOMBERG SCHOOL  
of PUBLIC HEALTH

Center for  
Gun Violence Solutions

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# About this Report

## About the Johns Hopkins Center for Gun Violence Solutions

Two leading organizations dedicated to gun violence prevention—the Johns Hopkins Center for Gun Violence Prevention and Policy and the Educational Fund to Stop Gun Violence—have merged to form a new center at the Johns Hopkins Bloomberg School of Public Health, the Johns Hopkins Center for Gun Violence Solutions.

The Johns Hopkins Center for Gun Violence Solutions combines the expertise of highly respected gun violence researchers with the skills of deeply experienced gun violence prevention advocates. We use a public health approach to conduct rigorous scientific research to identify a range of innovative solutions to gun violence. Because gun violence disproportionately impacts communities of color, we ground our work in equity and seek insights from those most impacted on appropriate solutions. Using the best available science, our Center works toward expanding evidence-based advocacy and policy-making efforts. This combination of expertise creates a unique opportunity to turn public health research into action that reduces deaths and injuries from gun violence.

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The Center for Gun Violence Solutions would like to thank Lauren Footman, MS, for her equity reviews, as well as Spencer Cantrell, JD, for her contributions to this report. We would also like to acknowledge staff and former staff of the Educational Fund to Stop Gun Violence who led similar reports analyzing 2019 and 2018 CDC data, including Vicka Chaplin and Dakota Jablon, and who created the foundation from which much of this report is based.

## How to Cite This Report

Johns Hopkins Center for Gun Violence Solutions. (2022). A Year in Review: 2020 Gun Deaths in the U.S. Available: <https://publichealth.jhu.edu/gun-violence-solutions>.

## Data Source

This report outlines gun death data from 2020, the most recent year of data available. The purpose of the report is to share data in an accessible and user-friendly format. All data were accessed using the Centers for Disease Control's Underlying Cause of Death database, part of the Wide-ranging Online Data for Epidemiologic Research (WONDER) database. The Underlying Cause of Death database contains data based on death certificates for United States residents. If while reading through this report, you have questions about any of the data or would like to learn more about specific aspects of the data that are not included in this report, please reach out to the team at the Center for Gun Violence Solutions at [CGVS@jh.edu](mailto:CGVS@jh.edu).



## Introduction

Gun violence is an ongoing public health crisis in the United States that impacts the health and well-being of all of us. In 2020, gun deaths reached the highest number ever recorded. According to data released by Centers for Disease Control and Prevention (CDC), more than 45,000 people died by gun violence in the U.S. As we struggled against the COVID-19 pandemic, a concurrent public health crisis intensified. Gun homicides rose dramatically across the country, increasing by 35% in just one year. Nearly 5,000 more lives were lost to gun homicide in 2020 than in 2019. Gun suicides remained at historically high levels. **Guns were the leading cause of death among children and teens in 2020, accounting for more deaths than COVID-19, car crashes, or cancers.**<sup>1</sup>

Coincident with the rise in gun-related deaths, 2020 was also a year of record gun sales. Millions of people, including many first-time purchasers, bought guns. Tens of thousands of these new guns turned up at crime scenes across the country—almost twice as many as in 2019.<sup>2</sup> While it remains to be seen whether this surge in gun purchases contributed to the rise in gun violence over the long term, a strong body of research has identified drivers of gun violence—namely, easy access to guns and weaknesses in our country’s laws that create a patchwork of gun regulations.

There are equitable, evidence-based solutions to prevent gun violence. These solutions are supported by most people, including gun owners. In spite of their wide support, many policymakers have been unwilling to follow the evidence and enact policies that will save lives.

The aim of this report is to illustrate the enormous toll gun violence has on our country. Ultimately, we strive to use these data to advocate for and implement life-saving policies and programs that will end the gun violence epidemic. This report builds off of [“A Public Health Crisis Decades in the Making: A Review of 2019 CDC Gun Mortality Data”](#) released by the Educational Fund to Stop Gun Violence in February 2021. Each year it is our mission to provide policymakers and the public the most accurate and up-to-date data on gun fatalities.

This year’s report uses the CDC’s 2020 firearm fatality data, which only became available in late December 2021—an unacceptable delay that hampers potential responses to gun violence. We cannot solve a problem we cannot quantify. Without timely data, we lack the information we need to make the best possible decisions. Data collection and reporting related to gun violence must be more timely.

We recognize that each data point discussed in this report is a person whose life was lost to gun violence. This loss has an immeasurable impact on the families, friends, and communities; and data can only partly illuminate the true burden of gun violence. In addition to analyzing the data we must listen to and uplift the voices of those directly impacted by gun violence, their loved ones, and their communities.

Yet even on its own, the 2020 CDC data paint an alarming picture of the epidemic of gun violence. It illustrates how people from all walks of life are impacted. These deaths, and the associated pain and suffering, can be prevented. By leveraging the data outlined in this report, we can improve gun violence prevention strategies and create a more peaceful future, free from gun violence.

1 Provisional death counts for Coronavirus disease 2019 (COVID-19). (2022). *National Center for Health Statistics*. Available: [https://www.cdc.gov/nchs/nvss/vsrr/covid\\_weekly/index.htm#SexAndAge](https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm#SexAndAge)

2 Barton C. (2021). New data suggests a connection between pandemic gun sales and increased violence. *The Trace*. Available: <https://www.thetrace.org/2021/12/atf-time-to-crime-gun-data-shooting-pandemic/>

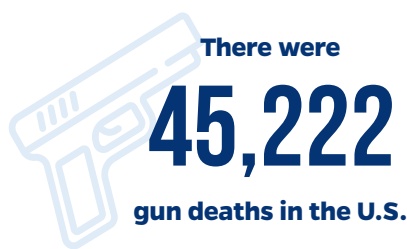




## An Overview of U.S. Gun Deaths in 2020

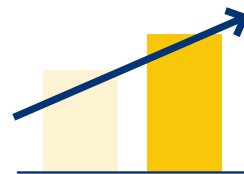
Gun violence was a leading cause of death in 2020. On average, 124 individuals died from gun violence every day in 2020, an additional 15 more gun deaths per day than in 2019. The overall gun death rate increased by 15% from 2019 reaching the highest level ever recorded. This increase was driven by a dramatic rise in gun homicides—nearly 5,000 more gun homicides than in 2019—and persistently high numbers of gun suicides.

### Five Fast Facts for Firearm Fatalities in 2020



The highest number of gun deaths ever in the U.S.

#### Gun deaths increased from 2019 to 2020



Firearm homicides

**increased by 35%**



For the second time in three years, more than 24,000 people died by gun suicide

#### Gun violence has a disproportionate impact



Black males ages 15–34 were over

**20x** more likely to be a victim of gun homicide

than their white counterparts

#### States with stronger gun laws have lower rates of gun violence



Someone living in Mississippi was

**8.5x** more likely to die by gun violence

than someone living in Hawaii



LAWS  
↑ GUN VIOLENCE



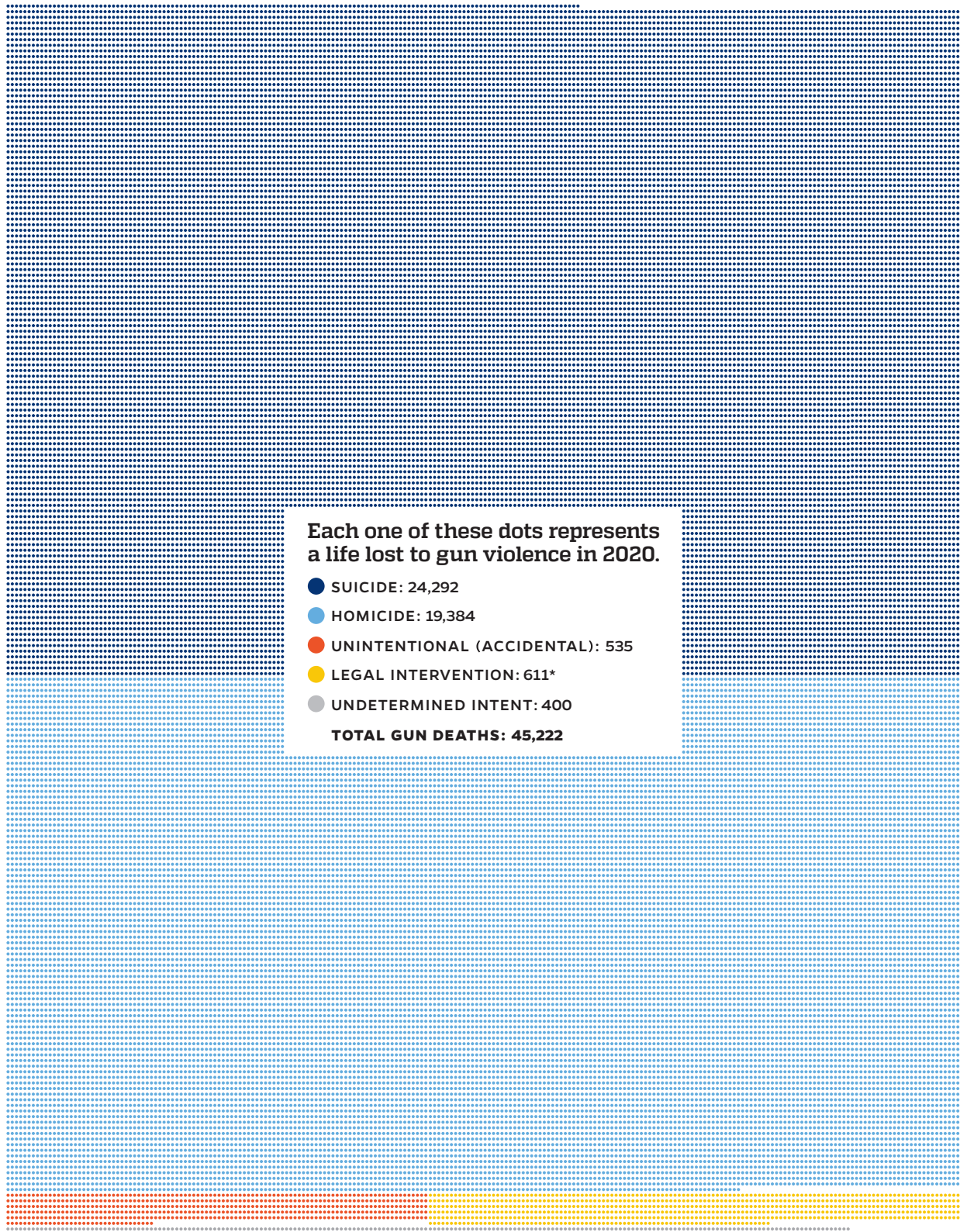
LAWS  
↓ GUN VIOLENCE



#### Gun violence was the leading cause of death among children, teens, and young adults under the age of 25



Young people under 30 were nearly 10 times more likely to die by firearm than from COVID-19 in 2020



**Note:** \* The CDC data classification “legal intervention” under-counts police-involved gun fatalities. To address this gap, media sources like the Washington Post’s Fatal Force database have tracked police-involved shootings in recent years, reporting that 1,021 people were shot and killed by police in 2020.



# Gun Deaths Over Time

## 2019–2020: A One-Year Spike in Gun Violence

In 2020, gun deaths in the U.S. reached the highest level ever recorded—driven by a dramatic rise in gun homicides. In 2020, more than 45,000 people died from gun violence. The increase coincided with a number of unique factors, including COVID-19, record increases in gun sales, widespread social unrest in the aftermath of George Floyd’s murder, and deep political divisions further exacerbated by attempts to overturn an election.

### QUICK TAKEAWAYS:

- Firearm homicides increased by nearly 5,000 deaths, or 35%, from 2019 to 2020. The firearm homicide spike was experienced in communities across the country—both rural and urban.
- The overall gun death rate among children and teens under age 19 increased by 30%—this increase was driven by a dramatic (40%) increase in the gun homicide rate and 11% increase in the gun suicide rate.
- There was a 47% increase in the firearm homicide rate among Black women from 2019 to 2020.
- The rate of gun suicides was the second highest in three decades, and 2020 was only the second time ever there were over 24,000 gun suicides.



## Domestic Violence, Firearms, and COVID-19

Domestic violence has been deemed the “pandemic within a pandemic.”<sup>3</sup> During COVID-19 lockdowns, victims and survivors of domestic violence faced unique vulnerabilities as they were quarantined with their abusers, including being unable to access the safety planning, victim advocacy, counseling, shelter, or legal services they would have traditionally relied on to escape abusive situations. The added stressors of the pandemic, including economic stressors and isolation, often caused abuse to further escalate. Research shows that access to firearms is one of the primary predictors of lethality in abusive relationships, and even when not used fatally, firearms are a tool for ongoing coercive control and threats. While the CDC data do not show how many of the gun violence deaths were related to domestic violence, studies show that there was an increase in domestic violence during the COVID-19 epidemic.<sup>4</sup> FBI data from 2020 show that over 1,400 individuals were murdered by current or former dating partners or spouses.<sup>5</sup> More information on the intersection of domestic violence and firearms is available at [www.disarmdv.org](http://www.disarmdv.org).

## Gun Deaths Over the Last 40 Years

The crisis of gun violence in the United States is not new. For over four decades, people have suffered from persistently high gun death rates. Over this time, 1,357,000 people have died from gun violence. This is more than the number of Americans who have died in wars fought throughout U.S. history.<sup>6</sup>

3 Evans ML, Lindauer M, & Farrell ME. (2020). A pandemic within a pandemic — Intimate partner violence during Covid-19. *The New England Journal of New Medicine*.

4 Piquero AR, Jennings WG, Jemison E, Kaukinen C, & Knaut FM. (2021). Domestic violence during COVID-19: Evidence from a systematic review and meta-analysis. *Council on Criminal Justice*. Available: <https://build.neoninspire.com/counciloncj/wp-content/uploads/sites/96/2021/07/Domestic-Violence-During-COVID-19-February-2021.pdf>

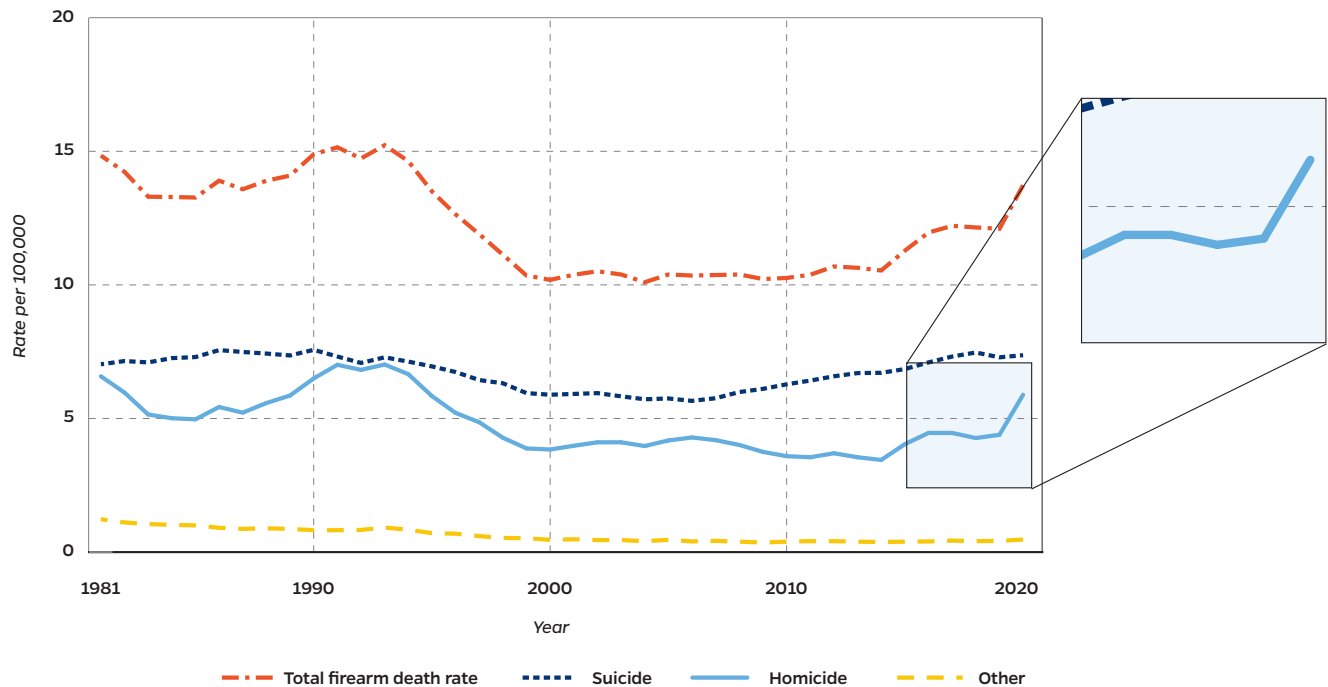
5 Federal Bureau of Investigation crime data explorer. (2021). *FBI Uniform Crime Reporting Program*. Available: <https://crime-data-explorer.fr.cloud.gov/pages/home>

6 Crigger M & Santhanam L. (2015). How many Americans have died in U.S. wars? *PBS*. Available: <https://www.pbs.org/newshour/nation/many-americans-died-u-s-wars>



The overall firearm suicide rate hasn't fluctuated much over the last 40 years. It dipped slightly in the 2000s before starting to rise in the 2010s. In 2020, the firearm suicide rate remained at essentially the same level it was in 1981. The firearm homicide rate has fluctuated much more than the gun suicide rate. It peaked in the early 1990s, declined significantly, and then leveled off in the 2000s. The gun homicide rate spiked in 2015–2016; and in 2020, the gun homicide rate experienced the largest one-year increase in modern history. Despite this monumental one-year spike, the gun homicide rate is still lower than it was in the early 1990s.

**FIGURE 1: Firearm Death Rate, 1980–2020**



**Note:** The gun death rates depicted in the graph above are classified from two versions of the International Classification of Diseases (ICD). The data from 1981 to 1998 were classified using ICD-9 codes, and from 1999 to 2020 classified using ICD-10.

### WHY USE RATES?

The numbers of gun deaths can help illustrate the burden of gun violence in a particular population. However, because the total population varies by geographic area and over time, firearm death rates (typically measured as the number of gun deaths per 100,000 people) provide an important measure for comparison.

For example, 2020 had the highest **number** of gun deaths ever, but not the highest **rate** because the U.S. population in 2020 was larger than in prior years. While there were fewer gun **deaths** in the early 1990s, the gun death **rate** in the early 1990s was higher than it is today because the number of gun deaths compared to the population was higher.<sup>7</sup>



<sup>7</sup> Rates in this report are generally age-adjusted. Age adjustment allows for accurate comparisons between populations with different age distributions. To learn more about age adjustment see the definition in the glossary.



## Policy Recommendations

Gun violence is a complex issue requiring many approaches to its prevention. We are committed to evidence-based policies, programs, and practices and ensuring that all of these preventative measures are designed and implemented equitably. Below, we highlight a few promising policy recommendations to stop gun violence in all its forms. For more information on gun violence solutions, visit our website at <https://publichealth.jhu.edu/gun-violence-solutions>.



### **States should implement firearm purchaser licensing (also known as permit-to-purchase) that requires prospective gun purchasers to obtain a license prior to buying a gun.**

- Firearm purchaser licensing systems create a robust structure to verify individuals' identities and ensure they are not prohibited from gun ownership. Background checks as part of a firearm purchaser licensing system often are facilitated using fingerprints and utilize records at the state level that might not have been reported to the federal system. Firearm purchaser licensing laws are associated with lower rates of diversion of guns for use in crime, homicide and suicide by firearm, mass shootings, and shootings by police.<sup>8,9,10,11</sup> These laws are supported by more than 75% of adults, including more than 60% of gun owners and Republicans.<sup>12</sup>



### **States should enact and implement firearm removal laws—Domestic Violence Protection Orders (DVPOs) and Extreme Risk Protection Orders (ERPOs).**

- DVPOs are civil court orders to protect victims and survivors of domestic abuse, including dating partners. Federal law prohibits anyone subject to a DVPO issued after notice and hearing from purchasing or possessing firearms. Research shows that the stronger the DVPO protections, the stronger the life-saving benefits. For example, the largest reductions in intimate partner homicide connected to DVPO firearm restrictions are those that extend to dating partners, temporary or emergency orders, and those that explicitly require defendants to surrender their firearms.<sup>13</sup>
- ERPO laws, which are modeled off of DVPOs, create a civil process allowing law enforcement, family members, and, in some states, medical professionals to petition a court to temporarily separate someone at risk of harming themselves or others from their firearms. ERPOs also prohibit individuals from acquiring new guns for the duration of the order. ERPO laws are associated with lower rates of firearm suicide and have been successfully used in response to threats of mass shootings. Law enforcement-initiated ERPOs are supported by 76% of adults, including more than 65% of gun owners and Republicans. Family-initiated ERPOs are supported by 80% of adults, including more than 70% of gun owners and Republicans.<sup>14</sup>

8 Crifasi CK, McCourt AD, & Webster DW. (2020). The impact of handgun purchaser licensing on gun violence. *Johns Hopkins University Bloomberg School of Public Health*. Available: [https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-gun-violence-prevention-and-policy/\\_docs/Impact\\_of\\_Handgun.pdf](https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-gun-violence-prevention-and-policy/_docs/Impact_of_Handgun.pdf)

9 McCourt AD, Crifasi CK, Stuart EA, Vernick JS, Kagawa RMC, Wintemute GJ, & Webster DW. (2020). Purchaser licensing laws, point-of-sale background check laws, and firearm homicide and suicide in 4 US States, 1985-2017. *American Journal of Public Health*.

10 Webster DW, McCourt AD, Crifasi CK, Booty MD, & Stuart EA. (2020). Evidence concerning the regulation of firearms design, sale, and carrying on fatal mass shootings in the United States. *Criminology and Public Policy*.

11 Crifasi CK, Pollack K, & Webster DW. (2016). The influence of state-level policy changes on the risk environment for law enforcement officers. *Injury Prevention*.

12 Barry CL, Stone E, Crifasi CK, Vernick JS, Webster DW, & McGinty EE. (2019). Trends in Americans' support for gun policies. *Health Affairs*.

13 Zeoli AM, McCourt A, Buggs S, Frattaroli S, Lilley D, & Webster DW. (2018). Analysis of the strength of legal firearms restrictions for perpetrators of domestic violence and their associations with intimate partner homicide. *American Journal of Epidemiology*.

14 Barry CL, Stone E, Crifasi CK, Vernick JS, Webster DW, & McGinty EE. (2019). Trends in Americans' support for gun policies. *Health Affairs*.





### **Cities should prioritize funding for Homicide Review Commissions (HRC) and community violence intervention (CVI).**

- Homicide Review Commissions (HRC) are a public health and public safety partnership that seek to analyze patterns and trends in gun violence, gather community input, and generate recommendations for action. An HRC is comprised of three committees: a criminal justice review, a community-based review, and an executive committee review. The HRC is led by a public health researcher who serves as a neutral convener to review data, synthesize findings, and generate recommendations. Prior research of Milwaukee's HRC found a 50% decline in homicide in the intervention districts compared to control districts.<sup>15</sup>
- Community violence interventions (CVI) are promising programs that aim to identify and support the small number of people at risk for violence by helping them peacefully resolve conflicts and providing them with wraparound mental health and social support. CVI is most effective when cities first establish an inter-agency process, like a Homicide Review Commission, to identify the drivers of violence within a city and deploy resources comprehensively to address these drivers of violence. Promising CVI initiatives that can help reduce violence include: violence interruption programs, group violence intervention strategies, violence reduction through blight remediation, hospital-based violence intervention programs, programs that use cognitive behavioral therapy, and programs that provide life coaching and case management to those at risk for violence.

Gun violence prevention advocates, policy makers, and researchers should ensure that the policies they pursue to reduce gun violence are equitable and don't unintentionally harm the very communities they aim to help. To do this, stakeholders should consider using a Racial Equity Impact Assessment (REIA) to examine policies through an equity lens, engage with impacted communities, anticipate the potential outcomes, and mitigate foreseeable risks. The Educational Fund to Stop Gun Violence and DC Justice Lab—in collaboration with five other organizations—have developed a [Racial Equity Impact Assessment Tool](#) specifically designed for gun violence.<sup>16</sup>

<sup>15</sup> Azrael D, Braga AA, & O'Brien ME. (2010). Developing the capacity to understand and prevent homicide: An evaluation of the Milwaukee Homicide Review Commission. *National Institute of Justice*. Available: <https://nij.ojp.gov/library/publications/developing-capacity-understand-and-prevent-homicide-evaluation-milwaukee>

<sup>16</sup> Educational Fund to Stop Gun Violence, DC Justice Lab, Cities United, March for Our Lives, Community Justice Action Fund, Consortium for Risk-Based Firearm Policy, and Johns Hopkins Center for Gun Violence Prevention and Policy. (2022). *Racial Equity Framework for Gun Violence Prevention*. <https://efsgv.org/racialequity/>

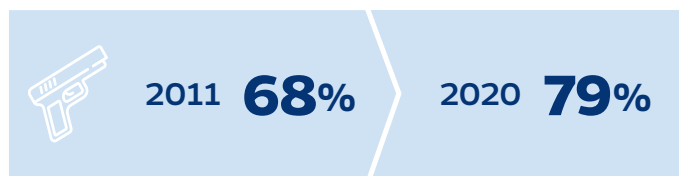


# The Lethality and Availability of Firearms

Due to their high lethality and availability, firearms fuel our nation's high suicide and homicide rates. Nearly 80% of all homicides and more than half of all suicides are by firearm. Yet far too often, the role of firearms is left out of policy and programmatic efforts to reduce homicides and suicides. In order to effectively prevent these tragedies, we need to incorporate policy solutions that acknowledge the lethality of firearms and address their availability, especially among those at an elevated risk for suicide or interpersonal violence.

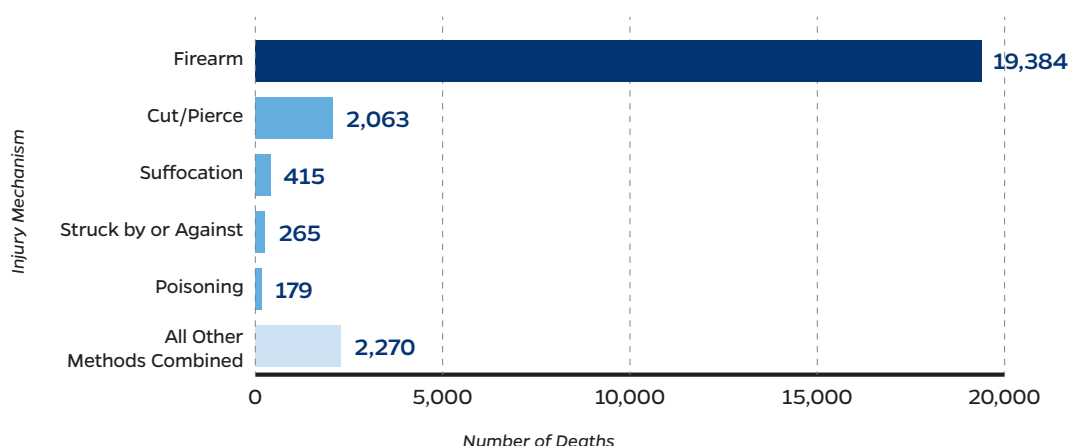
## Homicides

In 2020, 79% of all homicides were by firearm, the highest proportion of homicides by firearm in history:



- The lethality and availability of guns drive our nation's high homicide rate. In fact, other high-income countries with fewer guns and stronger gun laws have comparable rates of violent assault to the U.S., but the U.S. has a firearm homicide rate 25 times higher than other high-income countries.<sup>17</sup>
- Guns are used in homicides nine times more than the second most common method of homicide (cutting/piercing) and 47 times more than suffocation.
- The increase in homicides from 2019 to 2020 was driven almost exclusively by firearms. Firearm homicides increased by 35% from 2019 to 2020. Non-firearm homicides only increased by 10% during the same period.

**FIGURE 2: Homicides by Method, 2020**



**Note:** The "All other methods combined" category includes: Unspecified injury (1,375 deaths), Other specified, not elsewhere classified injury (450), Other specified, classifiable injury (187), Fire/flame (116), Other land transport (99), Drowning (26), Fall (14), and Hot object/substance (3).

<sup>17</sup> Grinshteyn E & Hemenway D. (2019). Violent death rates in the US compared to those of the other high-income countries, 2015. *Preventive Medicine*.

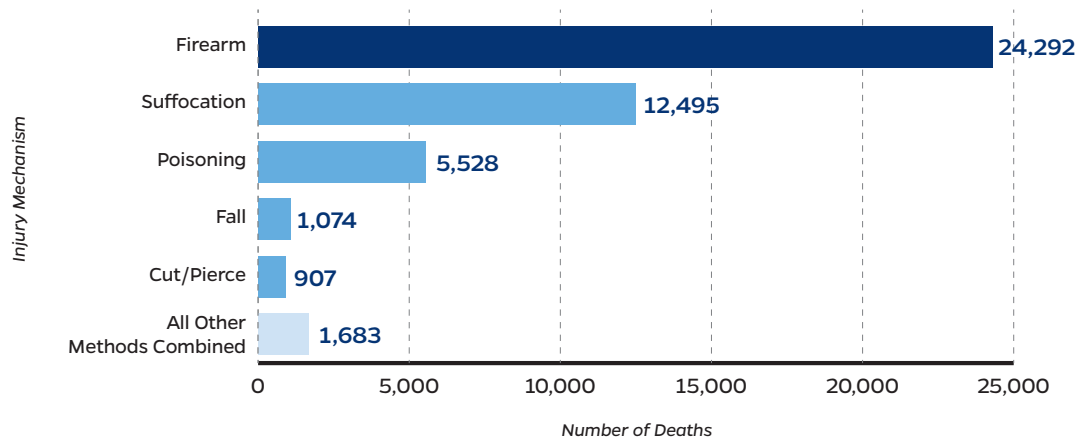


## Suicides

In 2020, 53% of all suicides were by firearm:

- Access to lethal means, like firearms, greatly increases the risk that a suicide attempt will result in death. 90% of suicide attempts involving firearms are fatal.<sup>18</sup>
- Because firearms are so lethal, they account for more than half of all suicide deaths even though they make up less than 10% of all suicide attempts.<sup>19</sup>
- Drug poisoning and cutting account for around 80% of all suicide attempts, but fewer than 1 in 20 suicide attempts involving these methods result in death.<sup>20</sup>
- Delaying a suicide attempt can also allow suicidal crises to pass and lead to fewer suicides. Ninety percent of individuals who attempt suicide do not eventually go on to die by suicide.<sup>21</sup>
- Guns are used in suicides twice as often as the second most common method of suicide (suffocation) and 27 times more than cutting/piercing.

**FIGURE 3: Suicides by Method, 2020**



**Note:** The “All other methods combined” category includes: Other specified, classifiable injury (638 deaths), Drowning (498), Fire/flame (175), Other land transport (161), Other specified, not elsewhere classified injury (125), and Unspecified injury (86).

18 Azrael D & Miller M. (2016). Reducing suicide without affecting underlying mental health: Theoretical underpinnings and a review of the evidence base linking the availability of lethal means and suicide. *The International Handbook of Suicide Prevention*.

19 Conner A, Azrael D, & Miller M. (2019). Suicide case-fatality rates in the United States, 2007 to 2014. A nationwide population-based study. *Annals of Internal Medicine*.

20 Ibid.

21 Owens D, Horrocks J, & House A. (2002). Fatal and non-fatal repetition of self-harm. Systematic review. *The British Journal of Psychiatry*.



# The Burden of Gun Violence Relative to Other Injuries and Diseases

## A Leading Cause of Death Among Young People

Gun violence is the leading cause of death among children, teens, and young adults under the age of 25, taking the lives of over 10,000 young people in 2020 alone. When young people are shot and killed, they lose decades of potential: the potential to grow up, have a family, contribute to society, and pursue their passions in life. These losses are felt across neighborhoods and communities.

Compared to other causes of death, gun violence often poses a larger burden on society in terms of years of potential life lost. Years of potential life lost calculations estimate the average time a person would have otherwise been expected to live if they did not die prematurely. In 2020, firearm deaths accounted for 1,131,105 years of potential life lost before the age of 65—more than diabetes, stroke, and liver disease combined.<sup>22</sup>

Shockingly, firearms also had a much larger burden on young people in terms of mortality than COVID-19 did in 2020. In fact, young people under the age of 30 were nearly 10 times more likely to die by firearm than by COVID-19 in 2020.<sup>23,24</sup> In 2020, firearms also accounted for 1.6 times more years of potential life lost before the age of 65 than COVID-19.<sup>25</sup> These comparisons are not meant to diminish the unprecedented toll of the COVID-19 epidemic and the devastating effect it had on the same communities disproportionately impacted by gun violence, but they do help illuminate the often overlooked public health epidemic of gun violence that impacts our country year after year.

Despite the enormous toll of gun violence, scant attention and only minimal funding are allocated to prevent this leading cause of death. We must treat gun violence with the same urgency we have addressed COVID-19 and other public health crises. Every week we delay action on gun violence prevention, hundreds of young people—including children—are needlessly killed.

## IMPACT ON CHILDREN, TEENS, AND YOUNG ADULTS

- Firearms were the leading cause of death for children and teens ages 1–19, prematurely taking the lives of 4,357 young people.
- Homicides are the most common type of gun death among children and teens—64% of child and teen gun deaths were homicides and 30% were suicides.
- While teenagers account for the majority of these deaths, younger children are not immune. An average of eight children ages 0–12 were killed by guns every single week in 2020.
- Every 2.5 days a child or teen was killed by an unintentional gun injury.
- Black children and teens face alarmingly high rates of gun victimization. More than half of all Black teens (15–19) who died in 2020—a staggering 52%—were killed by gun violence.

22 WISQARS years of potential life lost (YPLL) Report, 1981–2020. (2020). *Centers for Disease Control and Prevention*. Available: <https://wisqars.cdc.gov/ypll>

23 According to provisional CDC data, there were 1,682 deaths due to COVID-19 in 2020 among those ages 0–29. There were 15,835 firearm deaths among this population.

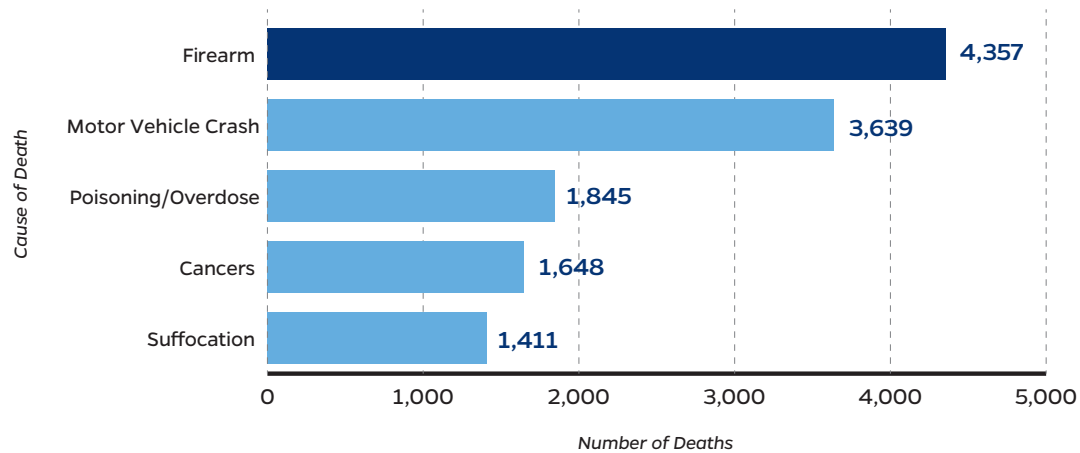
24 Provisional death counts for Coronavirus disease 2019 (COVID-19). (2022). *National Center for Health Statistics*. Available: [https://www.cdc.gov/nchs/nvss/vsrr/covid\\_weekly/index.htm#SexAndAge](https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm#SexAndAge)

25 WISQARS years of potential life lost (YPLL) Report, 1981–2020. (2020). *Centers for Disease Control and Prevention*. Available: <https://wisqars.cdc.gov/ypll>



- Gun violence remains a leading cause of death for young adults in their 20s and 30s. These age groups are particularly impacted by gun homicide. People ages 20–39 years old made up 27% of the population but accounted for 61% of all homicide victims in 2020.

**FIGURE 4: Leading Causes of Death, Ages 1–19**

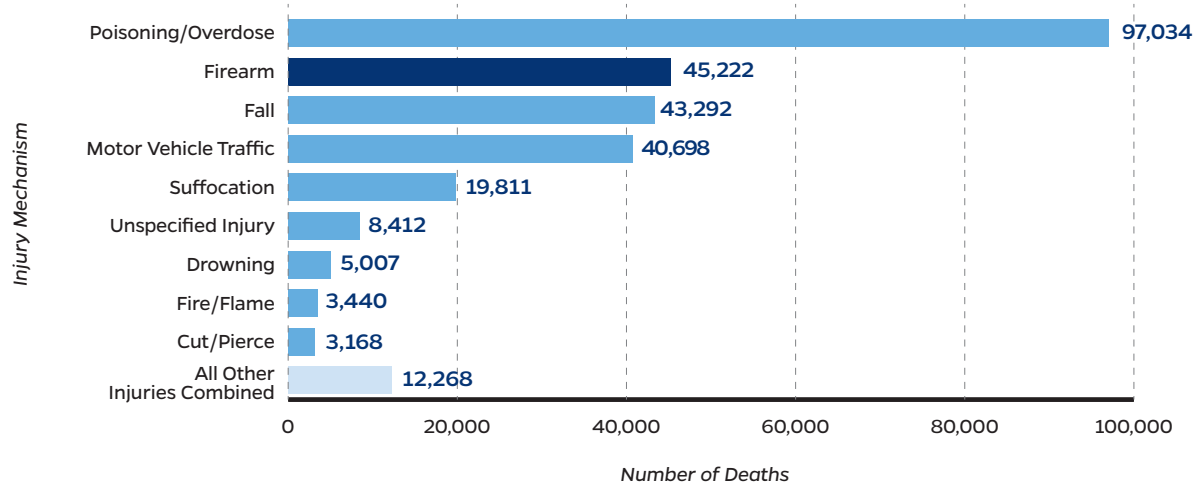


**Note:** We chose not to include infant deaths in our analyses, as infants (under age 1) are at a unique risk for age-specific causes of death, including perinatal period deaths and congenital anomalies. In 2020, 11 infants were killed by firearms. There were 1,711 deaths classified as “all other diseases” making it the fourth leading cause of death behind poisoning/overdose.

## Firearm Fatalities Compared to Other Forms of Fatal Injuries

Injuries make up a substantial burden of premature death in the United States, and among injury mechanisms, firearms are one of the deadliest. In 2020, firearms contributed to the second most injury fatalities in the U.S., surpassed only by poisonings (overdose).

**FIGURE 5: Total Injury Deaths by Mechanism, 2020**



**Note:** The “All other injuries combined” category includes: Natural/environmental (2,118 deaths), Other specified, not elsewhere classified injury (2,002), Other land transport (1,696), Struck by or against (1,173), Other transport (938), Other pedestrian (899), Machinery (530), Other pedal cyclist (454), Hot object/substance (89), Overexertion (20).












## Firearm Fatalities Compared to Car Crashes

The burden of firearm mortality is often compared to car crashes, in part because their numbers are similar. In the last four years, however, for the first time more people died by guns than by car crashes (in 2020, there were 45,222 and 40,698 deaths, respectively). However, there are vast differences in exposure to motor vehicles compared to firearms. The average person spends around eight hours per week in their car.<sup>26</sup> Cars are a part of our daily lives, while, for many people, firearms are not.

By using a comprehensive public health approach to car safety that included vehicle and road design improvements, the United States reduced per-mile driving deaths by nearly 80% from 1967 to 2017 (see figure 6).<sup>27</sup> This public health approach to car safety prevented more than 3.5 million deaths over 50 years.<sup>28</sup> Reducing motor vehicle injuries and their severity has long been a focus of injury prevention policy. While there is more work to do, substantial reductions have been made. A similarly comprehensive approach to gun violence prevention also holds promise.<sup>29,30</sup>

To learn more about this approach, read the Educational Fund to Stop Gun Violence report entitled “[The Public Health Approach to Gun Violence Prevention](#).”

|                                                                                                                              | Preventing Car Crashes                                                                                                               | Preventing Gun Deaths                                                            |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>Research</b>                            | Allocate funds to study the epidemic of motor vehicle crashes.                                                                                                                                                        | Allocate federal funds to research gun violence.                                                                                                                    |
|  <b>Industry Regulations and Oversight</b> | Federal agencies regulate car manufacturers and ensure car safety.<br><br>Cars are monitored and regulated, and recalls are issued for unsafe models. Manufacturers are held liable if they sell a dangerous vehicle. | Allow federal agencies to regulate firearm manufacturers, require gun safety components, and ensure industry accountability and liability for reckless practices.   |
|  <b>Licensing</b>                         | Drivers must submit an application and pass a test to obtain a driver's license.                                                                                                                                      | Require firearm purchasers to submit an application, undergo a background check, get fingerprinted, and take safety education to obtain a license to own a firearm. |
|  <b>Prohibiting Risky People</b>          | Reckless and drunk driving laws ensure that risky individuals do not endanger others on the road.                                                                                                                     | Expand firearm prohibitions to include individuals who are at elevated risk for violence.                                                                           |
|  <b>Age Requirements</b>                  | Age requirements for obtaining a driver's license, including a graduated licensing system (driver's permit) for young drivers.                                                                                        | Enact stronger age requirements for owning or possessing all types of firearms.                                                                                     |

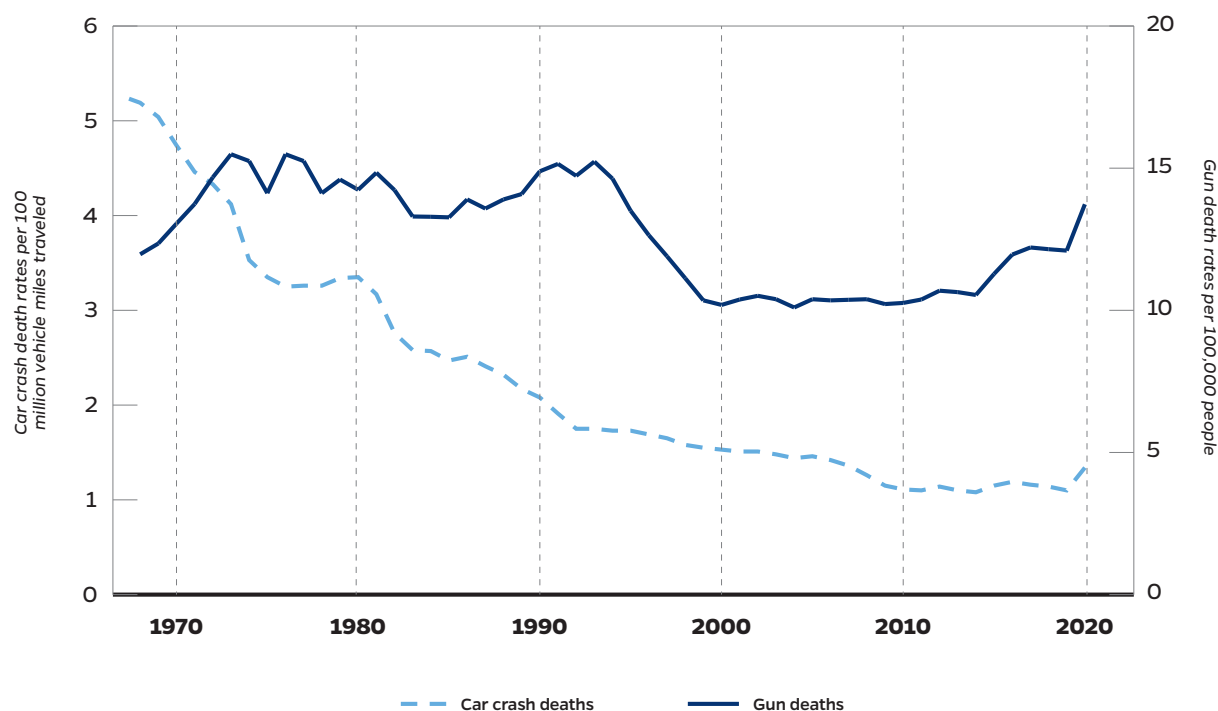
26 How much time do Americans spend behind the wheel? (2017). U.S. Department of Transportation. Available: <https://www.volpe.dot.gov/news/how-much-time-do-americans-spend-behind-wheel>

27 Traffic safety facts: A compilation of motor vehicle crash data. (2020). National Highway Traffic Safety Administration. Available: <https://cdan.nhtsa.gov/tsftables/tsfar.htm>

28 On 50th anniversary of Ralph Nader's 'Unsafe at Any Speed,' safety group reports auto safety regulation has saved 3.5 million lives. (2015). The Nation. Available: [www.thenation.com/article/archive/on-50th-anniversary-of-ralph-naders-unsafe-at-any-speed-safety-group-reports-auto-safety-regulation-has-saved-3-5-million-lives/](http://www.thenation.com/article/archive/on-50th-anniversary-of-ralph-naders-unsafe-at-any-speed-safety-group-reports-auto-safety-regulation-has-saved-3-5-million-lives/)

29 Mozaffarian D, Hemenway D, & Ludwig DS. (2013). Curbing gun violence: Lessons from public health successes. JAMA Network Open

30 The Public Health Approach to Gun Violence Prevention. (2020). Educational Fund to Stop Gun Violence. Available: [www.efsgv.org/PublicHealthApproachToGV](http://www.efsgv.org/PublicHealthApproachToGV)

**FIGURE 6: Comparison of Car Crash Deaths and Gun Deaths Over Time<sup>31</sup>**

**Note:** This graph depicts the gun death rate per 100,000 people (ICD code classifications 8-10) and the car crash fatality rate per 100 million vehicle miles traveled as reported by the National Highway Traffic Safety Administration. Because car use has increased dramatically over the last 50 years, examining the fatality rate per million miles traveled more accurately depicts how much safer cars have become, and as a result, how many fatalities have been prevented.

<sup>31</sup> National Highway Traffic Safety Administration. Traffic safety facts annual report tables. Motor vehicle traffic fatalities and fatality rates. Available: <https://cdan.nhtsa.gov/tsftables/tsfar.htm>



## Gun Deaths by Demographic Groups

To stop gun violence in all its forms, we must implement broad prevention efforts to reduce risk to the population as a whole, together with tailored solutions for high-risk populations. Understanding how risk differs across the population by sex, race/ethnicity, and age, and broken down by gun death intent (homicide and suicide), is critical for designing these interventions.

While nobody is immune from gun violence, some demographic groups are at much higher risk than others:



**By sex:** Males are much more likely to die by all forms of gun violence than females.

- Nearly nine in ten (87%) firearm suicide decedents and 85% of homicide victims were male in 2020.
- Males were five times more likely to be gun homicide victims than females.
- Males were nearly seven times more likely to die by firearm suicide than females.



**By age:** In general, young people are most impacted by gun homicides and elderly people are most impacted by gun suicides.

- Young people ages 15–34 years old are at the highest risk for dying by firearm homicide. They had a gun homicide rate twice the national average and accounted for three out of every five gun homicide victims.
- Elderly people ages 75 and older are at the highest risk for dying by gun suicide. They had a gun suicide rate twice the national average.



**By race/ethnicity:** In general, white people are overrepresented among gun suicide decedents and Black people are disproportionately impacted by gun homicides.

### CDC DEMOGRAPHIC CATEGORIES

#### The Need for More Inclusive Classifications

The demographic categories used by the CDC WONDER database are limited, and we acknowledge that these categorizations are not inclusive of all racial, ethnic, and gender identities. However, because this report is an analysis of CDC WONDER data, we chose to list the categories and labels used by the CDC.

While Hispanic origin is classified by the CDC as an ethnicity, not a race category, we chose to use “Hispanic or Latino” as a distinct category regardless of race, and selected “Not Hispanic or Latino” for each of the race categories. This ensured that individuals were not counted twice in different demographic groups and follows common practice used by the CDC for data analyses.

Ultimately, more nuanced and inclusive data classification is needed to understand and address how gun violence impacts different demographic groups.





People of different races and ethnicities in the U.S. are impacted by gun violence differently. This is a result of social and economic factors that are associated with increased risk of violence. For example, gun homicides are highly concentrated within neighborhoods composed of predominantly Black and Hispanic/Latino residents. These neighborhoods face a host of systemic inequalities—hypersegregation, discrimination, lack of economic opportunities, and under-resourced public services. As a result, young Black and Hispanic/Latino people, particularly males, are disproportionately impacted by gun homicide. In contrast, elderly white men are at increased risk for gun suicide because this demographic is most likely to live in more rural communities with limited availability of mental health services and easy access to firearms.<sup>32,33</sup>

### Black/African American:

- Black people are at highest risk for gun homicide. They were more than 12 times more likely to be a victim of gun homicide than white people.
- Black men were 15 times more likely to die by firearm homicide than white men.
- Black women were more than five times more likely to die by firearm homicide than white women.
- Gun suicides among Black teenagers and young men ages 15–24 doubled from 2011 to 2020.
- Gun suicides among Black teenagers and young women ages 15–24 have increased dramatically over the last decade. The gun suicide rate nearly doubled from 2012 to 2020.<sup>34</sup>

### BLACK PEOPLE ARE DISPROPORTIONATELY IMPACTED BY GUN HOMICIDE

- In 2020, one out of every 1,000 young Black males (15–34) was shot and killed. Young Black males (15–34) are disproportionately impacted—although they represented 2% of the total population in the U.S., they accounted for 38% of all gun homicide fatalities in 2020. Their rate of firearm homicide was almost 21 times higher than white males of the same age group.
- The firearm homicide rate among young Black females (15–34) was seven times higher than white females of the same age group.
- In 2020, there was a 49% increase in Black females who died by gun homicide compared to 2019.



**These racial disparities are largely the result of structural inequities that increase the risk of interpersonal violence.**

### Hispanic/Latino:

- Hispanic/Latino people were twice as likely to die by gun homicide than their white counterparts.
- Hispanic/Latino men were 2.5 times more likely to die by firearm homicide than white men.
- Among Hispanic/Latino teenagers and young women ages 15–24, the gun suicide rate was 2.6 times higher in 2020 than it was in 2011.
- Hispanic/Latino people in New Mexico had a gun violence death rate 2.5 times higher than the rate for Hispanic/Latino people nationally. In fact, the homicide rate was nearly two times higher and the suicide rate was 3.2 times higher than the average homicide and suicide rates for Hispanic/Latino people in 2020.

32 Ibrahim SE, Xiao Y, Bergeron CD, & et al. (2021). Suicide distribution and trends among male older adults in the U.S., 1999–2018. *American Journal of Preventive Medicine*.

33 Steelesmith DL, Fontanella CA, & Campo JV. (2019). Contextual factors associated with county-level suicide rates in the United States, 1999 to 2016. *JAMA Network Open*.

34 We used 2012 instead of 2011 because the gun suicide rate among Black females ages 15–34 was reported as unreliable in 2011 (fewer than 20 fatalities).



### American Indian/Alaska Native:

- American Indian/Alaska Native people were 3.7 times more likely to be a victim of firearm homicide compared to their white counterparts.
- American Indian/Alaska Native women were two times more likely to be firearm homicide victims than white women.
- American Indian/Alaska Native males had the highest firearm suicide rate compared to the other races/ethnicities. While the available data highlight the gun violence many American Indian/Alaska Native people face, the data on this demographic under-report the true number of victims of gun violence. This is a result of incomplete and inconsistent reporting of missing persons especially among females, as well as misclassification of race and ethnicity categories among American Indian/Alaska Native people.<sup>35</sup>

### White:

- White males are overrepresented among gun suicides. White males accounted for 30% of the U.S. population but 72% of all firearm suicide decedents in 2020.
- White men over the age of 34 made up 18% of the U.S. population but accounted for 54% of all gun suicides in 2020. Gun ownership is most common among white men with about half (48%) of all white men reporting that they own a gun.<sup>36</sup>
- White females were overrepresented among female gun suicide decedents. In 2020, white females made up 60% of the female population in the U.S. but accounted for 84% of all female firearm suicide decedents.

### Asian/Pacific Islander:

- Although Asian/Pacific Islander people had the lowest gun death rates of all races and ethnicities, 531 Asian/Pacific Islander people died by firearm in 2020.
- Among young Asian/Pacific Islander males ages 15–24, the gun suicide rate was 2.4 times higher in 2020 than it was in 2011.
- The proportion of suicides carried out by firearm among Asian/Pacific Islander people was far lower than other racial or ethnic groups. For example, in 2020, 25% of all suicides among Asian/Pacific Islander people were by firearm. By comparison, 56% of all suicides among white people were by firearm. The low gun suicide rate among Asian/Pacific Islander people is likely because they have lower rates of gun ownership.
- Anti-Asian hate crimes, sparked by the COVID-19 pandemic, increased by 76% from 2019 to 2020 and another 339% from 2020 to 2021. As discrimination and violence against Asian/Pacific Islander people continues to increase, Asian/Pacific Islander people are buying guns for protection against hate crimes. This is concerning because increased gun ownership is associated with increases in non-fatal firearm injuries and deaths.<sup>37,38,39</sup>

35 Healy J. (2019). In Indian country, a crisis of missing women. And a new one when they're found. *New York Times*. Available: <https://www.nytimes.com/2019/12/25/us/native-women-girls-missing.html>

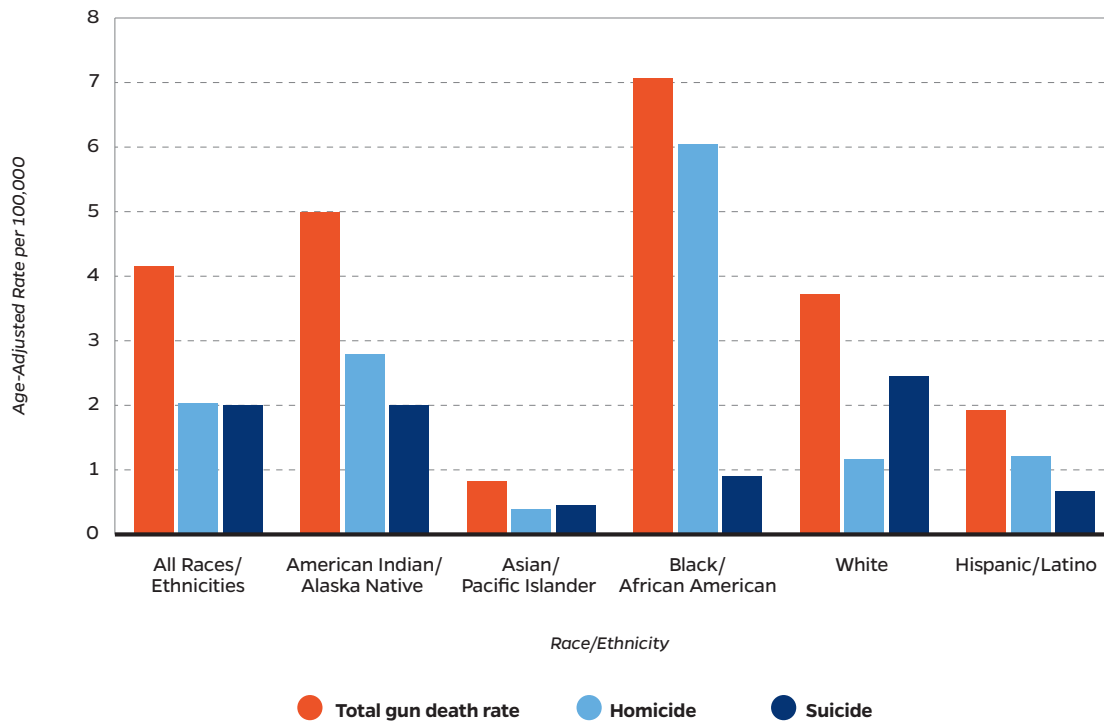
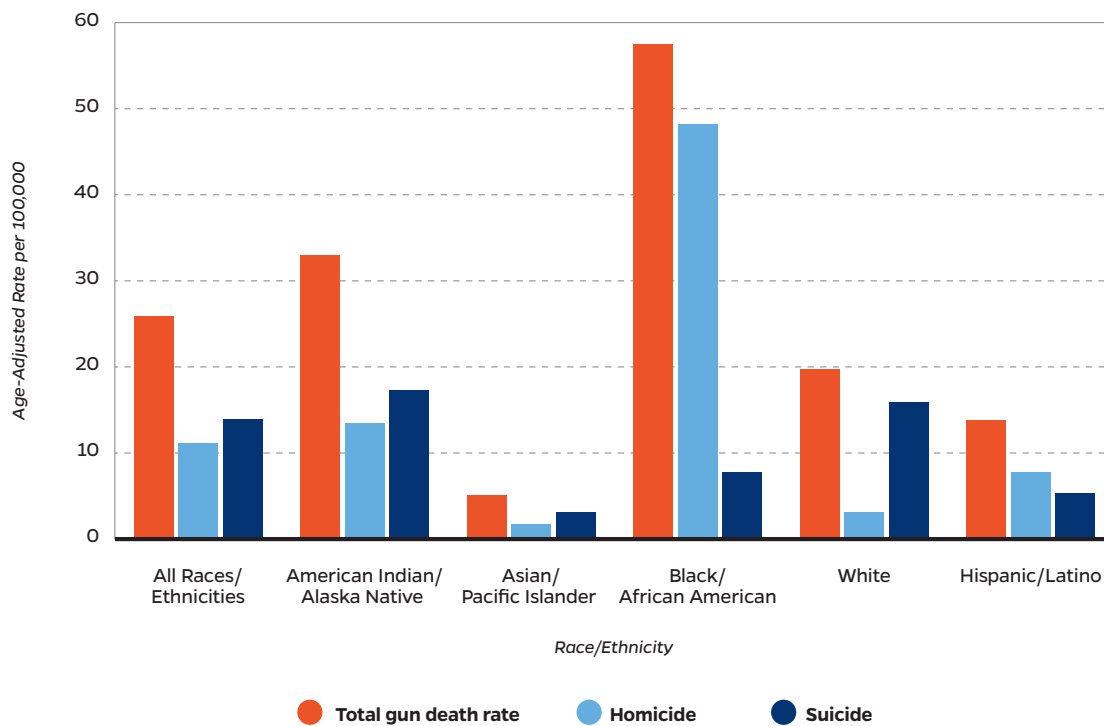
36 Parker K, Horowitz JM, Igielnik R, Oliphant JB, & Brown A. (2017). The demographics of gun ownership. *Pew Research Center*. Available: [www.pewresearch.org/social-trends/2017/06/22/the-demographics-of-gun-ownership/](http://www.pewresearch.org/social-trends/2017/06/22/the-demographics-of-gun-ownership/)

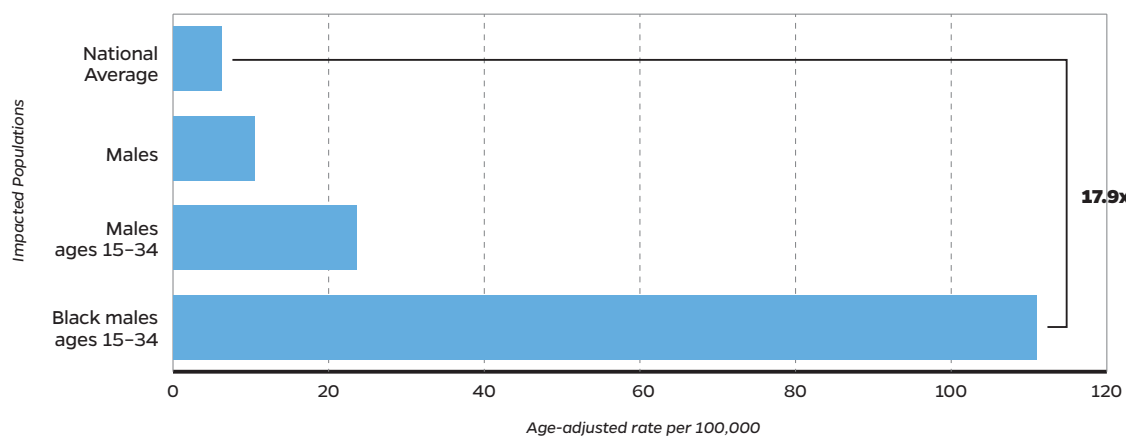
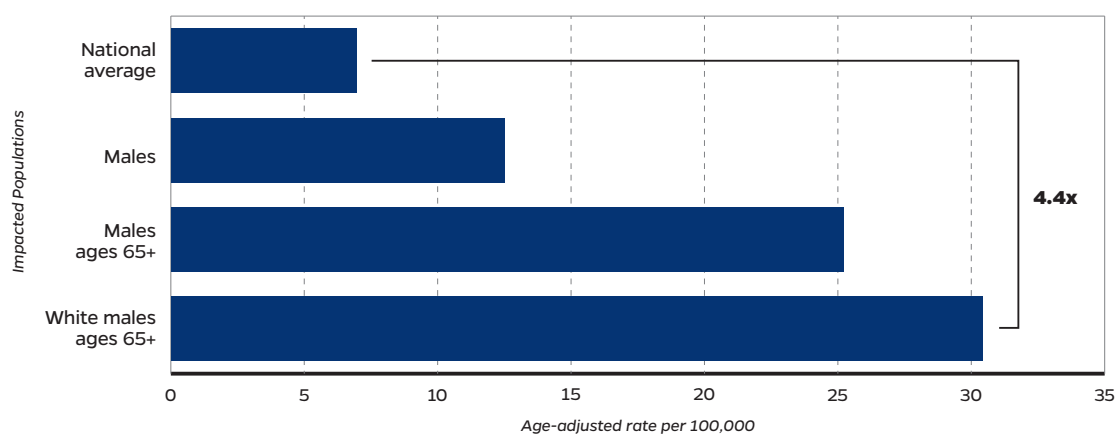
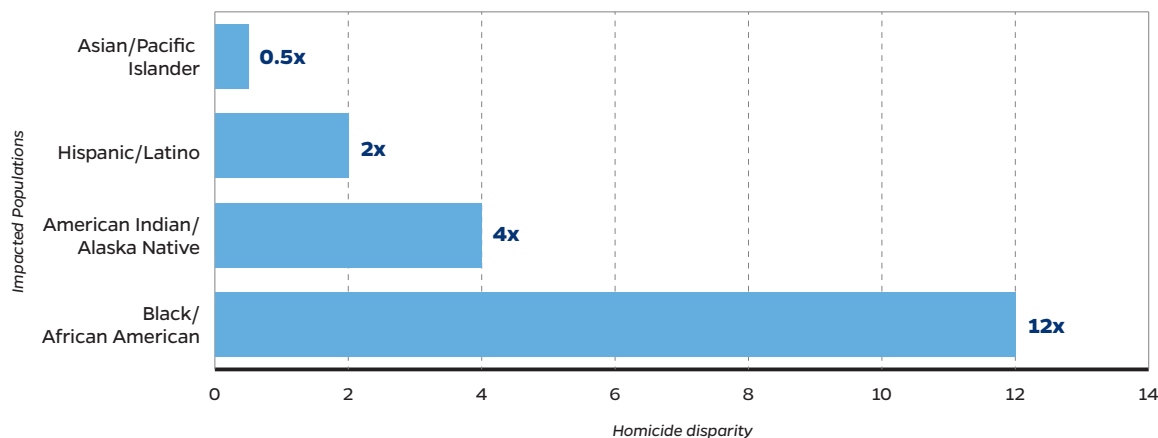
37 Fact sheet: Anti-Asian prejudice March 2021. (2021). *Center for the Study of Hate & Extremism*. Available: [www.csusb.edu/sites/default/files/FACT%20SHEET-%20Anti-Asian%20Hate%202020%20rev%203.21.21.pdf](http://www.csusb.edu/sites/default/files/FACT%20SHEET-%20Anti-Asian%20Hate%202020%20rev%203.21.21.pdf)

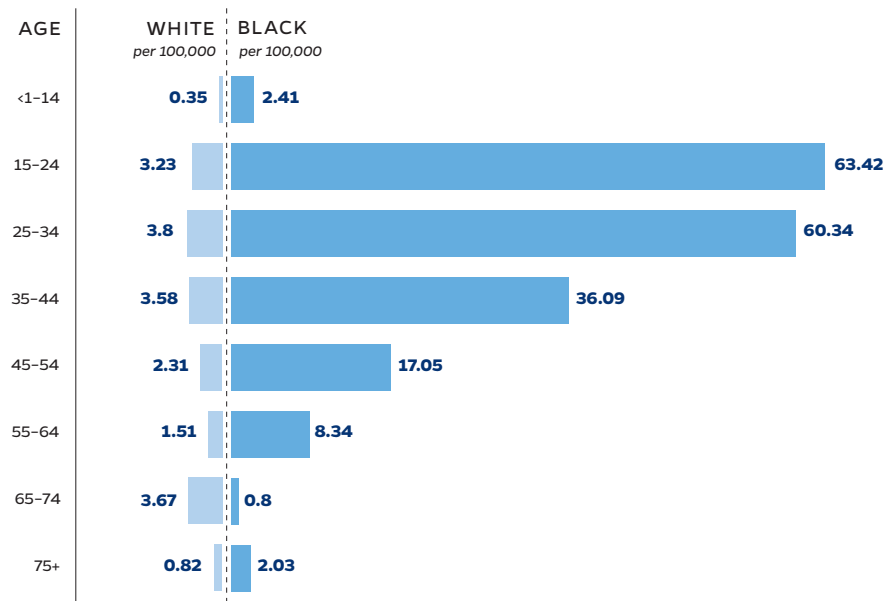
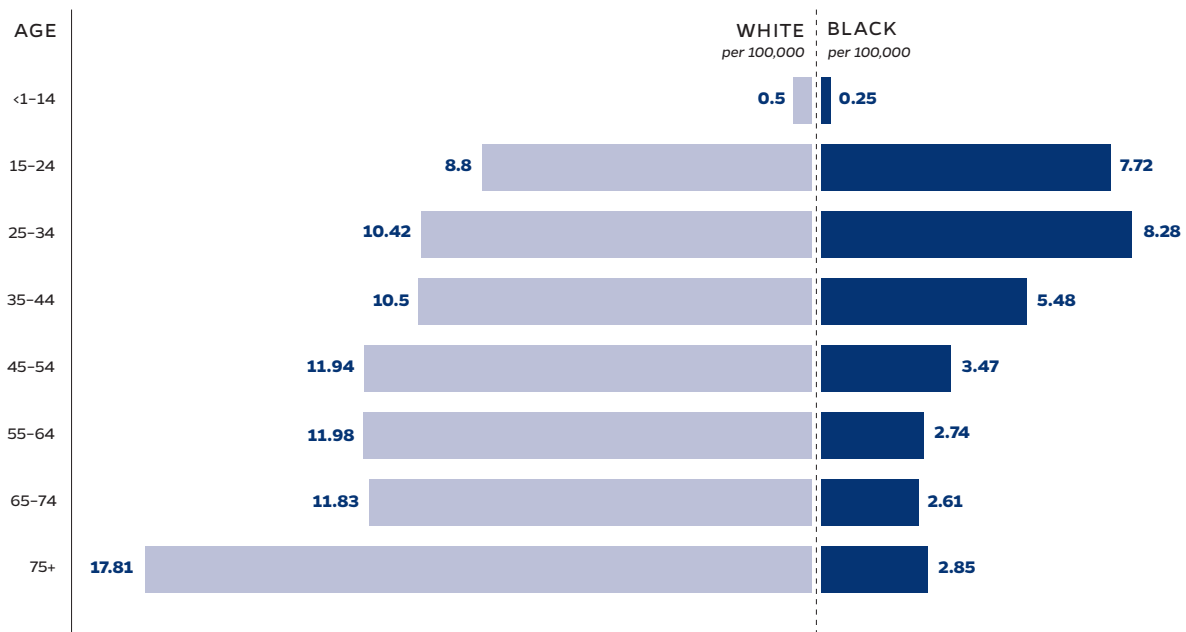
38 Choi J. (2022). Anti-Asian hate crimes in US spiked 339 percent in 2021: Report. *The Hill*. Available: <https://thehill.com/blogs/blog-briefing-room/news/592191-anti-asian-hate-crimes-in-us-spiked-339-percent-in-2021-report>

39 How the firearms industry markets guns to Asian Americans. (2021). *Violence Policy Center*. Available: <https://vpc.org/studies/AAP12021.pdf>



**FIGURE 7: Female Gun Death Rates by Race/Ethnicity, 2020****FIGURE 8: Male Gun Death Rates by Race/Ethnicity, 2020**

**FIGURE 9: Firearm Homicide Rates by Disproportionately Impacted Populations, 2020****FIGURE 10: Firearm Suicide Rates by Disproportionately Impacted Populations, 2020****FIGURE 11: Racial/Ethnic Disparities in Gun Homicide: Likelihood of Homicide Victimization Relative to White Population**

**FIGURE 12: Difference in Gun Homicide Rates by Race and Age, 2020****FIGURE 13: Difference in Gun Suicide Rates by Race and Age, 2020**



## Gun Violence Rates Across States

Gun death rates vary widely between states. For example, in 2020, Hawaii, the state with the lowest gun death rate, had a rate eight times lower than Mississippi, the state with the highest gun death rate. A wide number of factors influence state level gun death rates including demographics, socio-economic factors, and gun policies. In many rural states, gun suicides make up the largest proportion of gun deaths, while in more urban states, gun homicides generally account for a larger proportion of gun deaths.

In general, the states with the highest gun death rates tend to be rural states in the South or West with weaker gun laws. While the media often focuses on gun violence in cities in states like New York, Pennsylvania, Maryland, and Illinois, all of these states had gun death rates lower than the national average. New York, for example, had a rate 2.5 times lower than the national rate. Many of the states with the lowest gun death rates have strong gun violence prevention policies. **For example, all five of the states with the lowest gun death rates had both: 1) a firearm purchaser licensing law or a purchaser waiting period, and 2) an extreme risk protection order (ERPO) law. Conversely, all five of the states with the highest gun death rates had stand your ground legislation, and three of the five had permitless carry laws (a fourth state, Alabama, passed permitless carry in 2022).**

The five states with the lowest overall gun death rates in 2020 were:

| State         | Purchaser Licensing | ERPO |
|---------------|---------------------|------|
| Hawaii        | ●                   | ●    |
| Massachusetts | ●                   | ●    |
| New Jersey    | ●                   | ●    |
| Rhode Island  | ● <sup>40</sup>     | ●    |
| New York      | ●                   | ●    |

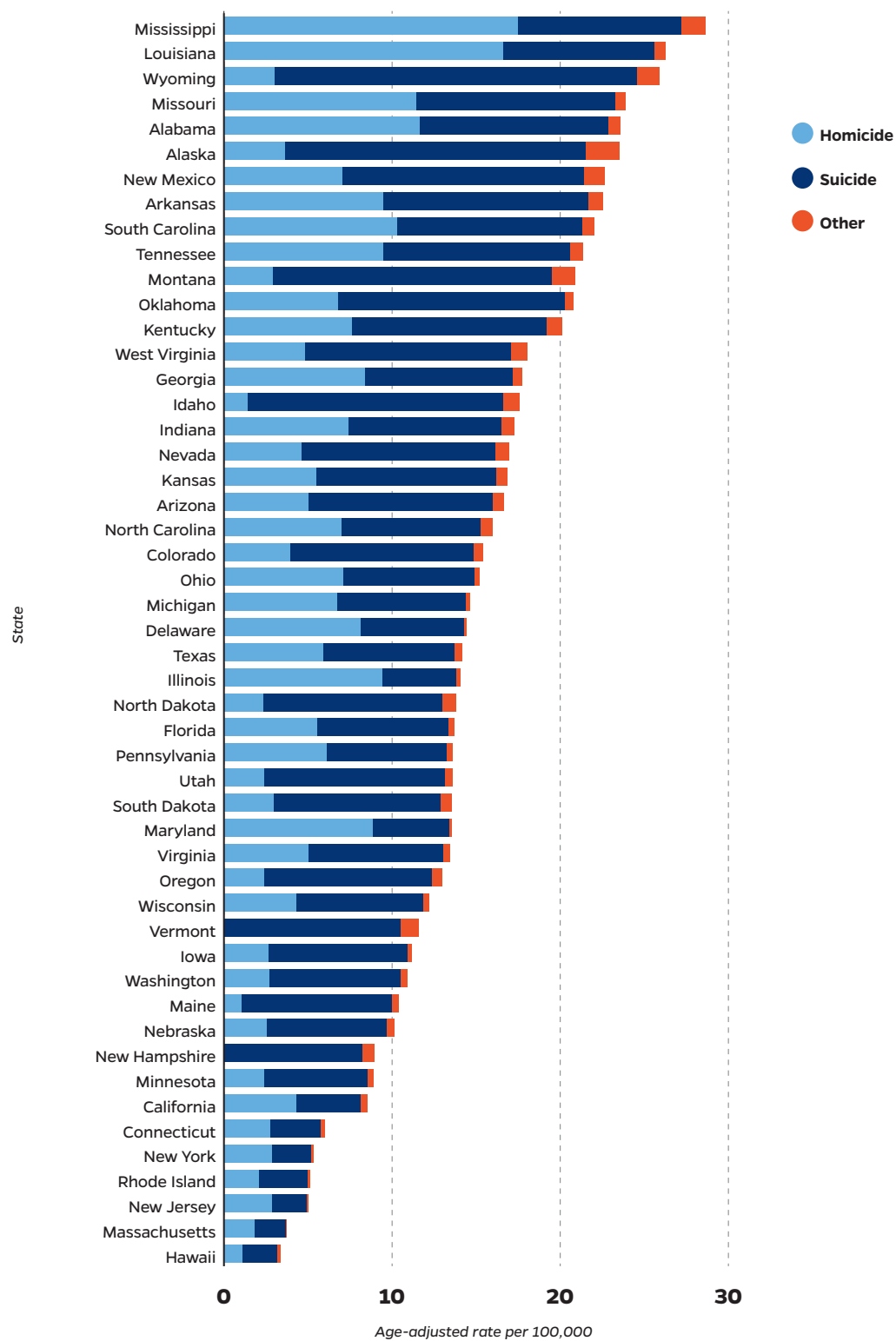
The five states with the highest overall gun death rates in 2020 were:

| State       | Permitless Carry | Stand Your Ground |
|-------------|------------------|-------------------|
| Mississippi | ●                | ●                 |
| Louisiana   |                  | ●                 |
| Wyoming     | ●                | ●                 |
| Missouri    | ●                | ●                 |
| Alabama     | ● <sup>40</sup>  | ●                 |

Figure 14 displays state gun death rates in 2020, ranking the gun death rates from lowest to highest. Additionally, it shows the proportion of deaths attributed to homicide, suicide, and other intents (legal intervention<sup>41</sup>, unintentional, and unclassified).

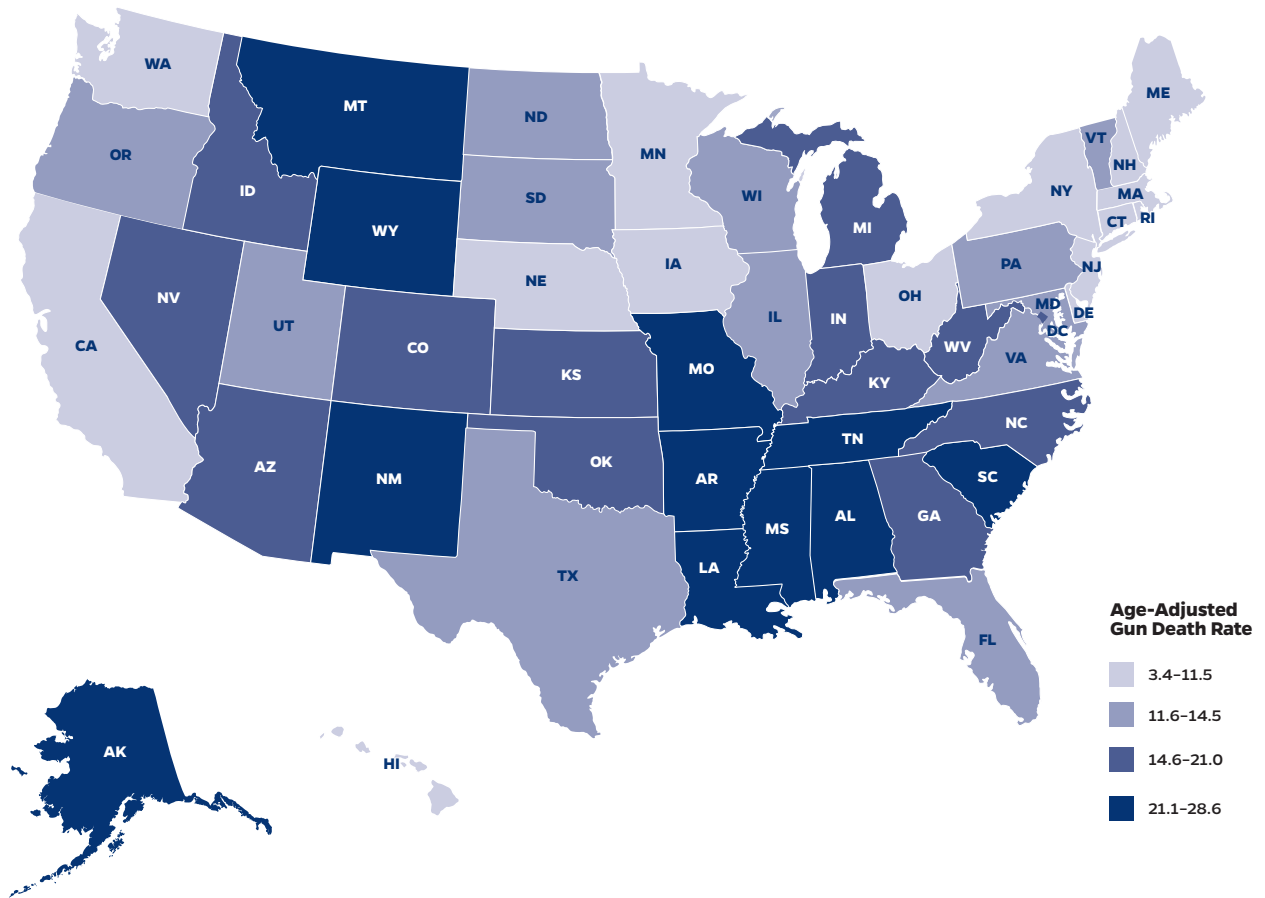
40 Rhode Island has a firearm purchaser waiting period but does not have a full firearm purchaser licensing law. Alabama passed a permitless carry law in 2022.

41 The CDC data classification "legal intervention" under-counts police-involved gun fatalities. To address this gap, media sources like the Washington Post's Fatal Force database have tracked police-involved shootings in recent years, reporting that 1,021 people were shot and killed by police in 2020.

**FIGURE 14: Gun Death Rates by State, Ranked Highest to Lowest, 2020**

**Note:** The total number of homicide deaths in New Hampshire and Vermont was less than 10 and thus repressed by CDC. Homicide deaths are thus listed as “other gun death rate” for these two states.



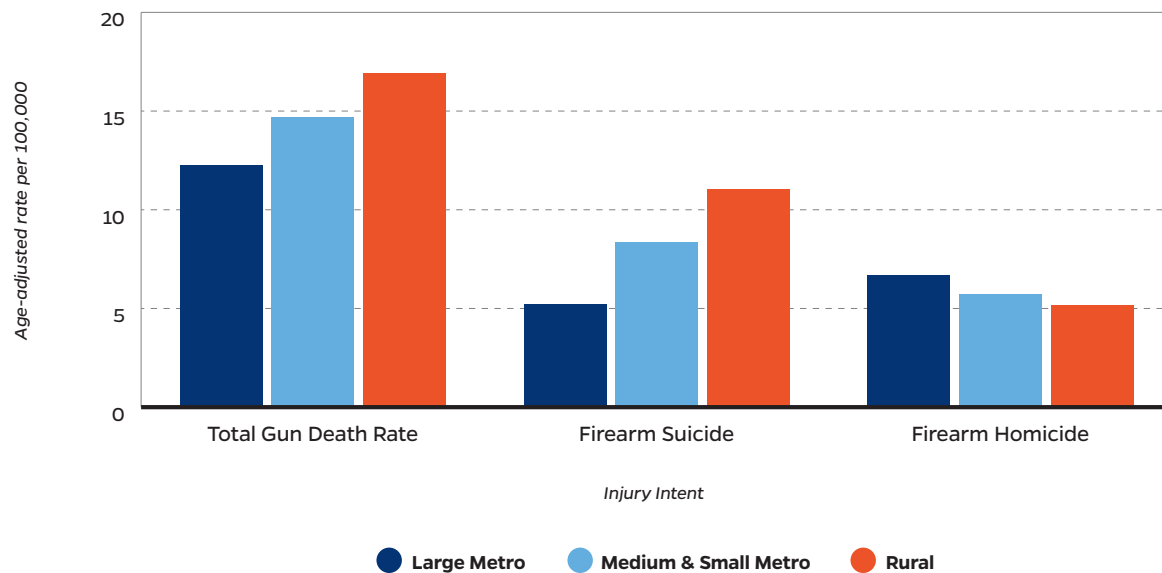
**FIGURE 15: Gun Death Rates by State, 2020**



## A Closer Look: Gun Violence by Intent Across Counties and Urbanization Levels

While the narratives around gun violence tend to focus on cities like Chicago, Baltimore, or Philadelphia, all areas in the United States—urban, suburban, and rural—are impacted by gun violence. The CDC’s 2020 gun fatality data clustered by county urbanization level (large metro, small & medium metro, and rural) highlight this reality. As illustrated in figure 16, the rural counties in the U.S. had the highest gun death rates in 2020, a rate 1.4 times higher than the most urban counties (large metro). This difference is driven by gun suicides, which make up the majority of gun deaths and disproportionately impact rural people. **While different communities experience different types of gun violence, it’s important to recognize how gun violence in the U.S. is not uniquely an “urban” or a “rural” issue.**

**FIGURE 16: Gun Death Rates by Urbanization, 2020**



**Note:** The 2013 urban classifications were combined for simplification. Large Central Metro and Large Fringe Metro classifications were combined as “Large Metro.” Medium Metro and Small Metro classifications were combined as “Medium & Small Metro.” Lastly, Micropolitan and Noncore classifications were combined as “Rural.”

### FIREARM HOMICIDES

Contrary to popular belief, gun homicide rates were relatively the same across urbanization levels in 2020.

- The most urban counties in the U.S. had only a slightly higher gun homicide rate in 2020 than rural counties, and many rural counties had homicide rates far higher than large cities.
- Thirteen of the 20 counties with the highest rates of firearm homicides from 2016 to 2020 were rural.
- Phillips County, Arkansas, with only 22,000 residents, had the nation’s highest homicide rate. Meanwhile, Cook County, Illinois (Chicago), which often captures the media’s attention around violence, had the 79th highest gun homicide rate.



While high rates in sparsely-populated counties represent small total numbers of deaths, these rates are alarmingly high and indicate a significant burden on many communities across the U.S., not just in cities. Policy solutions are needed to address the crisis of gun homicides in our biggest cities as well as in our most rural communities.

## CONCENTRATED FIREARM VIOLENCE



This urbanization data illustrate that both rural and urban communities are impacted by gun violence, yet this does not mean that all communities are equally impacted. In fact, gun homicide tends to occur in highly concentrated areas. One analysis, for instance, found that in 2015, 26% of all firearm homicides in the United States occurred in census tracts that contained only 1.5% of the population.<sup>42</sup>

The CDC does not provide census tract gun fatality data and therefore our analysis relies on the county level as the smallest geographic area to analyze. Because county size varies significantly within and between states, data at this level does not consistently portray the most accurate representation of the local areas most impacted by gun violence. Data at the census tract level is needed to truly understand concentrations of gun violence.

Despite this, even an examination of 2020 county level data can illustrate geographic disparities of firearm victimization in the U.S. For example, in Maryland from 2016–2020, someone living in Baltimore City was 30 times more likely to die by firearm than someone living 40 miles away in Montgomery County.<sup>43</sup>

Geographic disparities in gun victimization help to shed light on the upstream factors that often contribute to violence, including poverty, lack of opportunity, and concentrated disadvantage. The example above illustrates this, as Montgomery County is among the wealthiest counties in the country based on the median household income; and in contrast, one in five residents in Baltimore City live in poverty.<sup>44,45</sup> Understanding the geographic disparities of gun violence, and how it concentrates in our most disadvantaged communities, is vital in developing effective policy solutions.

## FIREARM SUICIDES

Firearm suicide rates are closely related to urbanization. The more rural a county is, the higher the firearm suicide rate is.

- In 2020, rural counties had the highest rate of firearm suicide, 2.1 times higher than the most urban counties, where the firearm suicide rate was lowest.
- Seventeen out of the 20 counties with the highest gun suicide rates from 2016 to 2020 were rural counties.

Rural counties tend to have limited access to mental health services, high rates of alcohol use, and, importantly, the highest rates of gun ownership. All of these factors contribute to high rates of firearm suicide.<sup>46</sup>

42 Aufrichtig A, Beckett L, Diehm J, & Lartey J. (2017). Want to fix gun violence in America? Go local. *The Guardian*. Available: <https://www.theguardian.com/us-news/ng-interactive/2017/jan/09/special-report-fixing-gun-violence-in-america>

43 Baltimore City is an independent city and thus classified by the United States Census Bureau as a county equivalent.

44 QuickFacts: Montgomery County, Maryland; Baltimore city, Maryland. (2021). *United States Census Bureau*. Available: <https://www.census.gov/quickfacts/fact/table/montgomerycountymaryland,baltimorecitymaryland/PST045221>

45 Income in the past 12 months (in 2019 inflation-adjusted dollars). (2019). *United States Census Bureau*. Available: <https://data.census.gov/cedsci/table?t=Income%20and%20Poverty&g=01000000US%240500000&tid=ACST1Y2019.S1902>

46 Steelesmith DL, Fontanella CA, & Campo JV. (2019). Contextual factors associated with county-level suicide rates in the United States, 1999 to 2016. *JAMA Network Open*.



Limited access to mental health care such as healthcare provider shortages, unreliable transportation, being uninsured or underinsured, poverty, and mental health stigma may be more of a concern for those living in rural areas and small communities, impeding help-seeking. In addition, consuming alcohol is considered a proximal risk factor for suicidal behavior due to its variety of effects on the body, including affecting behaviors and moods.<sup>47</sup> Individuals with a diagnosis of alcohol use disorder or dependence are at a 10 times greater risk for suicide compared to the general population, and suicide is a leading cause of death among people who misuse alcohol and drugs.<sup>48</sup>

While social, health, and economic disparities affect suicide rates in rural communities, the primary driver of the difference in suicide rates between rural and urban communities is gun access. Gun ownership is much more common among rural areas as nearly six in ten people have a gun in their household (compared to three in ten people in urban areas), allowing for easier accessibility and exposure to guns, and resulting in higher firearm suicide rates.<sup>49,50</sup>

The high rates of these risk factors within rural communities coupled with high rates of gun ownership, make rural people particularly at risk for firearm suicide. Effective solutions to address our nation's high gun suicide rate should be aimed at supporting rural communities to address these disparities as well as easy access to firearms by those in crisis.

## Conclusion

In 2020, the outbreak of COVID-19 exacerbated the ongoing gun violence epidemic impacting individuals, families, and communities. Gun violence affects all of us; it remains the leading cause of death for young people, and it disproportionately impacts both communities of color and those in the most rural communities. Fortunately, this crisis of gun violence is preventable. We must call for a comprehensive public health approach to address this crisis, pushing for evidence-based and equitable gun violence solutions.

47 Substance use and suicide: A nexus requiring a public health approach. (2016). *Substance Abuse and Mental Health Services Administration*. Available: <https://store.samhsa.gov/sites/default/files/d7/priv/sma16-4935.pdf>

48 Ibid.

49 Igielnik R. (2017). Rural and urban gun owners have different experiences, views on gun policy. *Pew Research Center*.

50 Nestadt PS, Triplett P, Fowler DR, & Mojtabai R. (2017). Urban-rural differences in suicide in the state of Maryland: The role of firearms. *American Journal of Public Health*.

## Appendix 1: Gun Deaths, 2020

|                            | Gun deaths total, 2020 | Average daily gun deaths, 2020 | Gun death rate (age-adjusted) per 100,000, 2020 |
|----------------------------|------------------------|--------------------------------|-------------------------------------------------|
| <b>Homicide</b>            | 19,384                 | 53                             | 6.19                                            |
| <b>Suicide</b>             | 24,292                 | 66                             | 6.95                                            |
| <b>Unintentional</b>       | 535                    | 2                              | 0.17                                            |
| <b>Legal Intervention*</b> | 611                    | 2                              | 0.20                                            |
| <b>Undetermined Intent</b> | 400                    | 1                              | 0.12                                            |
| <b>Total</b>               | 45,222                 | 124                            | 13.62                                           |

## Appendix 2: Gun Deaths Among Children and Teens, 2020

|                            | Child and teen gun deaths total, 2020 | Average weekly child and teen gun deaths, 2020 | Child and teen gun death rate (age-adjusted) per 100,000, 2020 |
|----------------------------|---------------------------------------|------------------------------------------------|----------------------------------------------------------------|
| <b>Homicide</b>            | 2,811                                 | 54                                             | 3.46                                                           |
| <b>Suicide</b>             | 1,293                                 | 25                                             | 1.59                                                           |
| <b>Unintentional</b>       | 149                                   | 3                                              | 0.18                                                           |
| <b>Legal Intervention*</b> | 25                                    | <1                                             | 0.03                                                           |
| <b>Undetermined Intent</b> | 90                                    | 2                                              | 0.11                                                           |
| <b>Total</b>               | 4,368                                 | 84                                             | 5.38                                                           |

## Appendix 3: Average Number of Gun Deaths, 2016–2020

|                            | Average annual gun deaths, 2016–2020 | Average daily gun deaths, 2016–2020 | Average gun death rate (age-adjusted) per 100,000, 2016–2020 |
|----------------------------|--------------------------------------|-------------------------------------|--------------------------------------------------------------|
| <b>Homicide</b>            | 15,343                               | 42                                  | 4.91                                                         |
| <b>Suicide</b>             | 23,891                               | 65                                  | 6.92                                                         |
| <b>Unintentional</b>       | 492                                  | 1                                   | 0.15                                                         |
| <b>Legal Intervention*</b> | 547                                  | 1                                   | 0.17                                                         |
| <b>Undetermined Intent</b> | 347                                  | 1                                   | 0.10                                                         |
| <b>Total</b>               | 40,620                               | 111                                 | 12.23                                                        |



#### Appendix 4: Average Number of Gun Deaths Among Children and Teens, 2016–2020

|                            | Average annual child and teen gun deaths, 2016–2020 | Average weekly child and teen gun deaths, 2016–2020 | Average child and teen gun death rate (age-adjusted) per 100,000, 2016–2020 |
|----------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------|
| <b>Homicide</b>            | 2,088                                               | 40                                                  | 2.55                                                                        |
| <b>Suicide</b>             | 1,231                                               | 24                                                  | 1.50                                                                        |
| <b>Unintentional</b>       | 125                                                 | 2                                                   | 0.15                                                                        |
| <b>Legal Intervention*</b> | 26                                                  | <1                                                  | 0.03                                                                        |
| <b>Undetermined Intent</b> | 70                                                  | 1                                                   | 0.09                                                                        |
| <b>Total</b>               | 3,540                                               | 68                                                  | 4.33                                                                        |

#### Appendix 5: United States Gun Deaths by Intent, 2011–2020

|             | Total Gun Deaths | Firearm Suicide Deaths | Firearm Homicide Deaths | Unintentional Gun Deaths | Legal Intervention Deaths* | Gun Deaths by Undetermined Intent |
|-------------|------------------|------------------------|-------------------------|--------------------------|----------------------------|-----------------------------------|
| <b>2011</b> | 32,351           | 19,990                 | 11,068                  | 591                      | 454                        | 248                               |
| <b>2012</b> | 33,563           | 20,666                 | 11,622                  | 548                      | 471                        | 256                               |
| <b>2013</b> | 33,636           | 21,175                 | 11,208                  | 505                      | 467                        | 281                               |
| <b>2014</b> | 33,594           | 21,386                 | 11,008                  | 461                      | 464                        | 275                               |
| <b>2015</b> | 36,252           | 22,018                 | 12,979                  | 489                      | 484                        | 282                               |
| <b>2016</b> | 38,658           | 22,938                 | 14,415                  | 495                      | 510                        | 300                               |
| <b>2017</b> | 39,773           | 23,854                 | 14,542                  | 486                      | 553                        | 338                               |
| <b>2018</b> | 39,740           | 24,432                 | 13,958                  | 458                      | 539                        | 353                               |
| <b>2019</b> | 39,707           | 23,941                 | 14,414                  | 486                      | 520                        | 346                               |
| <b>2020</b> | 45,222           | 24,292                 | 19,384                  | 535                      | 611                        | 400                               |

**Note:** The CDC data classification “legal intervention” under-counts police-involved gun fatalities. To address this gap, media sources like the Washington Post’s Fatal Force database have tracked police-involved shootings in recent years, reporting that 1,021 people were shot and killed by police in 2020.

## Appendix 6: United States Gun Death Rates, by Intent, 2011–2020

|             | Gun Death Rate<br>(age-adjusted)<br>per 100,000 | Firearm<br>Suicide Rate<br>(age-adjusted)<br>per 100,000 | Firearm<br>Homicide Rate<br>(age-adjusted)<br>per 100,000 | Unintentional<br>Gun Death Rate<br>(age-adjusted)<br>per 100,000 |
|-------------|-------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------|
| <b>2011</b> | 10.22                                           | 6.2                                                      | 3.6                                                       | 0.2                                                              |
| <b>2012</b> | 10.51                                           | 6.31                                                     | 3.79                                                      | 0.19                                                             |
| <b>2013</b> | 10.43                                           | 6.41                                                     | 3.63                                                      | 0.16                                                             |
| <b>2014</b> | 10.31                                           | 6.37                                                     | 3.53                                                      | 0.14                                                             |
| <b>2015</b> | 11.06                                           | 6.51                                                     | 4.17                                                      | 0.15                                                             |
| <b>2016</b> | 11.78                                           | 6.75                                                     | 4.63                                                      | 0.17                                                             |
| <b>2017</b> | 11.99                                           | 6.93                                                     | 4.65                                                      | 0.16                                                             |
| <b>2018</b> | 11.9                                            | 7.04                                                     | 4.44                                                      | 0.14                                                             |
| <b>2019</b> | 11.86                                           | 6.84                                                     | 4.59                                                      | 0.16                                                             |
| <b>2020</b> | 13.62                                           | 6.95                                                     | 6.19                                                      | 0.17                                                             |

## Appendix 7: United States Gun Death Numbers by Demographic Groups, 2020

|                                                 | Total Gun Deaths | Firearm Homicide Deaths | Firearm Suicide Deaths |
|-------------------------------------------------|------------------|-------------------------|------------------------|
| <b>Female</b>                                   | 6,241            | 2,956                   | 2,904                  |
| American Indian or Alaska Native (non-Hispanic) | 72               | 38                      | 31                     |
| Asian or Pacific Islander (non-Hispanic)        | 96               | 44                      | 48                     |
| Black (non-Hispanic)                            | 1,589            | 1,356                   | 206                    |
| White (non-Hispanic)                            | 3,870            | 1,141                   | 2,619                  |
| Hispanic or Latino (any race)                   | 608              | 375                     | 204                    |
| <b>Male</b>                                     | 38,981           | 16,428                  | 19,551                 |
| American Indian or Alaska Native (non-Hispanic) | 450              | 183                     | 236                    |
| Asian or Pacific Islander (non-Hispanic)        | 531              | 183                     | 326                    |
| Black (non-Hispanic)                            | 12,530           | 10,548                  | 1,646                  |
| White (non-Hispanic)                            | 21,000           | 2,911                   | 17,343                 |
| Hispanic or Latino (any race)                   | 4,395            | 2,572                   | 1,586                  |

## Appendix 8: United States Gun Death Rates by Demographic Groups, 2020

|                                                    | Total Gun Death<br>Rate (age-adjusted)<br>per 100,000 | Firearm Homicide<br>Rate (age-adjusted)<br>per 100,000 | Firearm Suicide<br>Rate (age-adjusted)<br>per 100,000 |
|----------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------|
| <b>Female (all races/<br/>ethnicities)</b>         | 3.77                                                  | 1.86                                                   | 1.79                                                  |
| American Indian or Alaska<br>Native (non-Hispanic) | 5.00                                                  | 2.79                                                   | 2.00                                                  |
| Asian or Pacific Islander<br>(non-Hispanic)        | 0.83                                                  | 0.39                                                   | 0.45                                                  |
| Black (non-Hispanic)                               | 7.07                                                  | 6.05                                                   | 0.90                                                  |
| White (non-Hispanic)                               | 3.72                                                  | 1.17                                                   | 2.45                                                  |
| Hispanic or Latino (any<br>race)                   | 1.93                                                  | 1.21                                                   | 0.67                                                  |
| <b>Male (all races/<br/>ethnicities)</b>           | 23.80                                                 | 10.41                                                  | 12.50                                                 |
| American Indian or Alaska<br>Native (non-Hispanic) | 32.90                                                 | 13.47                                                  | 17.28                                                 |
| Asian or Pacific Islander<br>(non-Hispanic)        | 5.04                                                  | 1.71                                                   | 3.13                                                  |
| Black (non-Hispanic)                               | 57.49                                                 | 48.16                                                  | 7.78                                                  |
| White (non-Hispanic)                               | 19.76                                                 | 3.15                                                   | 15.84                                                 |
| Hispanic or Latino (any<br>race)                   | 13.78                                                 | 7.76                                                   | 5.29                                                  |

## Appendix 9: State Variations, 2020

| State                | Ranking, Highest to Lowest Total Gun Death Rate | Total Gun Deaths | Total Gun Death Rate (age-adjusted) per 100,000 | Total Gun Deaths Among Children and Teens (Ages 0-19) | Child and Teen Gun Death Rate per 100,000 | Firearm Homicide Deaths | Firearm Homicide Rate (age-adjusted) per 100,000 | Ranking, Highest to Lowest Firearm Homicide Rate | Firearm Suicide Deaths | Firearm Suicide Rate (age-adjusted) per 100,000 | Ranking, Highest to Lowest Firearm Suicide Rate |
|----------------------|-------------------------------------------------|------------------|-------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------|--------------------------------------------------|--------------------------------------------------|------------------------|-------------------------------------------------|-------------------------------------------------|
| Alabama              | 5                                               | 1,141            | 23.58                                           | 96                                                    | 7.92                                      | 564                     | 12.36                                            | 4                                                | 542                    | 10.55                                           | 14                                              |
| Alaska               | 6                                               | 175              | 23.52                                           | 22                                                    | 11.27                                     | 27                      | 3.75                                             | 31                                               | 133                    | 17.78                                           | 2                                               |
| Arizona              | 21                                              | 1,265            | 16.67                                           | 101                                                   | 5.48                                      | 382                     | 5.48                                             | 25                                               | 830                    | 10.42                                           | 17                                              |
| Arkansas             | 8                                               | 673              | 22.55                                           | 77                                                    | 9.91                                      | 282                     | 10.06                                            | 7                                                | 364                    | 11.54                                           | 7                                               |
| California           | 45                                              | 3,449            | 8.54                                            | 301                                                   | 3.07                                      | 1,732                   | 4.49                                             | 29                                               | 1,552                  | 3.63                                            | 44                                              |
| Colorado             | 23                                              | 922              | 15.41                                           | 82                                                    | 5.87                                      | 235                     | 4.07                                             | 30                                               | 654                    | 10.77                                           | 13                                              |
| Connecticut          | 46                                              | 219              | 6.01                                            | 18                                                    | Unreliable                                | 101                     | 3.06                                             | 35                                               | 109                    | 2.67                                            | 46                                              |
| Delaware             | 26                                              | 135              | 14.4                                            | 15                                                    | Unreliable                                | 76                      | 8.67                                             | 11                                               | 58                     | 5.64                                            | 41                                              |
| District of Columbia | 10                                              | 167              | 21.94                                           | 25                                                    | 16.63                                     | 157                     | 20.35                                            | 1                                                | Suppressed             | Suppressed                                      | *                                               |
| Florida              | 30                                              | 3,041            | 13.71                                           | 251                                                   | 5.31                                      | 1,227                   | 6.35                                             | 21                                               | 1,730                  | 6.94                                            | 38                                              |
| Georgia              | 16                                              | 1,897            | 17.71                                           | 209                                                   | 7.48                                      | 899                     | 8.63                                             | 12                                               | 939                    | 8.52                                            | 26                                              |
| Hawaii               | 51                                              | 50               | 3.37                                            | Suppressed                                            | Suppressed                                | 16                      | Unreliable                                       | *                                                | 31                     | 2.05                                            | 48                                              |
| Idaho                | 17                                              | 321              | 17.57                                           | 26                                                    | 5.21                                      | 26                      | 1.55                                             | 45                                               | 277                    | 15.07                                           | 4                                               |
| Illinois             | 28                                              | 1,745            | 14.07                                           | 196                                                   | 6.33                                      | 1,167                   | 9.74                                             | 9                                                | 543                    | 4.05                                            | 43                                              |
| Indiana              | 18                                              | 1,159            | 17.28                                           | 155                                                   | 8.86                                      | 496                     | 7.76                                             | 14                                               | 609                    | 8.65                                            | 25                                              |
| Iowa                 | 39                                              | 351              | 11.16                                           | 31                                                    | 3.81                                      | 83                      | 2.85                                             | 37                                               | 260                    | 8.03                                            | 29                                              |
| Kansas               | 20                                              | 494              | 16.86                                           | 70                                                    | 9.01                                      | 160                     | 5.79                                             | 23                                               | 314                    | 10.4                                            | 18                                              |
| Kentucky             | 14                                              | 902              | 20.12                                           | 97                                                    | 8.70                                      | 341                     | 8.11                                             | 13                                               | 518                    | 11.03                                           | 11                                              |
| Louisiana            | 2                                               | 1,183            | 26.26                                           | 150                                                   | 12.56                                     | 747                     | 17.1                                             | 3                                                | 406                    | 8.52                                            | 27                                              |
| Maine                | 41                                              | 153              | 10.39                                           | Suppressed                                            | Suppressed                                | 15                      | Unreliable                                       | *                                                | 132                    | 8.84                                            | 24                                              |
| Maryland             | 34                                              | 803              | 13.52                                           | 73                                                    | 4.91                                      | 526                     | 9.27                                             | 10                                               | 267                    | 4.09                                            | 42                                              |
| Massachusetts        | 50                                              | 268              | 3.74                                            | 21                                                    | 1.36                                      | 130                     | 1.93                                             | 44                                               | 134                    | 1.75                                            | 50                                              |
| Michigan             | 25                                              | 1,454            | 14.6                                            | 117                                                   | 4.91                                      | 672                     | 7.3                                              | 18                                               | 761                    | 7.1                                             | 36                                              |
| Minnesota            | 44                                              | 513              | 8.9                                             | 46                                                    | 3.19                                      | 138                     | 2.53                                             | 41                                               | 354                    | 5.96                                            | 40                                              |
| Mississippi          | 1                                               | 818              | 28.63                                           | 86                                                    | 11.14                                     | 499                     | 17.89                                            | 2                                                | 278                    | 9.35                                            | 23                                              |
| Missouri             | 4                                               | 1,426            | 23.89                                           | 131                                                   | 8.59                                      | 683                     | 11.98                                            | 5                                                | 704                    | 11.21                                           | 9                                               |
| Montana              | 12                                              | 238              | 20.89                                           | 14                                                    | Unreliable                                | 33                      | 3.46                                             | 32                                               | 189                    | 15.82                                           | 3                                               |
| Nebraska             | 42                                              | 197              | 10.13                                           | 19                                                    | Unreliable                                | 49                      | 2.65                                             | 39                                               | 139                    | 6.99                                            | 37                                              |
| Nevada               | 19                                              | 547              | 16.96                                           | 48                                                    | 6.27                                      | 148                     | 4.97                                             | 27                                               | 372                    | 11.12                                           | 10                                              |
| New Hampshire        | 43                                              | 128              | 8.92                                            | Suppressed                                            | Suppressed                                | Suppressed              | Suppressed                                       | *                                                | 118                    | 8.16                                            | 28                                              |
| New Jersey           | 49                                              | 443              | 5.03                                            | 31                                                    | 1.45                                      | 253                     | 3.12                                             | 34                                               | 181                    | 1.82                                            | 49                                              |



| State          | Ranking, Highest to Lowest Total Gun Death Rate | Total Gun Deaths | Total Gun Death Rate (age-adjusted) per 100,000 | Total Gun Deaths Among Children and Teens (Ages 0-19) | Child and Teen Gun Death Rate per 100,000 | Firearm Homicide Deaths | Firearm Homicide Rate (age-adjusted) per 100,000 | Ranking, Highest to Lowest Firearm Homicide Rate | Firearm Suicide Deaths | Firearm Suicide Rate (age-adjusted) per 100,000 | Ranking, Highest to Lowest Firearm Suicide Rate |
|----------------|-------------------------------------------------|------------------|-------------------------------------------------|-------------------------------------------------------|-------------------------------------------|-------------------------|--------------------------------------------------|--------------------------------------------------|------------------------|-------------------------------------------------|-------------------------------------------------|
| New Mexico     | 7                                               | 479              | 22.66                                           | 41                                                    | 7.77                                      | 149                     | 7.54                                             | 16                                               | 303                    | 13.73                                           | 5                                               |
| New York       | 47                                              | 1,052            | 5.32                                            | 82                                                    | 1.84                                      | 561                     | 3.04                                             | 36                                               | 462                    | 2.12                                            | 47                                              |
| North Carolina | 22                                              | 1,699            | 15.97                                           | 177                                                   | 6.82                                      | 744                     | 7.34                                             | 17                                               | 879                    | 7.85                                            | 30                                              |
| North Dakota   | 29                                              | 100              | 13.77                                           | Suppressed                                            | Suppressed                                | 17                      | Unreliable                                       | *                                                | 77                     | 10.45                                           | 16                                              |
| Ohio           | 24                                              | 1,764            | 15.19                                           | 186                                                   | 6.48                                      | 824                     | 7.61                                             | 15                                               | 903                    | 7.24                                            | 34                                              |
| Oklahoma       | 13                                              | 826              | 20.75                                           | 73                                                    | 6.90                                      | 269                     | 7.07                                             | 19                                               | 538                    | 13.18                                           | 6                                               |
| Oregon         | 36                                              | 592              | 12.97                                           | 39                                                    | 4.07                                      | 109                     | 2.65                                             | 40                                               | 454                    | 9.63                                            | 21                                              |
| Pennsylvania   | 31                                              | 1,752            | 13.59                                           | 169                                                   | 5.72                                      | 788                     | 6.75                                             | 20                                               | 919                    | 6.47                                            | 39                                              |
| Rhode Island   | 48                                              | 54               | 5.13                                            | Suppressed                                            | Suppressed                                | 22                      | 2.22                                             | 43                                               | 30                     | 2.7                                             | 45                                              |
| South Carolina | 9                                               | 1,131            | 22.01                                           | 127                                                   | 10.14                                     | 528                     | 10.9                                             | 6                                                | 565                    | 10.3                                            | 19                                              |
| South Dakota   | 33                                              | 120              | 13.56                                           | 10                                                    | Unreliable                                | 26                      | 3.29                                             | 33                                               | 88                     | 9.63                                            | 22                                              |
| Tennessee      | 11                                              | 1,473            | 21.35                                           | 121                                                   | 7.21                                      | 652                     | 10.03                                            | 8                                                | 767                    | 10.5                                            | 15                                              |
| Texas          | 27                                              | 4,164            | 14.18                                           | 485                                                   | 5.88                                      | 1,734                   | 5.96                                             | 22                                               | 2,287                  | 7.78                                            | 31                                              |
| Utah           | 32                                              | 429              | 13.59                                           | 46                                                    | 4.48                                      | 75                      | 2.28                                             | 42                                               | 339                    | 10.83                                           | 12                                              |
| Vermont        | 38                                              | 76               | 11.58                                           | Suppressed                                            | Suppressed                                | Suppressed              | Suppressed                                       | *                                                | 69                     | 10.24                                           | 20                                              |
| Virginia       | 35                                              | 1,174            | 13.43                                           | 126                                                   | 6.03                                      | 440                     | 5.33                                             | 26                                               | 697                    | 7.69                                            | 32                                              |
| Washington     | 40                                              | 864              | 10.93                                           | 66                                                    | 3.59                                      | 211                     | 2.81                                             | 38                                               | 618                    | 7.67                                            | 33                                              |
| West Virginia  | 15                                              | 325              | 18.06                                           | 17                                                    | Unreliable                                | 87                      | 5.52                                             | 24                                               | 220                    | 11.53                                           | 8                                               |
| Wisconsin      | 37                                              | 717              | 12.2                                            | 59                                                    | 4.18                                      | 253                     | 4.62                                             | 28                                               | 442                    | 7.15                                            | 35                                              |
| Wyoming        | 3                                               | 154              | 25.9                                            | Suppressed                                            | Suppressed                                | 18                      | Unreliable                                       | *                                                | 128                    | 20.91                                           | 1                                               |

\*Denotes where the state firearm homicide or suicide rate is unreliable and cannot be compared.

### Appendix 10: Top 5 Counties With the Highest Firearm Homicide Rate, 2016–2020

| Top 5 Counties (by ranking) | County & State      | Firearm Homicide Rate (age-adjusted) per 100,000 |
|-----------------------------|---------------------|--------------------------------------------------|
| 1                           | Phillips County, AR | 55.45                                            |
| 2                           | Lowndes County, AL  | 48.36                                            |
| 3                           | St. Louis City, MO  | 45.36                                            |
| 4                           | Macon County, AL    | 44.34                                            |
| 5                           | Petersburg City, VA | 42.45                                            |

### Appendix 11: Top 5 Counties With the Highest Firearm Suicide Rate, 2016–2020

| Top 5 Counties (by ranking) | County & State     | Firearm Suicide Rate (age-adjusted) per 100,000 |
|-----------------------------|--------------------|-------------------------------------------------|
| 1                           | Park County, CO    | 34.83                                           |
| 2                           | Lincoln County, MT | 27.54                                           |
| 3                           | La Paz County, AZ  | 27.06                                           |
| 4                           | Aransas County, TX | 26.82                                           |
| 5                           | Lumpkin County, GA | 26.13                                           |

### Appendix 12: Top 5 Counties With the Highest Firearm Death Rate, 2016–2020

| Top 5 Counties (by ranking) | County & State               | Firearm Death Rate (age-adjusted) per 100,000 |
|-----------------------------|------------------------------|-----------------------------------------------|
| 1                           | Phillips County, AR          | 71.77                                         |
| 2                           | Wade Hampton Census Area, AK | 66.32                                         |
| 3                           | Lowndes County, AL           | 62.38                                         |
| 4                           | Quay County, NM              | 55.68                                         |
| 5                           | Petersburg City, VA          | 53.53                                         |

## Appendix 13: Rise in Gun Homicides by State, 2019–2020

| State                   | Age-Adjusted Rate<br>(per 100,000),<br>2019 | Age-Adjusted Rate<br>(per 100,000),<br>2020 | 2019–2020<br>Rate Difference | Percent Change |
|-------------------------|---------------------------------------------|---------------------------------------------|------------------------------|----------------|
| Alabama                 | 10.67                                       | 12.36                                       | 1.69                         | 16%            |
| Alaska                  | 7.2                                         | 3.75                                        | -3.45                        | -48%           |
| Arizona                 | 4.11                                        | 5.48                                        | 1.37                         | 33%            |
| Arkansas                | 7.38                                        | 10.06                                       | 2.68                         | 36%            |
| California              | 3.18                                        | 4.49                                        | 1.31                         | 41%            |
| Colorado                | 2.89                                        | 4.07                                        | 1.18                         | 41%            |
| Connecticut             | 1.97                                        | 3.06                                        | 1.09                         | 55%            |
| Delaware                | 5.21                                        | 8.67                                        | 3.46                         | 66%            |
| District of<br>Columbia | 16.52                                       | 20.35                                       | 3.83                         | 23%            |
| Florida                 | 5.2                                         | 6.35                                        | 1.15                         | 22%            |
| Georgia                 | 6.67                                        | 8.63                                        | 1.96                         | 29%            |
| Hawaii                  | Unreliable                                  | Unreliable                                  | N/A                          | N/A            |
| Idaho                   | Unreliable                                  | 1.55                                        | N/A                          | N/A            |
| Illinois                | 6.58                                        | 9.74                                        | 3.16                         | 48%            |
| Indiana                 | 5.53                                        | 7.76                                        | 2.23                         | 40%            |
| Iowa                    | 1.72                                        | 2.85                                        | 1.13                         | 66%            |
| Kansas                  | 3.51                                        | 5.79                                        | 2.28                         | 65%            |
| Kentucky                | 4.82                                        | 8.11                                        | 3.29                         | 68%            |
| Louisiana               | 12.35                                       | 17.1                                        | 4.75                         | 38%            |
| Maine                   | Unreliable                                  | Unreliable                                  | N/A                          | N/A            |
| Maryland                | 8.19                                        | 9.27                                        | 1.08                         | 13%            |
| Massachusetts           | 1.39                                        | 1.93                                        | 0.54                         | 39%            |
| Michigan                | 4.95                                        | 7.3                                         | 2.35                         | 47%            |
| Minnesota               | 1.9                                         | 2.53                                        | 0.63                         | 33%            |
| Mississippi             | 13.08                                       | 17.89                                       | 4.81                         | 37%            |
| Missouri                | 9.33                                        | 11.98                                       | 2.65                         | 28%            |
| Montana                 | 2.29                                        | 3.46                                        | 1.17                         | 51%            |
| Nebraska                | 2.09                                        | 2.65                                        | 0.56                         | 27%            |
| Nevada                  | 3.99                                        | 4.97                                        | 0.98                         | 25%            |
| New Hampshire           | 1.48                                        | Suppressed                                  | N/A                          | N/A            |
| New Jersey              | 2.39                                        | 3.12                                        | 0.73                         | 31%            |

| State          | Age-Adjusted Rate<br>(per 100,000),<br>2019 | Age-Adjusted Rate<br>(per 100,000),<br>2020 | 2019-2020<br>Rate Difference | Percent Change |
|----------------|---------------------------------------------|---------------------------------------------|------------------------------|----------------|
| New Mexico     | 8.16                                        | 7.54                                        | -0.62                        | -8%            |
| New York       | 1.74                                        | 3.04                                        | 1.3                          | 75%            |
| North Carolina | 5.41                                        | 7.34                                        | 1.93                         | 36%            |
| North Dakota   | Unreliable                                  | Unreliable                                  | N/A                          | N/A            |
| Ohio           | 5.21                                        | 7.61                                        | 2.4                          | 46%            |
| Oklahoma       | 6.56                                        | 7.07                                        | 0.51                         | 8%             |
| Oregon         | 1.88                                        | 2.65                                        | 0.77                         | 41%            |
| Pennsylvania   | 4.65                                        | 6.75                                        | 2.1                          | 45%            |
| Rhode Island   | Unreliable                                  | 2.22                                        | N/A                          | N/A            |
| South Carolina | 9.5                                         | 10.9                                        | 1.4                          | 15%            |
| South Dakota   | Unreliable                                  | 3.29                                        | N/A                          | N/A            |
| Tennessee      | 7.37                                        | 10.03                                       | 2.66                         | 36%            |
| Texas          | 4.5                                         | 5.96                                        | 1.46                         | 32%            |
| Utah           | 1.6                                         | 2.28                                        | 0.68                         | 43%            |
| Vermont        | Suppressed                                  | Suppressed                                  | N/A                          | N/A            |
| Virginia       | 4.18                                        | 5.33                                        | 1.15                         | 28%            |
| Washington     | 2.22                                        | 2.81                                        | 0.59                         | 27%            |
| West Virginia  | 4.86                                        | 5.52                                        | 0.66                         | 14%            |
| Wisconsin      | 2.82                                        | 4.62                                        | 1.8                          | 64%            |
| Wyoming        | Unreliable                                  | Unreliable                                  | N/A                          | N/A            |

# Glossary

**Age-adjusted rate:** The rates of almost all causes of death vary by age. Age adjustment is a technique for “removing” the effects of age from crude rates to allow meaningful comparisons across populations with different underlying age structures. Age-adjusted death rates are weighted averages of the age-specific death rates, where the weights represent a fixed population by age. An age-adjusted rate represents the rate that would have existed had the age-specific rates of the particular year prevailed in a population whose age distribution was the same as that of the fixed population. Age-adjusted rates should be viewed as relative indexes rather than as direct or actual measures of mortality risk.

**Burden of injury:** Describes the impact of a health problem (injury), including death and loss of health due to injuries, related financial costs, and other indicators.

**Cause of death:** Based on medical information—including injury diagnoses and external causes of injury—entered on death certificates filed in the United States. This information is classified and coded per the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10).

*International Classification of Diseases (ICD):* Causes of death are classified per the International Classification of Diseases. Deaths for 1999 and beyond are classified using the 10th Revision (ICD-10). ICD is designed to promote international comparability in the collection, processing, classification, and presentation of mortality statistics. This includes providing a format for reporting causes of death on the death certificate. The reported conditions are then translated into medical codes through the use of the classification structure and the selection and modification rules contained in the applicable revision of the ICD, published by the World Health Organization (WHO).

*Underlying Cause of Death database:* The database contains mortality data based on information from all death certificates filed in the 50 states and the District of Columbia. Deaths of nonresidents (e.g., nonresident aliens, nationals living abroad, residents of Puerto Rico, Guam, the Virgin Islands, and other territories of the U.S.) and fetal deaths are excluded. Each death certificate identifies a single underlying cause of death and demographic data.

**County Classification:** The CDC categorizes all counties into six levels of urbanization that incorporate population number and density. From largest and most urban to smallest and most rural, they are:

*Large central metro counties:* Counties part of a metropolitan statistical area with >1 million population and cover a principal city; most urban, large cities.

*Large fringe metro counties:* Counties part of a metropolitan statistical area with >1 million population but do not cover a principal city; akin to suburbs.

*Medium metro counties:* Counties part of a metropolitan statistical area of 250,000–999,999 population.

*Small metro counties:* Counties part of a metropolitan statistical area of less than 250,000 population.



*Micropolitan (non-metro) counties:* Counties part of a micropolitan statistical area (has an urban cluster of  $\geq 10,000$  but  $< 50,000$  population).

*Non-core (non-metro) counties:* Counties not part of a metropolitan or micropolitan statistical area; the most rural counties.

**Injury Intent:** Describes whether an injury was caused by an act carried out on purpose by oneself or by another person(s), with the goal of injuring or killing. For the CDC data used in this report, all injury-related causes of death are classified by intent and by mechanism, determined according to the ICD-10 external cause of injury coded as the underlying cause of death on the death certificate.

*Homicide:* Injuries inflicted by another person with the intent to injure or kill, by any means. Excludes injuries due to legal intervention and operations of war. The ICD-10 cause of death codes for firearm homicide include X93 Assault by handgun discharge; X94 Assault by rifle, shotgun, and larger firearm discharge; X95 Assault by other and unspecified firearm and gun discharge; and \*U01.4 Terrorism involving firearms.

*Legal Intervention:* Injuries inflicted by the police or other law-enforcing agents, including military on duty, in the course of arresting or attempting to arrest lawbreakers, suppressing disturbances, maintaining order, and other legal actions. Excludes injuries caused by civil insurrections. The ICD-10 cause of death code for legal intervention by firearm is Y35.0 Legal intervention involving firearm discharge.

*Suicide:* An intentionally self-inflicted injury that results in death. The ICD-10 cause of death codes for firearm suicide are X72 Intentional self-harm by handgun discharge; X73 Intentional self-harm by rifle, shotgun, and larger firearm discharge; and X74 Intentional self-harm by other and unspecified firearm and gun discharge.

*Undetermined Intent:* Events where available information is insufficient to enable a medical or legal authority to make a distinction between accident, self-harm, and assault. The ICD-10 cause of death codes for firearm deaths of undetermined intent are Y22 Handgun discharge, undetermined intent; Y23 Rifle, shotgun and larger firearm discharge, undetermined intent; and Y24 Other and unspecified firearm discharge, undetermined intent.

*Unintentional:* Unintentional injury that results in death. The ICD-10 cause of death codes for unintentional firearm deaths are W32 Accidental handgun discharge and malfunction; W33 Accidental rifle, shotgun and larger firearm discharge; and W34 Accidental discharge and malfunction from other and unspecified firearms and guns.

**Injury Mechanism or Method:** The cause, or mechanism, of injury is the way in which the person sustained the injury; how the person was injured; or the process by which the injury occurred.

**Suppressed:** Rates are marked as suppressed when there are zero to nine (0–9) deaths.

**Unreliable:** Rates are marked as “unreliable” when the death count is less than 20.



## SPECIAL REPORT

APRIL 2022

NCJ 251663

# Trends and Patterns in Firearm Violence, 1993–2018

Grace Kena and Jennifer L. Truman, Ph.D., *BJS Statisticians*

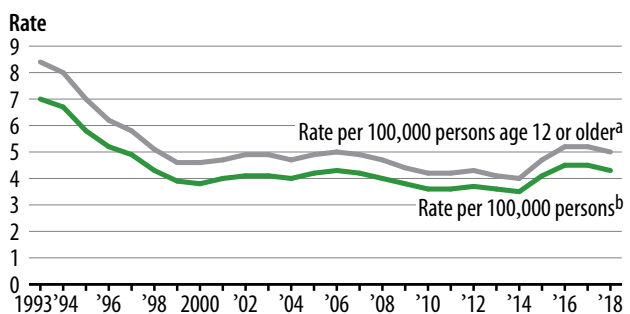
The rate of firearm homicide per 100,000 persons age 12 or older declined 41% across the 26-year period of 1993 to 2018, from 8.4 to 5.0 homicides per 100,000 (**figure 1**). During the more recent 5 years from 2014 to 2018, this rate was between 4.0 and 5.2 homicides per 100,000 persons age 12 or older. A total of 150 persons age 11 or younger were victims of firearm homicide in 2018, resulting in a rate of 0.3 homicides per 100,000 persons in this age group (not shown).

Firearm homicides include fatal injuries that involved a firearm and were inflicted by another person with intent to injure or kill by any means. Homicide data in this report are primarily from mortality data in the Center for Disease Control and Prevention's (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS) Fatal Injury Reports. WISQARS data are based on death certificates in the National Vital Statistics System (NVSS) of the National Center for Health Statistics.

In 2018, some 14,000 homicides were committed with a firearm (**table 1**). The number of firearm homicides involving persons age 12 or older declined 23% across 26 years, from 18,000 in 1993 to 13,800 in 2018.

**FIGURE 1**

**Rate of firearm homicide per 100,000 persons, 1993–2018**



Note: Includes fatal injuries involving a firearm inflicted by another person with intent to injure or kill by any means. Includes homicides due to the events of September 11, 2001. Excludes homicides due to legal intervention and operations of war. See table 1 for rates and appendix table 1 for population estimates.

<sup>a</sup>Includes homicides of persons age 12 or older.

<sup>b</sup>Includes homicides of all persons of known or unknown age.

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System Fatal Injury Reports developed from the National Vital Statistics System, 1993–2018.

## HIGHLIGHTS

- The firearm homicide rate decreased 41% overall from 1993 to 2018 (from 8.4 to 5.0 homicides per 100,000 persons age 12 or older), reaching a low of 4.0 per 100,000 in 2014 before rising to 5.0 per 100,000 in 2018.
- The rate of nonfatal firearm violence for persons age 12 or older declined 76% from 1993 to 2018, dropping from 7.3 to 1.7 victimizations per 1,000, and ranging from 1.1 to 1.8 per 1,000 from 2014 to 2018.
- From 1993 to 2018, on average, 71% of homicides were committed with a firearm.
- The majority of firearm violence involved the use of a handgun from 1993 to 2018.
- During the aggregate period of 2014–18, males had higher rates than females of both firearm homicide and nonfatal firearm victimization.
- Persons ages 18 to 24 had the highest firearm homicide rate among persons age 12 or older (11.6 homicides per 100,000) during 2014–18.
- Nearly 70% of nonfatal firearm violence was reported to police during 2014–18.



## Data sources, measures, and definitions of firearm violence

This report uses information from several data sources to examine trends and patterns in firearm violence from 1993 to 2018 and the more recent period of 2014 to 2018, including death certificates, data reported to law enforcement agencies, and victimization survey estimates. These sources have different methodologies and provide distinct information about firearm-related crimes, victims, and incidents. Together, these complementary measures provide a broad overview of firearm violence in the United States. For more information about the data sources used in this report, see *Methodology*.

### Firearm homicide data

Homicide data in this report are primarily from the Web-based Injury Statistics Query and Reporting System (WISQARS) Fatal Injury Reports developed from the National Vital Statistics System (NVSS) of the National Center for Health Statistics (NCHS), a part of the Centers for Disease Control and Prevention. NVSS mortality data are produced from standardized death certificates and include causes of death reported by attending physicians, medical examiners, and coroners.

NVSS data also include demographic information about decedents reported by funeral directors who obtain such details from family members and other informants. The NCHS collects, compiles, verifies, and prepares these data for release to the public. Additional information in this report on firearm-related homicides comes from the FBI's Supplementary Homicide Reports (SHR).

Generally, the NVSS produces more accurate information than the SHR on annual homicide rates at the national level, though trends from the two data sources tend to be similar. (See *The Nation's Two Measures of Homicide* (NCJ 247060, BJS, July 2014) for more information.) The NVSS includes more complete state and local jurisdiction reporting and has more complete information about victim characteristics. However, because NVSS data do not provide detailed information about homicide incidents, SHR data are used for table 4, which shows firearm homicides by type of gun involved.

### Nonfatal firearm violence data

The Bureau of Justice Statistics' National Crime Victimization Survey (NCVS) is the source for nonfatal firearm violence data in this report. The NCVS collects information on nonfatal crimes against persons age 12 or older reported and not reported to police from a nationally representative sample of U.S. households. It provides detailed data on the characteristics of nonfatal firearm violence. While most NCVS estimates in this report are based on victimizations, table 13 presents incident-level data to facilitate comparisons between victim and offender demographic characteristics.

### Measures and definitions

Rates are presented per 100,000 persons for homicide and per 1,000 persons age 12 or older for nonfatal victimization. Trend estimates of nonfatal firearm violence by type of gun are presented as 3-year rolling averages. Several tables in this report focus on aggregate periods of multiple years, such as 2014 through 2018, with some presenting data as annual average estimates and others as aggregate estimates for the period. These approaches—using rolling averages and aggregated years—increase the reliability and stability of the estimates of nonfatal violence, which facilitates comparisons over time and between subgroups. Estimates are shown for different years based on data availability and measures of reliability.

### Key terms used in the report

**Firearm**—A weapon that fires a projectile by force of an explosion, e.g., handguns, rifles, and shotguns.

**Firearm homicide (NVSS)**—Includes fatal injuries that involved a firearm and were inflicted by another person with intent to injure or kill by any means. Fatal firearm injuries are gunshot wounds or penetrating injuries from a weapon that uses a powder charge to fire a projectile. Includes homicides due to the events of September 11, 2001. Excludes homicides due to legal intervention and operations of war.

**Firearm homicide (SHR)**—Includes both murders and nonnegligent manslaughters that involved a firearm and the willful killing of one human being by another. Excludes justifiable homicides, nonnegligent manslaughter, and homicides resulting from operations of war and the terrorist attacks of September 11, 2001.

**Nonfatal firearm violence (NCVS)**—Includes rape or sexual assault, robbery, and aggravated assault victimizations against persons age 12 or older in which the offender had, showed, or used a firearm, and excludes simple assault victimizations. For more information on these crime types, see *Criminal Victimization, 2018* (NCJ 251150, BJS, December 2017).

**Nonfatal violence excluding simple assault (NCVS)**—Includes rape or sexual assault, robbery, and aggravated assault against persons age 12 or older.

**Nonfatal violent and property victimizations (NCVS)**—The total number of times that persons or households were victimized by crime. For crimes against persons, the number of victimizations is the number of victims of that crime. For crimes against households, each crime is counted as having a single victim (the affected household).

**Nonfatal violent incidents (NCVS)**—The number of specific criminal acts involving one or more victims.

## Trends in firearm homicide and nonfatal firearm violence

In 2018, there were 470,800 nonfatal firearm victimizations against persons age 12 or older, down 69% from 1.5 million in 1993 ([table 2](#)). Data on nonfatal firearm violence in this report are from the Bureau of Justice Statistics' National Crime Victimization Survey (NCVS) and include rape or sexual assault, robbery, and aggravated assault victimizations against persons age 12 or older in which the offender had, showed, or used a firearm. Across this period, the rate of nonfatal firearm violence declined 76%, from 7.3 to 1.7 victimizations per 1,000 persons age 12 or older ([figure 2](#)). This rate varied from 1.1 to 1.8 per 1,000 during the 5 years from 2014 to 2018.

**TABLE 1**  
Firearm homicide, 1993–2018

| Year | All persons <sup>a</sup> |                  | Persons age 12 or older <sup>b</sup> |                  |
|------|--------------------------|------------------|--------------------------------------|------------------|
|      | Number                   | Rate per 100,000 | Number                               | Rate per 100,000 |
| 1993 | 18,300                   | 7.0              | 18,000                               | 8.4              |
| 1994 | 17,500                   | 6.7              | 17,300                               | 8.0              |
| 1995 | 15,600                   | 5.8              | 15,300                               | 7.0              |
| 1996 | 14,000                   | 5.2              | 13,800                               | 6.2              |
| 1997 | 13,300                   | 4.9              | 13,100                               | 5.8              |
| 1998 | 11,800                   | 4.3              | 11,600                               | 5.1              |
| 1999 | 10,800                   | 3.9              | 10,700                               | 4.6              |
| 2000 | 10,800                   | 3.8              | 10,700                               | 4.6              |
| 2001 | 11,300                   | 4.0              | 11,200                               | 4.7              |
| 2002 | 11,800                   | 4.1              | 11,700                               | 4.9              |
| 2003 | 11,900                   | 4.1              | 11,800                               | 4.9              |
| 2004 | 11,600                   | 4.0              | 11,500                               | 4.7              |
| 2005 | 12,400                   | 4.2              | 12,200                               | 4.9              |
| 2006 | 12,800                   | 4.3              | 12,600                               | 5.0              |
| 2007 | 12,600                   | 4.2              | 12,500                               | 4.9              |
| 2008 | 12,200                   | 4.0              | 12,000                               | 4.7              |
| 2009 | 11,500                   | 3.8              | 11,300                               | 4.4              |
| 2010 | 11,100                   | 3.6              | 10,900                               | 4.2              |
| 2011 | 11,100                   | 3.6              | 10,900                               | 4.2              |
| 2012 | 11,600                   | 3.7              | 11,500                               | 4.3              |
| 2013 | 11,200                   | 3.6              | 11,100                               | 4.1              |
| 2014 | 11,000                   | 3.5              | 10,900                               | 4.0              |
| 2015 | 13,000                   | 4.1              | 12,800                               | 4.7              |
| 2016 | 14,400                   | 4.5              | 14,300                               | 5.2              |
| 2017 | 14,500                   | 4.5              | 14,400                               | 5.2              |
| 2018 | 14,000                   | 4.3              | 13,800                               | 5.0              |

Note: Includes fatal injuries involving a firearm inflicted by another person with intent to injure or kill by any means. Includes homicides due to the events of September 11, 2001. Excludes homicides due to legal intervention and operations of war. See appendix table 1 for population estimates.

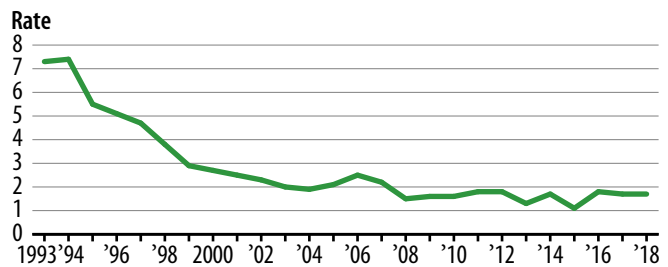
<sup>a</sup>Includes homicides of all persons of known or unknown age.

<sup>b</sup>Includes homicides of persons age 12 or older.

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System Fatal Injury Reports developed from the National Vital Statistics System, 1993–2018.

**FIGURE 2**

Rate of nonfatal firearm victimization per 1,000 persons age 12 or older, 1993–2018



Note: Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older in which the offender had, showed, or used a firearm. See table 2 for rates and appendix table 2 for population estimates and standard errors.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

**TABLE 2**  
Nonfatal firearm victimization against persons age 12 or older, 1993–2018

| Year  | Number of victimizations | Rate per 1,000 |
|-------|--------------------------|----------------|
| 1993  | 1,529,700 †              | 7.3 †          |
| 1994  | 1,568,200 †              | 7.4 †          |
| 1995  | 1,193,200 †              | 5.5 †          |
| 1996  | 1,100,800 †              | 5.1 †          |
| 1997  | 1,024,100 †              | 4.7 †          |
| 1998  | 835,400 †                | 3.8 †          |
| 1999  | 640,900                  | 2.9 †          |
| 2000  | 610,200                  | 2.7 †          |
| 2001  | 563,100                  | 2.5 ‡          |
| 2002  | 540,000                  | 2.3            |
| 2003  | 467,300                  | 2.0            |
| 2004  | 456,500                  | 1.9            |
| 2005  | 503,500                  | 2.1            |
| 2006  | 614,400                  | 2.5 ‡          |
| 2007  | 554,800                  | 2.2            |
| 2008  | 371,300                  | 1.5            |
| 2009  | 410,100                  | 1.6            |
| 2010  | 415,000                  | 1.6            |
| 2011  | 467,900                  | 1.8            |
| 2012  | 460,700                  | 1.8            |
| 2013  | 333,000                  | 1.3            |
| 2014  | 466,100                  | 1.7            |
| 2015  | 284,900 †                | 1.1 †          |
| 2016  | 486,600                  | 1.8            |
| 2017  | 456,300                  | 1.7            |
| 2018* | 470,800                  | 1.7            |

Note: Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older in which the offender had, showed, or used a firearm. See appendix table 2 for population estimates and standard errors.

\*Comparison year.

†Difference with comparison year is significant at the 95% confidence level.

‡Difference with comparison year is significant at the 90% confidence level.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

***The majority of homicides were committed with a firearm from 1993 to 2018***

From 1993 to 2018, an annual average of 8% of all fatal and nonfatal violence involved a firearm (table 3). The average percentage of nonfatal violence that involved a firearm was 7%. On average, 71% of homicides were

committed with a firearm from 1993 to 2018. During the same period, an annual average of 22% of nonfatal violence, excluding simple assault, involved a firearm, including 23% of robberies and 27% of aggravated assaults.<sup>1</sup>

<sup>1</sup>Estimates on rape/sexual assault victimizations involving firearms are not shown separately due to small sample sizes.

**TABLE 3**

**Percent of fatal and nonfatal violence involving a firearm, by type of crime, 1993–2018**

| Year                                 | All fatal and nonfatal violence | Homicide <sup>a</sup> | Nonfatal violence <sup>b</sup> | Nonfatal violence excluding simple assault <sup>c</sup> | Robbery | Aggravated assault |
|--------------------------------------|---------------------------------|-----------------------|--------------------------------|---------------------------------------------------------|---------|--------------------|
| Average annual percentage, 1993–2018 | 7.6%                            | 71.2%                 | 7.4%                           | 22.0%                                                   | 22.6%   | 26.8%              |
| 1993                                 | 9.2                             | 73.4                  | 9.1                            | 24.9 ‡                                                  | 22.3    | 30.7               |
| 1994                                 | 9.3                             | 73.7                  | 9.2                            | 27.2 †                                                  | 27.1 †  | 31.9               |
| 1995                                 | 7.9                             | 71.3                  | 7.8                            | 24.8 ‡                                                  | 27.3 †  | 28.0               |
| 1996                                 | 7.9                             | 70.7                  | 7.8                            | 23.2                                                    | 24.6 ‡  | 25.7               |
| 1997                                 | 7.7                             | 70.5                  | 7.6                            | 22.1                                                    | 19.9    | 27.0               |
| 1998                                 | 7.0                             | 68.9                  | 7.0                            | 22.7                                                    | 20.1    | 26.5               |
| 1999                                 | 6.1                             | 67.2                  | 6.0                            | 17.9                                                    | 19.2    | 22.4 †             |
| 2000                                 | 7.3                             | 67.4                  | 7.2                            | 21.7                                                    | 21.1    | 26.6               |
| 2001 <sup>d</sup>                    | 7.7                             | 57.8                  | 7.5                            | 22.3                                                    | 29.5 †  | 26.0               |
| 2002                                 | 7.4                             | 69.9                  | 7.3                            | 23.4                                                    | 23.4    | 28.7               |
| 2003                                 | 6.2                             | 70.1                  | 6.1                            | 19.5                                                    | 22.4    | 22.2 †             |
| 2004                                 | 6.9                             | 69.9                  | 6.8                            | 19.9                                                    | 19.7    | 23.6 ‡             |
| 2005                                 | 7.4                             | 70.9                  | 7.2                            | 22.3                                                    | 21.8    | 25.7               |
| 2006 <sup>e</sup>                    | 7.4                             | 71.7                  | 7.3                            | 19.5                                                    | 16.6    | 24.3               |
| 2007 <sup>e</sup>                    | 8.3                             | 71.7                  | 8.1                            | 24.7                                                    | 20.0    | 32.6               |
| 2008                                 | 6.0                             | 71.3                  | 5.8                            | 18.6                                                    | 19.6    | 24.6               |
| 2009                                 | 7.4                             | 71.3                  | 7.2                            | 20.8                                                    | 27.0 ‡  | 23.2               |
| 2010                                 | 8.6                             | 71.1                  | 8.4                            | 24.5                                                    | 24.7    | 25.4               |
| 2011                                 | 8.2                             | 71.2                  | 8.1                            | 25.2                                                    | 25.7    | 30.6               |
| 2012                                 | 6.9                             | 72.3                  | 6.7                            | 22.1                                                    | 29.4 †  | 24.1               |
| 2013                                 | 5.6                             | 72.3                  | 5.4                            | 17.2                                                    | 16.8    | 22.3 ‡             |
| 2014                                 | 8.9                             | 72.0                  | 8.7                            | 22.8                                                    | 20.7    | 29.7               |
| 2015                                 | 5.9                             | 75.6                  | 5.7                            | 15.6                                                    | 16.0    | 22.6 ‡             |
| 2016                                 | 9.3                             | 76.8                  | 9.1                            | 27.1 †                                                  | 26.5 ‡  | 33.9               |
| 2017                                 | 8.4                             | 76.9                  | 8.1                            | 22.8                                                    | 29.1 †  | 27.7               |
| 2018*                                | 7.6                             | 76.5                  | 7.4                            | 19.9                                                    | 16.8    | 31.9               |

Note: Fatal firearm violence includes fatal injuries involving a firearm inflicted on persons age 12 or older by another person with intent to injure or kill by any means. Includes homicides due to the events of September 11, 2001. Excludes homicides due to legal intervention and operations of war. Nonfatal firearm violence includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older in which the offender had, showed, or used a firearm. See appendix table 3 for standard errors.

\*Comparison year. Significance testing was conducted for estimates of nonfatal firearm violence only.

†Difference with comparison year is significant at the 95% confidence level.

‡Difference with comparison year is significant at the 90% confidence level.

<sup>a</sup>Includes homicides of persons age 12 or older.

<sup>b</sup>Includes rape or sexual assault, robbery, aggravated assault, and simple assault victimizations. Estimates on rape/sexual assault victimizations involving firearms are not shown separately due to small sample sizes.

<sup>c</sup>Includes rape or sexual assault, robbery, and aggravated assault victimizations. This category was called serious violence in previous years. Estimates on rape/sexual assault victimizations involving firearms are not shown separately due to small sample sizes.

<sup>d</sup>Homicides due to the events of September 11, 2001 are included in total number of homicides.

<sup>e</sup>For information on changes to the 2006 National Crime Victimization Survey that impacted trends in nonfatal violence, see *Criminal Victimization, 2007* (NCJ 224390, BJS, December 2008).

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018; and Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System Fatal Injury Reports developed from the National Vital Statistics System, 1993–2018.



**From 1993 to 2018, most firearm violence involved handguns**

In 2018, an estimated 7,600 firearm homicides were committed with a handgun, down from 14,000 in 1993 (table 4). The percentage of all firearm homicides that were committed with a handgun decreased as well, from 82% in 1993 to 64% in 2018. The trend was also consistent for firearm homicides against persons age 12 or older.

As was the case for firearm homicides, handguns were involved in the majority of nonfatal firearm violence between 1993–95 and 2016–18 (table 5). Though the average number of nonfatal firearm victimizations involving a handgun decreased from 1.3 million in 1993–95 to 432,800 in 2016–18, the percentage of nonfatal firearm victimizations involving a handgun was not statistically different from 1993–95 (89%) to 2016–18 (92%). Other types of firearms, such as shotguns and rifles, accounted for the remainder of both fatal and nonfatal firearm violence during these periods.

**TABLE 4**  
**Firearm homicide, by type of firearm, 1993–2018**

| Year | All persons <sup>a</sup> |         |                            |         | Persons age 12 or older <sup>b</sup> |         |                            |         |
|------|--------------------------|---------|----------------------------|---------|--------------------------------------|---------|----------------------------|---------|
|      | Handgun                  |         | Other firearm <sup>c</sup> |         | Handgun                              |         | Other firearm <sup>c</sup> |         |
|      | Number                   | Percent | Number                     | Percent | Number                               | Percent | Number                     | Percent |
| 1993 | 14,000                   | 82.1%   | 3,100                      | 17.9%   | 13,900                               | 82.1%   | 3,000                      | 17.9%   |
| 1994 | 13,500                   | 82.7    | 2,800                      | 17.3    | 13,400                               | 82.8    | 2,800                      | 17.2    |
| 1995 | 12,100                   | 81.9    | 2,700                      | 18.1    | 12,000                               | 82.0    | 2,600                      | 18.0    |
| 1996 | 10,800                   | 81.1    | 2,500                      | 18.9    | 10,700                               | 81.2    | 2,500                      | 18.8    |
| 1997 | 9,800                    | 78.8    | 2,600                      | 21.2    | 9,700                                | 78.9    | 2,600                      | 21.1    |
| 1998 | 8,900                    | 80.4    | 2,200                      | 19.6    | 8,800                                | 80.6    | 2,100                      | 19.4    |
| 1999 | 8,000                    | 78.8    | 2,200                      | 21.2    | 7,900                                | 79.0    | 2,100                      | 21.0    |
| 2000 | 8,000                    | 78.6    | 2,200                      | 21.4    | 7,900                                | 78.5    | 2,200                      | 21.5    |
| 2001 | 7,800                    | 77.9    | 2,200                      | 22.1    | 7,700                                | 78.0    | 2,200                      | 22.0    |
| 2002 | 8,200                    | 75.8    | 2,600                      | 24.2    | 8,100                                | 75.9    | 2,600                      | 24.1    |
| 2003 | 8,900                    | 80.3    | 2,200                      | 19.7    | 8,800                                | 80.4    | 2,100                      | 19.6    |
| 2004 | 8,300                    | 78.0    | 2,400                      | 22.0    | 8,300                                | 78.1    | 2,300                      | 21.9    |
| 2005 | 8,600                    | 75.1    | 2,800                      | 24.9    | 8,500                                | 75.3    | 2,800                      | 24.7    |
| 2006 | 9,100                    | 77.0    | 2,700                      | 23.0    | 9,000                                | 77.1    | 2,700                      | 22.9    |
| 2007 | 8,600                    | 73.6    | 3,100                      | 26.4    | 8,500                                | 73.6    | 3,000                      | 26.4    |
| 2008 | 7,900                    | 71.8    | 3,100                      | 28.2    | 7,800                                | 71.7    | 3,100                      | 28.3    |
| 2009 | 7,400                    | 71.3    | 3,000                      | 28.7    | 7,300                                | 71.4    | 2,900                      | 28.6    |
| 2010 | 6,900                    | 69.6    | 3,000                      | 30.4    | 6,900                                | 69.6    | 3,000                      | 30.4    |
| 2011 | 7,300                    | 73.0    | 2,700                      | 27.0    | 7,200                                | 73.2    | 2,600                      | 26.8    |
| 2012 | 7,500                    | 72.6    | 2,800                      | 27.4    | 7,400                                | 72.6    | 2,800                      | 27.4    |
| 2013 | 6,800                    | 69.1    | 3,100                      | 30.9    | 6,800                                | 69.1    | 3,000                      | 30.9    |
| 2014 | 6,700                    | 69.1    | 3,000                      | 30.9    | 6,600                                | 69.1    | 2,900                      | 30.9    |
| 2015 | 7,700                    | 68.1    | 3,600                      | 31.9    | 7,600                                | 68.2    | 3,600                      | 31.8    |
| 2016 | 8,200                    | 65.0    | 4,400                      | 35.0    | 8,200                                | 65.1    | 4,400                      | 34.9    |
| 2017 | 8,100                    | 64.6    | 4,400                      | 35.4    | 8,000                                | 64.7    | 4,400                      | 35.3    |
| 2018 | 7,600                    | 64.4    | 4,200                      | 35.6    | 7,500                                | 64.4    | 4,100                      | 35.6    |

Note: Includes murders and nonnegligent manslaughters involving a firearm and the willful killing of one human being by another. Excludes justifiable homicides, nonnegligent manslaughters, and homicides resulting from operations of war and the terrorist attacks of September 11, 2001.

<sup>a</sup>Includes homicides of all persons of known or unknown age.

<sup>b</sup>Includes homicides of persons age 12 or older.

<sup>c</sup>Includes rifle, shotgun, and other types of firearms.

Source: Federal Bureau of Investigation, Supplementary Homicide Reports, 1993–2018.

**TABLE 5****Nonfatal firearm victimization, by type of firearm, 1995–2018 (3-year rolling averages)**

| Year              | Handgun     |         | Other firearm <sup>a</sup> |         |
|-------------------|-------------|---------|----------------------------|---------|
|                   | Number      | Percent | Number                     | Percent |
| 1995              | 1,270,300 † | 88.8%   | 150,100 †                  | 10.5%   |
| 1996              | 1,147,600 † | 89.1    | 132,600 †                  | 10.3    |
| 1997              | 941,700 †   | 85.1 †  | 156,500 †                  | 14.1 †  |
| 1998              | 843,100 †   | 85.4 †  | 138,100 †                  | 14.0 †  |
| 1999              | 715,100 †   | 85.8 †  | 111,900 †                  | 13.4 †  |
| 2000              | 617,400 †   | 88.8    | 75,100 ‡                   | 10.8    |
| 2001              | 530,500     | 87.7    | 61,800                     | 10.2    |
| 2002              | 492,100     | 86.2 ‡  | 67,800                     | 11.9 ‡  |
| 2003              | 450,800     | 86.1 ‡  | 53,700                     | 10.3    |
| 2004              | 415,500     | 85.2 †  | 59,500                     | 12.2 ‡  |
| 2005              | 410,100     | 86.2 ‡  | 49,000                     | 10.3    |
| 2006 <sup>b</sup> | 456,300     | 87.0 ‡  | 55,800                     | 10.6    |
| 2007 <sup>b</sup> | 488,800     | 87.7    | 57,100                     | 10.2    |
| 2008 <sup>b</sup> | 449,700     | 87.6    | 56,600                     | 11.0    |
| 2009              | 389,700     | 87.5    | 50,400                     | 11.3    |
| 2010              | 364,600     | 91.4    | 30,700                     | 7.7     |
| 2011              | 382,400     | 88.7    | 45,300                     | 10.5    |
| 2012              | 400,200     | 89.4    | 46,300                     | 10.3    |
| 2013              | 365,000     | 86.8    | 51,600                     | 12.3 ‡  |
| 2014              | 382,200     | 91.0    | 31,200                     | 7.4     |
| 2015              | 325,800     | 90.2    | 29,000                     | 8.0     |
| 2016              | 369,900     | 89.7    | 38,000                     | 9.2     |
| 2017              | 370,100     | 90.4    | 37,900                     | 9.3     |
| 2018*             | 432,800     | 91.8    | 35,200                     | 7.5     |

Note: Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older in which the offender had, showed, or used a firearm. Based on 3-year rolling averages, with the most recent year shown (e.g., 1993–95 is shown as 1995). See appendix table 4 for standard errors.

\*Comparison year.

†Difference with comparison year is significant at the 95% confidence level.

‡Difference with comparison year is significant at the 90% confidence level.

<sup>a</sup>Includes rifle, shotgun, and other types of firearms. Also includes a small percentage of unknown firearm types.

<sup>b</sup>For information on changes to the 2006 National Crime Victimization Survey that impacted trends in nonfatal violence, see *Criminal Victimization, 2007* (NCJ 224390, BJS, December 2008).

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

## Patterns in firearm homicide and nonfatal firearm violence

### *Males were victims of fatal and nonfatal firearm violence at higher rates than females during 2014–18*

During 2014–18, an average of 13,200 firearm homicides occurred annually (table 6). The overall rate of firearm homicide was 4.8 per 100,000 persons age 12 or older. The firearm homicide rate was higher for males (8.3 per 100,000 males) than females (1.5 per 100,000 females). Based on rates among population groups, the firearm homicide rate was higher for black persons (22.0 per 100,000) than white (1.8 per 100,000), Hispanic (4.6 per 100,000), Asian or Pacific Islander (1.2 per 100,000), and American Indian or Alaska

Native (6.2 per 100,000) persons. The rate was also higher for persons ages 18 to 24 (11.6 per 100,000) than for persons in all other age groups.

The rate of nonfatal firearm violence was 1.6 victimizations per 1,000 persons age 12 or older during 2014–18 (table 7). Patterns of nonfatal firearm violence by victim characteristics were generally similar to those for firearm homicides. Males were victims of nonfatal firearm violence at a higher rate (2.0 per 1,000) than females (1.2 per 1,000), and black persons were victims (2.7 per 1,000) at a higher rate than white (1.3 per 1,000) and Asian persons (0.9 per 1,000). The rate of nonfatal firearm violence was higher for persons ages 18 to 24 (3.8 per 1,000) than for persons in all other age groups.

**TABLE 6**

#### Firearm homicide against persons age 12 or older, by victim characteristics, 2014–18

| Victim characteristic                             | Average annual number of homicides | Rate per 100,000 in each category |
|---------------------------------------------------|------------------------------------|-----------------------------------|
| Total                                             | 13,200                             | 4.8                               |
| <b>Sex</b>                                        |                                    |                                   |
| Male                                              | 11,200                             | 8.3                               |
| Female                                            | 2,000                              | 1.5                               |
| <b>Race/ethnicity</b>                             |                                    |                                   |
| White*                                            | 3,200                              | 1.8                               |
| Black*                                            | 7,600                              | 22.0                              |
| Hispanic                                          | 2,100                              | 4.6                               |
| Asian/Native Hawaiian/<br>Other Pacific Islander* | 200                                | 1.2                               |
| American Indian/<br>Alaska Native*                | 100                                | 6.2                               |
| <b>Age</b>                                        |                                    |                                   |
| 12–17                                             | 700                                | 2.7                               |
| 18–24                                             | 3,600                              | 11.6                              |
| 25–34                                             | 4,100                              | 9.3                               |
| 35–49                                             | 3,100                              | 5.0                               |
| 50 or older                                       | 1,700                              | 1.5                               |

Note: Includes fatal injuries involving a firearm inflicted on persons age 12 or older by another person with intent to injure or kill by any means. Includes homicides due to the events of September 11, 2001. Excludes homicides due to legal intervention and operations of war. Details may not sum to totals due to rounding and some categories not being shown. See appendix table 5 for population estimates.

\*Excludes persons of Hispanic origin (e.g., “white” refers to non-Hispanic whites and “black” refers to non-Hispanic blacks).

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System Fatal Injury Reports developed from the National Vital Statistics, 2014–18.

**TABLE 7**

#### Nonfatal firearm victimization against persons age 12 or older, by victim characteristics, 2014–18

| Victim characteristic | Average annual number of victimizations | Rate per 1,000 in each category |
|-----------------------|-----------------------------------------|---------------------------------|
| Total                 | 432,900                                 | 1.6                             |
| <b>Sex</b>            |                                         |                                 |
| Male*                 | 262,300                                 | 2.0                             |
| Female                | 170,600 ‡                               | 1.2 †                           |
| <b>Race/ethnicity</b> |                                         |                                 |
| White <sup>a</sup>    | 225,600 †                               | 1.3 †                           |
| Black <sup>a*</sup>   | 88,500                                  | 2.7                             |
| Hispanic              | 86,300                                  | 1.9                             |
| Asian <sup>a</sup>    | 14,400 !                                | 0.9 †                           |
| Other <sup>a,b</sup>  | 18,200 !                                | 3.1                             |
| <b>Age</b>            |                                         |                                 |
| 12–17                 | 25,000 †                                | 1.0 †                           |
| 18–24*                | 113,800                                 | 3.8                             |
| 25–34                 | 90,200                                  | 2.0 †                           |
| 35–49                 | 118,900                                 | 1.9 †                           |
| 50 or older           | 85,100                                  | 0.8 †                           |

Note: Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older in which the offender had, showed, or used a firearm. Details may not sum to totals due to rounding and some categories not being shown. See appendix table 6 for population estimates and standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

‡Difference with comparison group is significant at the 90% confidence level.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Excludes persons of Hispanic origin (e.g., “white” refers to non-Hispanic whites and “black” refers to non-Hispanic blacks).

<sup>b</sup>Includes Native Hawaiians or Other Pacific Islanders, American Indians or Alaska Natives, and persons of two or more races.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

## Measures and definitions of race and ethnicity

In the National Crime Victimization Survey (NCVS), the Bureau of Justice Statistics (BJS) uses race and ethnicity categories for data collection as specified by the Office of Management and Budget's Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity. The standards have five categories for data on race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. There are two categories for data on ethnicity: Hispanic or Latino, and Not Hispanic or Latino.

Given that NCVS data are derived from surveyed respondents, the relatively small sizes of certain population groups compared to the overall U.S. population can pose measurement difficulties. In addition, the relatively infrequent occurrence of crime types such as firearm victimization in the population can

compound these measurement challenges. These issues often lead to even smaller sample sizes for particular demographic groups, including persons who are American Indian, Alaska Native, Native Hawaiian, Other Pacific Islander, or Asian. In accordance with standard statistical analysis methodology for reporting estimates from sample data, BJS may combine categories into an "Other" group to generate valid and reliable estimates or to protect the identity of individuals.

In this report, NCVS estimates for specific race and ethnicity groups are shown for different years based on data availability and measures of reliability. Some differences between these estimates that may seem substantial may not be statistically significant, due to the larger standard errors that typically result from smaller sample sizes. (See *Measurement of crime in the NCVS in Methodology*.)

### ***During 2014–18, strangers committed a greater percentage of nonfatal firearm violence than nonstrangers***

During 2014–18, the victim-offender relationship and number of offenders were known in 1.9 million victimizations involving nonfatal firearm violence (table 8). Strangers committed a greater percentage of nonfatal firearm violence (60%) than known offenders (40%).<sup>2</sup> Friends or acquaintances committed a greater

percentage of nonfatal firearm violence (25%) than intimate partners (9%) and other relatives (7%).

In comparison, strangers committed 39% of the 7.3 million nonfirearm violent victimizations during 2014–18, while known persons committed 61%. Similar to nonfatal firearm violence, friends and acquaintances (35%) committed a greater percentage of nonfirearm violence than intimate partners (18%) and other relatives (8%). Intimate partners committed a greater percentage of nonfirearm violence than other relatives.

<sup>2</sup>Known offenders include persons known to the victim, such as current or former intimate partners, other relatives, and friends or acquaintances.

**TABLE 8**

### **Nonfatal violence excluding simple assault, by presence of firearm and victim-offender relationship, 2014–18**

| Victim-offender relationship | Total <sup>a</sup> |         | Firearm violence <sup>b</sup> |         | Nonfirearm violence <sup>c</sup> |         |
|------------------------------|--------------------|---------|-------------------------------|---------|----------------------------------|---------|
|                              | Number             | Percent | Number                        | Percent | Number                           | Percent |
| Any                          | 9,179,700          | 100%    | 1,907,300                     | 100%    | 7,272,400                        | 100%    |
| Nonstranger                  | 5,211,900 †        | 56.8% † | 768,800 †                     | 40.3% † | 4,443,100 †                      | 61.1% † |
| Intimate <sup>d</sup>        | 1,517,800 †        | 16.5 †  | 175,300 †                     | 9.2 †   | 1,342,600 †                      | 18.5 †  |
| Other relative               | 716,600 †          | 7.8 †   | 125,900 †                     | 6.6 †   | 590,700 †                        | 8.1 †   |
| Friend/acquaintance          | 2,977,500 †        | 32.4 †  | 467,600 †                     | 24.5 †  | 2,509,800                        | 34.5 ‡  |
| Stranger*                    | 3,967,800          | 43.2%   | 1,138,500                     | 59.7%   | 2,829,300                        | 38.9%   |

Note: Includes victimizations in which the victim-offender relationship was known. The victim-offender relationship and number of offenders were unknown in 8% of total violence, 12% of firearm violence, and 8% of nonfirearm violence. Details may not sum to totals due to rounding. See appendix table 7 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

‡Difference with comparison group is significant at the 90% confidence level.

<sup>a</sup>Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older.

<sup>b</sup>Includes victimizations in which the offender had, showed, or used a firearm.

<sup>c</sup>Includes victimizations in which the offender did not have, show, or use a firearm.

<sup>d</sup>Includes victimizations by current or former spouses, boyfriends, and girlfriends.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

### About 40% of nonfatal firearm violence occurred in or near the victim's home during 2014–18

During 2014–18, there were 2.2 million nonfatal firearm victimizations (**table 9**). About 40% of all nonfatal violence excluding simple assault occurred in or near the victim's home, whether it involved a firearm or not. A greater percentage of nonfatal violence

involving a firearm (21%) than nonfirearm violence (13%) occurred near the victim's home. However, a greater percentage of nonfirearm violence (29%) than firearm violence (17%) occurred in the victim's home. Meanwhile, a greater percentage of nonfatal violence involving a firearm (11%) than nonfirearm violence (6%) occurred in a parking lot or garage.

**TABLE 9**

#### Nonfatal violence excluding simple assault, by presence of firearm and location of crime, 2014–18

| Location                                                | Total <sup>a</sup> |         | Firearm violence <sup>b*</sup> |         | Nonfirearm violence <sup>c</sup> |         |
|---------------------------------------------------------|--------------------|---------|--------------------------------|---------|----------------------------------|---------|
|                                                         | Number             | Percent | Number                         | Percent | Number                           | Percent |
| Any                                                     | 10,032,400         | 100%    | 2,164,700                      | 100%    | 7,867,600 †                      | 100%    |
| Victim's home/lodging                                   | 2,660,200          | 26.5    | 372,600                        | 17.2    | 2,287,600 †                      | 29.1 †  |
| Near victim's home                                      | 1,495,400          | 14.9    | 453,800                        | 21.0    | 1,041,500 †                      | 13.2 †  |
| In, at, or near friend's/neighbor's/<br>relative's home | 1,009,000          | 10.1    | 218,500                        | 10.1    | 790,500 †                        | 10.0    |
| Commercial place                                        | 811,200            | 8.1     | 189,300                        | 8.7     | 621,900 †                        | 7.9     |
| Parking lot/garage                                      | 704,700            | 7.0     | 239,600                        | 11.1    | 465,000 †                        | 5.9 †   |
| School <sup>d</sup>                                     | 611,300            | 6.1     | 33,700 !                       | 1.6 !   | 577,600                          | 7.3     |
| Open area/on street/<br>public transportation           | 1,877,200          | 18.7    | 503,400                        | 23.3    | 1,373,900 †                      | 17.5 †  |
| Other location                                          | 863,400            | 8.6     | 153,800                        | 7.1     | 709,600 †                        | 9.0     |

Note: Details may not sum to totals due to rounding. See appendix table 8 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older.

<sup>b</sup>Includes victimizations in which the offender had, showed, or used a firearm.

<sup>c</sup>Includes victimizations in which the offender did not have, show, or use a firearm.

<sup>d</sup>Inside a school building or on school property.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

### About 125,400 victimizations involved the theft of a firearm in 2018

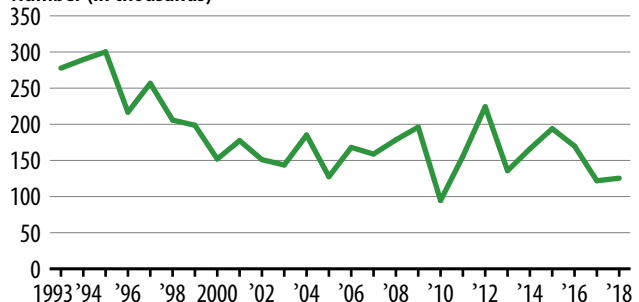
Violent and property victimizations involving the theft of at least one firearm declined from 277,700 in 1993 to 125,400 in 2018 (**figure 3**). The number of victimizations involving the theft of items excluding firearms decreased during this period, from 32.3 million to 12.2 million (not shown). In addition, an annual average of 1% of all theft victimizations from 1993 to 2018 involved the theft of firearms (not shown).

From 2014 to 2018, about 777,100 victimizations (an annual average of 155,400) involved the theft of at least one firearm. About 1.2 million firearms (an annual average of 249,400) were stolen during violent, property, and personal larceny victimizations during this five-year period (not shown).

**FIGURE 3**

#### Nonfatal victimizations involving the theft of a firearm, 1993–2018

Number (in thousands)



Note: See appendix table 9 for estimates and standard errors.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.



***During 2014–18, about 16% of nonfatal firearm victimizations resulted in physical injury***

In 9% of all nonfatal firearm violence during 2014–18, the offender actually fired the weapon (not shown). In 23% of these victimizations, the victim suffered a gunshot wound (not shown). A total of 16% of nonfatal firearm victimizations resulted in physical injury (**table 10**).<sup>3</sup> About 5% of nonfatal firearm victimizations resulted in serious injury (e.g., gunshot

wounds, broken bones, or internal injuries), while 11% resulted in minor injury (e.g., bruises or cuts). Victims received medical treatment in 47% of these victimizations. Among the victimizations in which victims received treatment, 78% did so in a hospital or doctor's office.

Overall, victims were more likely to suffer physical injury in nonfatal violence without a firearm (40%) than in firearm victimizations (16%). This pattern also held for victimizations involving serious injury and minor injury. There was no statistically significant difference between the percentage of victims who received treatment for injuries from firearm (47%) and nonfirearm violence (46%).

<sup>3</sup>Victims hospitalized for an extended period due to injury may not have been present for their scheduled NCVS household interview and thus may not have been captured by the survey. This could affect the percentages of victims reporting injury and treatment in the NCVS.

**TABLE 10**

**Nonfatal violence excluding simple assault, by presence of firearm, injury, and treatment received, 2014–18**

| Injury and treatment              | Total <sup>a</sup> |         | Firearm violence <sup>b*</sup> |         | Nonfirearm violence <sup>c</sup> |         |
|-----------------------------------|--------------------|---------|--------------------------------|---------|----------------------------------|---------|
|                                   | Number             | Percent | Number                         | Percent | Number                           | Percent |
| Any                               | 10,032,400         | 100%    | 2,164,700                      | 100%    | 7,867,600 †                      | 100%    |
| Not injured                       | 6,542,100          | 65.2%   | 1,822,100                      | 84.2%   | 4,720,000 †                      | 60.0% † |
| Injured                           | 3,490,300          | 34.8%   | 342,600                        | 15.8%   | 3,147,600 †                      | 40.0% † |
| Serious injuries <sup>d</sup>     | 1,871,800          | 18.7    | 110,100                        | 5.1     | 1,761,700 †                      | 22.4 †  |
| Gunshot                           | 42,400             | 0.4     | 42,400                         | 2.0     | ~                                | ~       |
| Minor injuries <sup>e</sup>       | 1,613,900          | 16.1    | 232,500                        | 10.7    | 1,381,400 †                      | 17.6 †  |
| Treatment for injury <sup>f</sup> | 3,490,300          | 100     | 342,600                        | 100     | 3,147,600 †                      | 100     |
| No treatment                      | 1,815,700          | 52.0    | 173,600                        | 50.7    | 1,642,100 †                      | 52.2 †  |
| Any treatment                     | 1,616,800          | 46.3    | 162,300                        | 47.4    | 1,454,500 †                      | 46.2    |
| Treatment setting <sup>g</sup>    | 1,616,800          | 100     | 162,300                        | 100     | 1,454,500 †                      | 100     |
| Medical facility <sup>h</sup>     | 1,064,400          | 65.8    | 125,900                        | 77.6    | 938,500 †                        | 64.5 ‡  |
| Nonmedical location <sup>i</sup>  | 552,400            | 34.2    | 36,400                         | 22.4    | 516,000 †                        | 35.5    |

Note: Details may not sum to totals due to rounding and because data on unknown injury type and unknown treatment are not shown. See appendix table 10 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

‡Difference with comparison group is significant at the 90% confidence level.

~Not applicable.

<sup>a</sup>Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older.

<sup>b</sup>Includes victimizations in which the offender had, showed, or used a firearm.

<sup>c</sup>Includes victimizations in which the offender did not have, show, or use a firearm.

<sup>d</sup>Includes gunshot wounds, knife wounds, sexual violence injuries, internal injuries, unconsciousness, and broken bones.

<sup>e</sup>Includes bruises, cuts, and other minor injuries.

<sup>f</sup>Includes only victims who were injured.

<sup>g</sup>Includes only victims who were injured and received treatment.

<sup>h</sup>Includes doctor's office, hospital emergency room, and overnight at a hospital.

<sup>i</sup>Includes at the scene, at the victim's/friend's/neighbor's home, or at another location.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

**Nearly 70% of nonfatal firearm violence during 2014–18 was reported to police**

During 2014–18, nonfatal firearm violence (68%) was more likely to be reported to police than nonfirearm violence (49%) (table 11). For firearm victimizations that were not reported to police, the most common reason victims gave was a belief that police could not or would not do anything to help (32%). The most common reason victims of nonfirearm violence gave for not reporting to police was that they had dealt

with the victimization another way, such as reporting to another official, like a guard, manager, or school official (28%).

Victims of firearm violence (32%) were more likely than victims of nonfirearm violence (20%) to not report to police because they believed the police could not or would not do anything to help. Similarly, victims of firearm violence (15%) were more likely than victims of nonfirearm violence (8%) to fear reprisal for reporting.

**TABLE 11**

**Nonfatal violence excluding simple assault, by presence of firearm, reporting to police, and reason for not reporting, 2014–18**

| Reporting to police                                                    | Total <sup>a</sup> |         | Firearm violence <sup>b*</sup> |         | Nonfirearm violence <sup>c</sup> |         |
|------------------------------------------------------------------------|--------------------|---------|--------------------------------|---------|----------------------------------|---------|
|                                                                        | Number             | Percent | Number                         | Percent | Number                           | Percent |
| Total                                                                  | 10,032,400         | 100%    | 2,164,700                      | 100%    | 7,867,600 †                      | 100%    |
| Reported                                                               | 5,303,600          | 52.9%   | 1,479,200                      | 68.3%   | 3,824,400 †                      | 48.6% † |
| Not reported                                                           | 4,579,000          | 45.6%   | 661,300                        | 30.5%   | 3,917,700 †                      | 49.8% † |
| Reason not reported <sup>d</sup>                                       | 4,579,000          | 100     | 661,300                        | 100     | 3,917,700 †                      | 100     |
| Dealt with it another way <sup>e</sup>                                 | 1,250,700          | 27.3    | 139,800                        | 21.1    | 1,110,900 †                      | 28.4 ‡  |
| Not important enough to respondent <sup>f</sup>                        | 682,000            | 14.9    | 68,800                         | 10.4    | 613,300 †                        | 15.7    |
| Police could/would not do anything to help <sup>g</sup>                | 1,007,200          | 22.0    | 212,400                        | 32.1    | 794,900 †                        | 20.3 †  |
| Fear of reprisal                                                       | 393,000            | 8.6     | 97,200                         | 14.7    | 295,900 †                        | 7.6 †   |
| Did not want to get offender in trouble with law/advised not to report | 333,800            | 7.3     | 32,800                         | 5.0     | 301,000 †                        | 7.7     |
| Other/unknown/no single most important reason <sup>h</sup>             | 912,200            | 19.9    | 110,300                        | 16.7    | 801,800 †                        | 20.5    |

Note: Details may not sum to totals due to rounding and missing data on reporting to police, which occurred in about 1% of all victimizations. See appendix table 11 for standard errors. The National Crime Victimization Survey asks respondents about 19 potential reasons for not reporting a victimization to police. For ease of presentation, those data are collapsed into the six categories presented here.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

‡Difference with comparison group is significant at the 90% confidence level.

<sup>a</sup>Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older.

<sup>b</sup>Includes victimizations in which the offender had, showed, or used a firearm.

<sup>c</sup>Includes victimizations in which the offender did not have, show, or use a firearm.

<sup>d</sup>The most important reason stated by the victim.

<sup>e</sup>Includes crime reported to another official (e.g., guard, apartment manager, or school official) or victims who took care of it themselves or informally.

<sup>f</sup>Includes victims who said it was a minor or unsuccessful crime, the offender(s) was a child, it was not clear the incident was criminal or that harm was intended, or insurance would not cover the losses.

<sup>g</sup>Includes victims who indicated they did not find out about the crime until too late, they could not find or identify the offender, they lacked proof of the incident, they thought police would not think it was important enough, they believed police would be inefficient or ineffective, they thought police would cause trouble for the victim, or the offender was a police officer.

<sup>h</sup>Includes victims who indicated they did not want to or could not take time to report, provided some other reason for not reporting, said no one reason was more important than another, or had unknown reasons for not reporting.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

***A firearm was used for self-defense in 2% of nonfatal violent victimizations***

The NCVS collects data on victims' reactions and any actions they may have taken during the incident. During 2014–18, the victim took no action against the offender or kept still in 37% of all nonfatal violence excluding simple assault (table 12). Other self-protective behaviors included noncombative tactics (31%) (such as yelling, running away, or trying to attract attention) and threatening or attacking

the offender without a weapon (25%). Victims used a firearm to threaten or attack the offender in 2% (166,900) of all nonfatal violent victimizations; the offender had a firearm in 28% of these cases (not shown).

In 1% (183,300) of property victimizations during which the victim was present, the victim threatened or attacked the offender with a firearm. However, the victim was not present during the majority (82%) of property crimes captured by the NCVS.

**TABLE 12**  
**Self-protective behaviors of victims, by type of crime, 2014–18**

| Self-protective behavior                  | Nonfatal violence excluding simple assault <sup>a</sup> |         | Property victimization |                      |
|-------------------------------------------|---------------------------------------------------------|---------|------------------------|----------------------|
|                                           | Number                                                  | Percent | Number                 | Percent <sup>b</sup> |
| <b>Total</b>                              | 10,032,400                                              | 100%    | 72,557,900             | 100%                 |
| <b>Victim was present<sup>c</sup></b>     | 10,032,400                                              | 100%    | 12,782,100             | 17.6%                |
| Took no action/kept still*                | 3,721,300                                               | 37.1    | 9,032,700              | 70.7                 |
| Threatened/attacked with a firearm        | 166,900 †                                               | 1.7 †   | 183,300 †              | 1.4 †                |
| Threatened/attacked with other weapon     | 184,700 †                                               | 1.8 †   | 31,100 †               | 0.2 †                |
| Threatened/attacked without a weapon      | 2,477,200 †                                             | 24.7 †  | 417,700 †              | 3.3 †                |
| Noncombative tactics <sup>d</sup>         | 3,129,300 ‡                                             | 31.2 †  | 1,495,700 †            | 11.7 †               |
| Other                                     | 336,100 †                                               | 3.4 †   | 256,900 †              | 2.0 †                |
| Unknown                                   | 16,800 !                                                | 0.2 !   | 1,364,700 †            | 10.7 †               |
| <b>Victim was not present<sup>c</sup></b> | ~                                                       | ~       | 59,775,800             | 82.4%                |

Note: Details may not sum to totals due to rounding. See appendix table 12 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

‡Difference with comparison group is significant at the 90% confidence level.

~Not applicable.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older.

<sup>b</sup>Denominator includes both property victimizations for which the victim was present and those for which the victim was not present.

<sup>c</sup>Victims were, by definition, present during violent victimizations but may not have been during property victimizations.

<sup>d</sup>Includes yelling, cooperating, running away, arguing or reasoning, calling police, or trying to attract attention or warn others.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

## Incidents of nonfatal firearm violence

An incident is a specific criminal act involving one or more victims. Table 13 presents incident-level data to facilitate comparisons between victim and offender characteristics. Offender characteristics in the NCVS are based on victims' perceptions of offenders.<sup>4</sup>

There were 1.9 million incidents of nonfatal violence excluding simple assault—rape or sexual assault, robbery, and aggravated assault—during 2014–18 in which the offender had, showed, or used a firearm (table 13). During 2014–18, the percentage of nonfatal

firearm violent incidents involving male victims (61%) was greater than males' share of the population (49%). The opposite was true for females: the percentage of nonfatal firearm violent incidents involving female victims (39%) was smaller than the percentage of the population that was female (51%).

***During 2014–18, males represented a higher share of offenders in nonfatal firearm incidents than their share of the U.S. population***

As for offenders, the percentage of nonfatal firearm incidents involving males (76%) was greater than the share of males represented in the population during 2014–18. In comparison, the percentage involving female offenders (6%) was smaller than the percentage of females in the population.

<sup>4</sup>Offender characteristics in the NCVS (sex, race, ethnicity, national origin, and age) are based on victims' perceptions of the offenders and are reported at the incident level. The NCVS began collecting expanded race data on offenders in 2012. See *Methodology*.

**TABLE 13**

**Incidents of nonfatal firearm violence, by characteristics of U.S. population, offender, and victim, 2014–18**

| Characteristic                      | U.S. population <sup>a</sup> | Number of incidents   |           | Percent of U.S. population <sup>a*</sup> | Percent of incidents  |         | Percent ratio      |                        |                      |
|-------------------------------------|------------------------------|-----------------------|-----------|------------------------------------------|-----------------------|---------|--------------------|------------------------|----------------------|
|                                     |                              | Offender <sup>b</sup> | Victim    |                                          | Offender <sup>b</sup> | Victim  | Offender to victim | Offender to population | Victim to population |
| <b>Total</b>                        | 1,356,189,700                | 1,934,800             | 1,934,800 | 100%                                     | 100%                  | 100%    | 1.00               | 1.00                   | 1.00                 |
| <b>Sex</b>                          |                              |                       |           |                                          |                       |         |                    |                        |                      |
| Male                                | 659,928,700                  | 1,469,400             | 1,178,500 | 48.7%                                    | 75.9% †               | 60.9% † | 1.25               | 1.56                   | 1.25                 |
| Female                              | 696,261,000                  | 108,800               | 756,300   | 51.3                                     | 5.6 †                 | 39.1 †  | 0.14               | 0.11                   | 0.76                 |
| Both male and female offenders      | ~                            | 210,000               | ~         | ~                                        | 10.9                  | ~       | ~                  | ~                      | ~                    |
| <b>Race/ethnicity</b>               |                              |                       |           |                                          |                       |         |                    |                        |                      |
| White <sup>c</sup>                  | 862,426,100                  | 586,700               | 1,021,200 | 63.6%                                    | 30.3% †               | 52.8% † | 0.57               | 0.48                   | 0.83                 |
| Black <sup>c</sup>                  | 165,512,800                  | 716,300               | 399,500   | 12.2                                     | 37.0 †                | 20.6 †  | 1.79               | 3.03                   | 1.69                 |
| Hispanic                            | 221,674,800                  | 313,400               | 363,800   | 16.3                                     | 16.2                  | 18.8    | 0.86               | 0.99                   | 1.15                 |
| Asian <sup>c</sup>                  | 77,629,700                   | 11,200 !              | 68,100    | 5.7                                      | 0.6 !                 | 3.5     | 0.16               | 0.10                   | 0.62                 |
| Other <sup>c,d</sup>                | 28,946,300                   | 101,100               | 82,200    | 2.1                                      | 5.2 †                 | 4.2     | 1.23               | 2.45                   | 1.99                 |
| Multiple offenders of various races | ~                            | 35,500                | ~         | ~                                        | 1.8                   | ~       | ~                  | ~                      | ~                    |
| <b>Age</b>                          |                              |                       |           |                                          |                       |         |                    |                        |                      |
| 11 or younger <sup>e</sup>          | ~                            | 1,800 !               | ~         | ~                                        | 0.1% !                | ~       | ~                  | ~                      | ~                    |
| 12–17                               | 124,832,500                  | 80,400                | 104,900   | 9.2%                                     | 4.2 †                 | 5.4% †  | 0.77               | 0.45                   | 0.59                 |
| 18–29                               | 263,440,000                  | 539,700               | 752,400   | 19.4                                     | 27.9 †                | 38.9 †  | 0.72               | 1.44                   | 2.00                 |
| 30 or older                         | 967,917,200                  | 725,500               | 1,077,500 | 71.4                                     | 37.5 †                | 55.7 †  | 0.67               | 0.53                   | 0.78                 |
| Multiple offenders of various ages  | ~                            | 240,100               | ~         | ~                                        | 12.4                  | ~       | ~                  | ~                      | ~                    |

Note: An incident is a specific criminal act involving one or more victims. Offender characteristics are based on victims' perceptions of offenders. Includes rape or sexual assault, robbery, and aggravated assault victimizations of persons age 12 or older in which the offender had, showed, or used a firearm. Details may not sum to totals due to rounding and missing data on offender characteristics. See appendix table 13 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence level.

~Not applicable.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes persons age 12 or older living in noninstitutionalized residential settings in the U.S.

<sup>b</sup>Includes incidents for which offender characteristics in each category were reported. Offender sex was unknown in 8% of incidents, race or ethnicity in 9% of incidents, and age in 18% of incidents.

<sup>c</sup>Excludes persons of Hispanic origin (e.g., "white" refers to non-Hispanic whites and "black" refers to non-Hispanic blacks).

<sup>d</sup>Includes Native Hawaiians or Other Pacific Islanders, American Indians or Alaska Natives, and persons of two or more races.

<sup>e</sup>The NCVS does not survey victims age 11 or younger, but victims can report an offender age 11 or younger.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

***The share of black persons in nonfatal firearm incidents was higher for both victims and perceived offenders than their share of the population during 2014–18***

During 2014–18, the percentage of nonfatal firearm incidents involving white victims (53%) was smaller than the percentage of white persons in the population (64%). In comparison, the percentage of firearm incidents involving black victims (21%) was larger than the percentage of black persons in the population (12%).

For offenders, the percentage of nonfatal firearm incidents during 2014–18 with persons perceived by the victim to be white (30%) was half their share of the population, while the percentage with persons perceived by the victim to be black (37%) was greater than the percentage of black persons in the population. The percentage of firearm incidents involving offenders who were perceived to be Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, or two or more races (5%) was greater than their combined share of the population (2%).

Nearly twice (1.8 times) as many nonfatal firearm incidents involved black offenders as black victims during 2014–18. In comparison, around half (0.6 times) as many firearm incidents involved white offenders as white victims.

***Relative to their portion of the population, persons ages 18 to 29 made up greater percentages of both victims and perceived offenders in nonfatal firearm incidents during 2014–18***

During 2014–18, persons age 30 or older made up a smaller share of both victims (56%) and offenders (38%) in nonfatal firearm incidents than their portion of the U.S. population (71%). The percentage of nonfatal firearm incidents involving victims (5%) and offenders (4%) ages 12 to 17 was also smaller than their portion of the population (9%). The percentage of nonfatal firearm incidents involving victims (39%) and offenders (28%) ages 18 to 29 was greater than their share of the population (19%). In 12% of nonfatal firearm incidents, victims reported multiple offenders of various ages.

Persons ages 18 to 29 were 1.4 times more likely to be offenders and twice as likely to be victims than their percentage of the population during 2014–18.



## Methodology

Estimates in this report are primarily based on data from the Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS) and the Fatal Injury Reports developed from the National Vital Statistics System (NVSS) Web-based Injury Statistics Query and Reporting System (WISQARS), a product of the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC). Additional estimates come from the FBI's Supplementary Homicide Reports (SHR). All comparisons in this report are based either on statistical significance testing of estimates derived from a sample or on an analysis of all records in the contributing source(s). In particular, comparisons based on figure 1; tables 1, 4, and 6; and part of table 3 derive from an analysis of all records in the contributing source(s).

### The National Crime Victimization Survey

#### Survey coverage

The NCVS is an annual BJS data collection carried out by the U.S. Census Bureau. The NCVS is a self-reported survey that is administered annually from January 1 to December 31. Annual NCVS estimates are based on the number and characteristics of crimes that respondents experienced during the prior 6 months, not including the month in which they were interviewed. Therefore, the 2018 survey covers crimes experienced from July 1, 2017, to November 30, 2018, with March 15, 2018, as the middle of the reference period. Crimes are classified by the year of the survey and not by the year of the crime.

The NCVS is administered to persons age 12 or older from a nationally representative sample of U.S. households and collects information on personal and property crimes. Personal crimes include personal larceny (purse snatching and pick pocketing) and nonfatal violent crimes (rape or sexual assault, robbery, aggravated assault, and simple assault). Household property crimes include burglary or trespassing, motor vehicle theft, and other types of theft. The survey collects information on threatened, attempted, and completed crimes. It collects data both on crimes reported and not reported to police. Unless specified otherwise, estimates in this report include threatened, attempted, and completed crimes. In addition to providing annual level and change estimates on

criminal victimization, the NCVS is the primary source of information on the nature of criminal victimization incidents.

Survey respondents provide information about themselves, including age, sex, race, ethnicity, marital status, education level, and income and whether they experienced a victimization. For each victimization incident, respondents report information about the offender (including age, sex, race, ethnicity, and victim-offender relationship), characteristics of the crime (including time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons the crime was or was not reported, and victim experiences with the criminal justice system.

Household information, including household-level demographics (e.g., income) and property victimizations committed against the household (e.g., burglary or trespassing), is typically collected from the reference person. The reference person is any responsible adult member of the household who is unlikely to permanently leave the household. Because an owner or renter of the sampled housing unit is normally the most responsible and knowledgeable household member, this person is generally designated as the reference person and household respondent. However, a household respondent does not have to be one of the household members who owns or rents the unit.

In the NCVS, a household is defined as a group of persons who all reside at a sampled address. Persons are considered household members when the sampled address is their usual place of residence at the time of the interview and when they have no primary place of residence elsewhere. Once selected, households remain in the sample for 3½ years, and eligible persons in these households are interviewed every 6 months, either in person or over the phone, for a total of seven interviews.

First interviews are typically conducted in person, with subsequent interviews conducted either in person or by phone. New households rotate into the sample on an ongoing basis to replace outgoing households that have been in the sample for the full 3½-year period. The sample includes persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings, and excludes persons living on military bases or in institutional settings such as correctional or hospital facilities.

## Measurement of crime in the National Crime Victimization Survey

BJS presents data from the NCVS on victimization, incident, and prevalence rates. NCVS victimization and incident data are presented in this report. Victimization rates measure the extent to which violent and property victimizations occur in a specified population during a specified time. Victimization numbers show the total number of times that people or households are victimized by crime. For crimes affecting persons, NCVS victimization rates are estimated by dividing the number of victimizations that occur during a specified time (T) by the population at risk for those victimizations and multiplying the rate by 1,000.

$$\text{Victimization rate } \tau = \frac{\text{Number of victimizations experienced by a specified population } \tau}{\text{Number of unique persons (or households) in the specified population } \tau} \times 1,000$$

For victimization rates, each victimization represents one person (for personal crimes) or one household (for property crimes) affected by a crime.<sup>5</sup> Every victimization experienced by a person or household during the year is counted. For example, if one person experiences two violent crimes during the year, both are counted in the victimization rate. If one household experiences two property crimes, both are counted in the victimization rate. Victimization estimates are presented in figures 1 through 3 and tables 1 through 12 in this report.

Incident rates are another measure of crime. The number of incidents is the number of specific criminal acts involving one or more victims. If every victimization had one victim, the number of incidents would be the same as the number of victimizations. If there was more than one victim, the incident estimate is adjusted to compensate for the possibility that the incident could be reported several times by multiple victims and thus be overcounted. For example, if two people were robbed during the same incident, this crime would be counted as one incident and two victimizations. Incident estimates are presented in table 13 in this report.

<sup>5</sup>In the NCVS, personal crimes include personal larceny (purse-snatching and pick-pocketing) and violent victimizations (rape or sexual assault, robbery, aggravated assault, and simple assault). Homicide is excluded because the NCVS is based on interviews with victims. Property crimes include burglary, residential trespassing, motor vehicle theft, and other theft.

## Nonresponse and weighting adjustments

The 2018 NCVS data file includes interviews from 151,055 households. Overall, 73% of eligible households completed an interview. Each household was interviewed twice during the year. Within participating households, 242,928 persons completed an interview in 2018, representing an 82% response rate among eligible persons from responding households.

Victimizations that occurred outside of the U.S. were excluded from this report. In 2018, less than 1% of the unweighted victimizations occurred outside of the U.S.

Estimates in this report use data from the 1993 to 2018 NCVS data files, which are weighted to produce annual estimates of victimization for persons age 12 or older living in U.S. households. Because the NCVS relies on a sample rather than a census of the entire U.S. population, weights are designed to calibrate sample point estimates to known population totals and to compensate for survey nonresponse and other aspects of the complex sample design.

The NCVS data files include person, household, and incident weights. Person weights provide an estimate of the population represented by each person in the sample. Household weights provide an estimate of the U.S. household population represented by each household in the sample. After proper adjustment, both household and person weights are also typically used to form the denominator in calculations of crime rates. For personal crimes, the incident weight is derived by dividing the person weight of a victim by the total number of persons victimized during an incident, as reported by the respondent. For property crimes measured at the household level, the incident weight and the household weight are the same because the victim of a property crime is considered to be the household as a whole. The incident weight is most frequently used to calculate estimates of offenders' and victims' demographic characteristics.

Victimization weights used in this analysis account for the number of persons present during an incident and for high-frequency repeat victimizations (i.e., series victimizations). Series victimizations are similar in type but occur with such frequency that a victim is unable to recall each individual event or describe each event in detail. Survey procedures allow NCVS interviewers to identify and classify these similar victimizations as series victimizations and to collect detailed information on only the most recent incident in the series.

The weight counts series incidents as the actual number of incidents reported by the victim, up to a maximum of 10 incidents. Doing so produces more reliable estimates of crime levels than counting such victimizations only once, while the cap at 10 minimizes the effect of extreme outliers on rates. According to the 2018 data, series victimizations accounted for 1.5% of all victimizations and 3.8% of all violent victimizations. Additional information on the series enumeration is detailed in *Methods for Counting High-Frequency Repeat Victimizations in the National Crime Victimization Survey* (NCJ 237308, BJS, April 2012).

### **Standard error computations**

When national estimates are derived from a sample, as with the NCVS, caution must be used when comparing one estimate to another or when comparing estimates over time. Although one estimate may be larger than another, estimates based on a sample have some degree of sampling error. The sampling error of an estimate depends on several factors, including the amount of variation in the responses and the size of the sample. When the sampling error around an estimate is taken into account, estimates that appear different may not be statistically different.

One measure of the sampling error associated with an estimate is the standard error. The standard error may vary from one estimate to the next. Generally, an estimate with a small standard error provides a more reliable approximation of the true value than an estimate with a larger standard error. Estimates with relatively large standard errors are associated with less precision and reliability and should be interpreted with caution.

For complex sample designs, there are several methods that can be used to generate standard errors around a point estimate (e.g., numbers, percentages, and rates). In this report, generalized variance function (GVF) parameters were used for variance estimation. The U.S. Census Bureau produces GVF parameters for BJS, which account for aspects of the NCVS's complex sample design and represent the curve fitted to a selection of individual standard errors, using a specialized version of Balanced Repeated Replication based on Fay's method. GVFs express the variance as a function of the expected value of the survey estimate.<sup>16</sup> For more information on GVFs, see *National Crime Victimization Survey, 2016 Technical Documentation* (NCJ 251442, BJS, December 2017).

BJS conducted statistical tests to determine whether differences in estimated numbers, percentages, and rates in this report were statistically significant once sampling error was taken into account. Using statistical analysis programs developed specifically for the NCVS, all comparisons in the text were tested for significance. The primary test procedure was the Student's t-statistic, which tests the difference between two sample estimates. Findings described in this report as higher, lower, or different passed a test at either the 0.05 level (95% confidence level) or 0.10 level (90% confidence level) of significance. Figures and tables in this report should be referenced for significance testing results for specific findings. Caution is required when comparing estimates not explicitly discussed in this report.

NCVS estimates and standard errors of the estimates provided in this report may be used to generate a confidence interval around the estimate as a measure of the margin of error. The following example illustrates how standard errors can be used to generate confidence intervals:

Based on the 2018 NCVS, the nonfatal firearm victimization rate among persons age 12 or older in 2018 was 1.7 victimizations per 1,000 persons. (See table 2.) Using GVFs, BJS determined that the estimated victimization rate has a standard error of 0.24. (See appendix table 2.) A confidence interval around the estimate is generated by multiplying the standard error by  $\pm 1.96$  (the t-score of a normal, two-tailed distribution that excludes 2.5% at either end of the distribution). Therefore, the 95% confidence interval around the 1.7 estimate from 2018 is  $1.7 \pm (0.24 \times 1.96)$  or (1.2 to 2.2). In other words, if BJS used the same sampling method to select different samples and computed an interval estimate for each sample, it would expect the true population parameter (rate of violent victimization) to fall within the interval estimates 95% of the time.

For this report, BJS also calculated a coefficient of variation (CV) for all estimates, representing the ratio of the standard error to the estimate. CVs (not shown in tables) provide another measure of reliability and a means for comparing the precision of estimates across measures with differing levels or metrics.

### **Collecting data on offender race and ethnicity in the National Crime Victimization Survey**

In 2012, BJS changed the manner in which the NCVS collects information about the perceived race of a violent offender. Information on an offender's race



and Hispanic origin is collected from the victim and is based on the victim's perceptions. Prior to 2012, the NCVS offender race categories were white, black or African American, and some other race. In 2012, offender race categories were expanded to align with the Office of Management and Budget's (OMB) standards for measuring race and ethnicity. The race variable now includes categories for Asians, Native Hawaiians or Other Pacific Islanders, American Indians or Alaska Natives, and persons of two or more races. In 2012, the NCVS also began collecting information on whether an offender was of Hispanic origin.

The NCVS collects offender information from victims in the Crime Incident Report (CIR).<sup>6</sup> Offender demographic characteristics are based on victims' perceptions. The section in the CIR on offenders begins with a question about the number of offenders. For violent crime incidents involving a single offender, respondents are asked about the offender's relationship to the victim, demographic characteristics (including sex, race, ethnicity, and age), membership in a street gang, use of alcohol or drugs at the time of the incident, and previous crimes against the respondent or respondent's household.

For violent incidents involving multiple offenders, respondents are asked similar questions, such as whether the offender demographic characteristics applied to all or most of the offenders. Respondents are asked if any of the offenders were Hispanic or Latino, followed by whether they were mostly Hispanic, mostly non-Hispanic, or an equal number of Hispanic and non-Hispanic persons. Respondents were then asked what the race or races were of the offenders. Following OMB standards for measuring race and ethnicity, the offender race categories in the NCVS are white, black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and persons of two or more races. Offenders reported as Hispanic are classified as Hispanic, regardless of their reported race.

### **Revised 2016 data file**

For 2016, BJS greatly increased the NCVS sample size to facilitate the ability to produce state-level victimization estimates from the 22 most populous states. At the same time, the sample was adjusted to reflect the U.S. population counts in the 2010 decennial census. These changes resulted in a historically large number of new households and first-time interviews

in the first half of 2016 and produced challenges in comparing 2016 results to prior data years.

Working with the U.S. Census Bureau, BJS subsequently devised the methodology that was used to create the revised 2016 NCVS data file and allow for year-to-year comparisons between 2016 and other data years. The result was revised criminal victimization estimates that were nationally representative for 2016 and could be compared with prior and future years. For more information, see *National Crime Victimization Survey revised 2016 estimates and Methodology in Criminal Victimization, 2016: Revised* (NCJ 252121, BJS, October 2018).

### **Web-based Injury Statistics Query and Reporting System Fatal Injury Reports**

The WISQARS Fatal Injury Reports (WISQARS Fatal) provide mortality data related to injury. The mortality data reported in WISQARS Fatal come from the NVSS death certificate data reported to the NCHS. Data include causes of death reported by attending physicians, medical examiners, and coroners. It also includes demographic information about decedents reported by funeral directors, who obtain that information from family members and other informants. The NCHS collects, compiles, verifies, and prepares these data for release to the public. The information describes what types of injuries are leading causes of deaths, how common they are, and who they affect. These data are intended for a broad audience—the public, media, and public health practitioners, researchers, and officials—to increase their knowledge of injury.

WISQARS Fatal mortality reports provide tables of total numbers of injury-related deaths and death rates per 100,000 persons. The reports list deaths according to cause (mechanism) and intent (manner) of injury by state, sex, race, Hispanic origin, and age groupings. This report features data on homicides by firearm from 1993 to 2018. The injury mortality data were classified based on the tenth revision of the International Classification of Diseases (ICD-10) for 1999 and later years and on the ICD-9 for 1998 and earlier years. A study showed that the comparability for homicide and firearm homicide between the two classification systems was high. Therefore, data are shown from both periods.<sup>7</sup>

<sup>6</sup>For all questions included on the NCVS CIR, see the BJS website.

<sup>7</sup>Anderson, R. N., Miniño, A. M., Hoyert, D. L., & Rosenberg, H. M. (2001). *Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates* (National Vital Statistics Reports, Vol. 49, No. 2). National Center for Health Statistics. [https://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49\\_02.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_02.pdf)

## The FBI's Uniform Crime Reporting Program, Supplementary Homicide Reports

The FBI's Uniform Crime Reporting Program (UCR) Supplementary Homicide Reports (SHR) were the source of information about the type of gun used in firearm homicides. (See table 4.) The SHR provide incident-level information on criminal homicides, including situation type (e.g., number of victims, number of offenders, and whether offenders were known); age, sex, and race of victims and offenders; weapon used; circumstances of the incident; and the victim's relationship to the offender. Local law enforcement agencies participating in the UCR provide these data to the FBI on a monthly basis. Data include murders and nonnegligent manslaughters in the U.S. from January 1993 to December 2018. Negligent manslaughters and justifiable homicides have been eliminated from the data. Based on the SHR, the FBI estimates that 442,911 murders (including nonnegligent manslaughters) were committed from 1993 to 2018. Agencies provided detailed information on 414,784 of these homicide victims. SHR estimates in this report have been revised from those in previously published reports.

About 94% of homicides are included in the SHR. However, adjustments can be made to the weights to correct for missing victim reports. SHR estimates in this report were generated by BJS. Weights have been developed to compensate for the average annual 10% of homicides that were not reported to the SHR. The development of the set of annual weights is a three-step process.

Each year the FBI's annual *Crime in the United States* report presents a national estimate of murder victims in the U.S. and estimates of the number of murder victims in each of the 50 states and the District of Columbia. The first-stage weight uses the FBI's annual estimates of murder victims in each state and the number of murder victims from that state found in the annual SHR database.

Specifically, the first-stage weight for victims in state  $S$  in year  $Y$  is—

$$\frac{\text{FBI's estimate of murder victims in state } S_{(\text{year } Y)}}{\text{Number of murder victims in the SHR file from state } S_{(\text{year } Y)}}$$

For complete reporting states, this first-stage weight is equal to 1. For partial reporting states, this weight is greater than 1. For states with a first-stage weight greater than 2—that is, the state reported SHR data for fewer than half of the FBI's estimated number of murder victims in the state—the first-stage weight is set to 1.

The second-stage weight uses the FBI's annual national estimates of murder victims in the U.S. and the sum of the first-stage weights for each state. The second-stage weight for victims in all states in year  $Y$  is—

$$\frac{\text{FBI's estimate of murder victims in United States}_{(\text{year } Y)}}{\text{Sum of the first-stage weights of all states}_{(\text{year } Y)}}$$

The third step in the process is to calculate the final annual victim-level SHR weight. The final weight used to develop national estimates of the attributes of murder victims is—

$$\text{SHR weight}_{(\text{year } Y)} = (\text{First-stage weight}_{(\text{year } Y)}) \times (\text{Second-stage weight}_{(\text{year } Y)})$$

Conceptually, the first-stage weight uses a state's own reported SHR records to represent all murder victims in that state, as long as at least 50% of the estimated number of murder victims in that state has a record in the SHR. The sum of the first-stage weights then equals the sum of the total number of all murder victims in states with at least 50% SHR coverage and the simple count of those victims from the other reporting states. The second-stage weight is used to inflate the first-stage weights so that the weight derived from the product of the first- and second-stage weights represents all murder victims in that year in the U.S. The difference between the sum of the first-stage weights and the FBI's annual national estimate of murder victims is the unreported murder victims in states with less than 50% SHR coverage and the murder victims in states that report no data to the SHR in that year. The second-stage weight compensates for this difference by assuming that the attributes of the nonreported victims are similar to the attributes of weighted murder victims in that year's SHR database.

The weighting procedure outlined above assumes that the characteristics of unreported homicide incidents are similar to the characteristics of reported incidents. There is no comprehensive way to assess the validity of this assumption. Also, there is one exception to this weighting process: Some states did not report any data in some years. For example, Florida reported no incidents to the SHR for 1988 through 1991 and from 1997 through 2018. However, the annual national weights attempt to compensate for those few instances in which entire states did not report any data. For more information on differences between the two homicide measures used in this report, see *The Nation's Two Measures of Homicide* (NCJ 247060, BJS, July 2014).



**APPENDIX TABLE 1**

Population estimates for figure 1: Rate of firearm homicide per 100,000 persons, 1993–2018; and for table 1: Firearm homicide, 1993–2018

| Year | Number of all persons | Number of persons age 12 or older |
|------|-----------------------|-----------------------------------|
| 1993 | 259,918,595           | 213,918,420                       |
| 1994 | 263,125,826           | 216,740,712                       |
| 1995 | 266,278,403           | 219,557,921                       |
| 1996 | 269,394,291           | 222,304,455                       |
| 1997 | 272,646,932           | 225,273,153                       |
| 1998 | 275,854,116           | 228,202,348                       |
| 1999 | 279,040,238           | 231,113,390                       |
| 2000 | 282,171,936           | 234,048,303                       |
| 2001 | 284,968,955           | 236,875,214                       |
| 2002 | 287,625,193           | 239,784,048                       |
| 2003 | 290,107,933           | 242,435,547                       |
| 2004 | 292,805,298           | 245,205,504                       |
| 2005 | 295,516,599           | 247,910,782                       |
| 2006 | 298,379,912           | 250,633,266                       |
| 2007 | 301,231,207           | 253,208,424                       |
| 2008 | 304,093,966           | 255,744,169                       |
| 2009 | 306,771,529           | 258,144,817                       |
| 2010 | 308,758,105           | 259,920,933                       |
| 2011 | 311,580,009           | 262,791,952                       |
| 2012 | 313,874,218           | 265,239,765                       |
| 2013 | 316,057,727           | 267,512,309                       |
| 2014 | 318,386,421           | 269,799,946                       |
| 2015 | 320,742,673           | 272,102,214                       |
| 2016 | 323,071,342           | 274,440,995                       |
| 2017 | 325,147,121           | 276,604,161                       |
| 2018 | 327,167,434           | 278,774,433                       |

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System Fatal Injury Reports developed from the National Vital Statistics System, 1993–2018.

**APPENDIX TABLE 2**

Population estimates and standard errors for figure 2: Rate of nonfatal firearm victimization per 100,000 persons age 12 or older, 1993–2018; and for table 2: Nonfatal firearm victimization against persons age 12 or older, 1993–2018

| Year | Number of persons age 12 or older | Standard error           |                |
|------|-----------------------------------|--------------------------|----------------|
|      |                                   | Number of victimizations | Rate per 1,000 |
| 1993 | 210,906,904                       | 151,899                  | 0.72           |
| 1994 | 213,135,895                       | 130,233                  | 0.61           |
| 1995 | 215,080,689                       | 109,866                  | 0.51           |
| 1996 | 217,234,276                       | 113,436                  | 0.52           |
| 1997 | 219,839,107                       | 119,587                  | 0.54           |
| 1998 | 221,880,964                       | 98,283                   | 0.44           |
| 1999 | 224,568,370                       | 87,003                   | 0.39           |
| 2000 | 226,804,614                       | 83,909                   | 0.37           |
| 2001 | 229,215,295                       | 73,576                   | 0.32           |
| 2002 | 231,589,263                       | 82,162                   | 0.36           |
| 2003 | 239,305,985                       | 70,340                   | 0.29           |
| 2004 | 241,703,710                       | 62,937                   | 0.26           |
| 2005 | 244,505,295                       | 74,811                   | 0.31           |
| 2006 | 247,233,080                       | 82,561                   | 0.33           |
| 2007 | 250,344,870                       | 80,010                   | 0.32           |
| 2008 | 252,242,523                       | 66,653                   | 0.26           |
| 2009 | 254,105,607                       | 75,355                   | 0.30           |
| 2010 | 255,961,936                       | 72,425                   | 0.28           |
| 2011 | 257,542,238                       | 70,968                   | 0.28           |
| 2012 | 261,996,322                       | 65,925                   | 0.25           |
| 2013 | 264,411,702                       | 63,225                   | 0.24           |
| 2014 | 266,665,162                       | 72,678                   | 0.27           |
| 2015 | 269,526,470                       | 54,750                   | 0.20           |
| 2016 | 272,204,185                       | 64,204                   | 0.24           |
| 2017 | 272,468,482                       | 61,479                   | 0.24           |
| 2018 | 275,325,387                       | 67,155                   | 0.24           |

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

**APPENDIX TABLE 3**

**Standard errors for table 3: Percent of fatal and nonfatal violence involving a firearm, by type of crime, 1993–2018**

| Year                                 | Nonfatal violence | Nonfatal violence excluding simple assault | Robbery | Aggravated assault |
|--------------------------------------|-------------------|--------------------------------------------|---------|--------------------|
| Average annual percentage, 1993–2018 | 0.20%             | 0.52%                                      | 0.80%   | 0.69%              |
| 1993                                 | 0.81              | 1.92                                       | 2.84    | 2.54               |
| 1994                                 | 0.68              | 1.72                                       | 2.65    | 2.19               |
| 1995                                 | 0.65              | 1.75                                       | 2.78    | 2.17               |
| 1996                                 | 0.72              | 1.85                                       | 2.80    | 2.27               |
| 1997                                 | 0.80              | 2.03                                       | 3.06    | 2.59               |
| 1998                                 | 0.74              | 2.05                                       | 2.92    | 2.53               |
| 1999                                 | 0.75              | 1.98                                       | 3.15    | 2.70               |
| 2000                                 | 0.88              | 2.32                                       | 3.33    | 3.07               |
| 2001                                 | 0.89              | 2.29                                       | 4.16    | 3.03               |
| 2002                                 | 0.99              | 2.71                                       | 4.07    | 3.50               |
| 2003                                 | 0.83              | 2.35                                       | 3.81    | 3.02               |
| 2004                                 | 0.85              | 2.23                                       | 3.65    | 2.87               |
| 2005                                 | 0.97              | 2.61                                       | 3.79    | 3.38               |
| 2006                                 | 0.89              | 2.12                                       | 3.03    | 2.87               |
| 2007                                 | 1.02              | 2.61                                       | 3.08    | 3.46               |
| 2008                                 | 0.96              | 2.76                                       | 4.31    | 4.12               |
| 2009                                 | 1.19              | 3.02                                       | 5.02    | 3.96               |
| 2010                                 | 1.29              | 3.20                                       | 4.54    | 4.02               |
| 2011                                 | 1.08              | 2.89                                       | 4.36    | 3.76               |
| 2012                                 | 0.88              | 2.54                                       | 4.26    | 3.51               |
| 2013                                 | 0.93              | 2.61                                       | 3.66    | 3.67               |
| 2014                                 | 1.20              | 2.78                                       | 3.97    | 3.86               |
| 2015                                 | 1.00              | 2.51                                       | 3.90    | 4.02               |
| 2016                                 | 1.06              | 2.71                                       | 4.46    | 3.58               |
| 2017                                 | 0.98              | 2.43                                       | 4.19    | 3.41               |
| 2018                                 | 0.94              | 2.26                                       | 3.41    | 3.63               |

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

**APPENDIX TABLE 4**

**Standard errors for table 5: Nonfatal firearm victimization, by type of firearm, 1995–2018 (3-year rolling averages)**

| Year | Handgun |         | Other firearm |         |
|------|---------|---------|---------------|---------|
|      | Number  | Percent | Number        | Percent |
| 1995 | 109,561 | 1.45%   | 28,924        | 1.17%   |
| 1996 | 89,674  | 1.29    | 22,843        | 1.04    |
| 1997 | 86,419  | 1.69    | 27,216        | 1.40    |
| 1998 | 91,714  | 1.99    | 28,238        | 1.64    |
| 1999 | 84,518  | 2.15    | 25,627        | 1.76    |
| 2000 | 73,015  | 1.97    | 18,805        | 1.58    |
| 2001 | 66,985  | 2.18    | 17,437        | 1.67    |
| 2002 | 67,379  | 2.47    | 18,928        | 1.92    |
| 2003 | 61,871  | 2.48    | 16,134        | 1.79    |
| 2004 | 59,009  | 2.63    | 17,419        | 2.04    |
| 2005 | 57,004  | 2.51    | 15,651        | 1.89    |
| 2006 | 52,985  | 2.06    | 14,871        | 1.62    |
| 2007 | 58,988  | 2.08    | 14,938        | 1.57    |
| 2008 | 58,760  | 2.27    | 16,114        | 1.81    |
| 2009 | 62,240  | 2.78    | 17,248        | 2.23    |
| 2010 | 58,700  | 2.42    | 12,950        | 1.90    |
| 2011 | 61,673  | 2.69    | 15,870        | 2.14    |
| 2012 | 58,492  | 2.39    | 15,252        | 1.97    |
| 2013 | 51,439  | 2.50    | 15,162        | 2.06    |
| 2014 | 56,384  | 2.26    | 12,217        | 1.70    |
| 2015 | 45,879  | 2.23    | 10,346        | 1.68    |
| 2016 | 58,228  | 2.55    | 14,793        | 2.07    |
| 2017 | 47,103  | 2.00    | 12,111        | 1.70    |
| 2018 | 58,264  | 1.98    | 12,862        | 1.59    |

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

**APPENDIX TABLE 5**

**Population estimates for table 6: Firearm homicide against persons age 12 or older, by victim characteristics, 2014–18**

| Victim characteristic                            | Average annual number of persons age 12 or older |
|--------------------------------------------------|--------------------------------------------------|
| Total                                            | 274,344,350                                      |
| <b>Sex</b>                                       |                                                  |
| Male                                             | 134,181,193                                      |
| Female                                           | 140,163,157                                      |
| <b>Race/ethnicity</b>                            |                                                  |
| White                                            | 175,653,313                                      |
| Black                                            | 34,733,897                                       |
| Hispanic                                         | 45,067,551                                       |
| Asian/Native Hawaiian/<br>Other Pacific Islander | 16,669,360                                       |
| American Indian/Alaska Native                    | 2,220,229                                        |
| <b>Age</b>                                       |                                                  |
| 12–17                                            | 25,004,717                                       |
| 18–24                                            | 30,876,228                                       |
| 25–34                                            | 44,645,898                                       |
| 35–49                                            | 61,525,664                                       |
| 50 or older                                      | 112,291,843                                      |

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System Fatal Injury Reports developed from the National Vital Statistics System, 2014–18.

**APPENDIX TABLE 6**

**Population estimates and standard errors for table 7: Nonfatal firearm victimization against persons age 12 or older, by victim characteristics, 2014–18**

| Victim characteristic | Average annual number of persons age 12 or older | Standard error                          |                                 |
|-----------------------|--------------------------------------------------|-----------------------------------------|---------------------------------|
|                       |                                                  | Average annual number of victimizations | Rate per 1,000 in each category |
| Total                 | 271,237,937                                      | 60,112                                  | 0.13                            |
| <b>Sex</b>            |                                                  |                                         |                                 |
| Male                  | 131,985,742                                      | 44,113                                  | 0.18                            |
| Female                | 139,252,195                                      | 34,017                                  | 0.13                            |
| <b>Race/ethnicity</b> |                                                  |                                         |                                 |
| White                 | 172,485,218                                      | 40,241                                  | 0.13                            |
| Black                 | 33,102,558                                       | 23,107                                  | 0.36                            |
| Hispanic              | 44,334,964                                       | 22,779                                  | 0.27                            |
| Asian                 | 15,525,930                                       | 8,400                                   | 0.26                            |
| Other                 | 5,789,268                                        | 9,519                                   | 0.80                            |
| <b>Age</b>            |                                                  |                                         |                                 |
| 12–17                 | 24,966,500                                       | 11,315                                  | 0.23                            |
| 18–24                 | 30,184,522                                       | 26,762                                  | 0.47                            |
| 25–34                 | 44,076,631                                       | 23,368                                  | 0.28                            |
| 35–49                 | 61,019,476                                       | 27,462                                  | 0.24                            |
| 50 or older           | 110,990,809                                      | 22,599                                  | 0.11                            |

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

**APPENDIX TABLE 7**

**Standard errors for table 8: Nonfatal violence excluding simple assault, by presence of firearm and victim-offender relationship, 2014–18**

| Victim-offender relationship | Total   |         | Firearm violence |         | Nonfirearm violence |         |
|------------------------------|---------|---------|------------------|---------|---------------------|---------|
|                              | Number  | Percent | Number           | Percent | Number              | Percent |
| Any                          | 453,071 | ~       | 156,465          | ~       | 386,275             | ~       |
| <b>Nonstranger</b>           | 307,727 | 1.84%   | 86,467           | 3.10%   | 276,098             | 1.97%   |
| Intimate                     | 134,542 | 1.22    | 34,568           | 1.65    | 124,124             | 1.40    |
| Other relative               | 82,662  | 0.81    | 28,404           | 1.39    | 73,096              | 0.91    |
| Friend/acquaintance          | 210,682 | 1.64    | 63,084           | 2.63    | 187,872             | 1.82    |
| <b>Stranger</b>              | 255,716 | 1.79%   | 111,444          | 3.19%   | 203,580             | 1.89%   |

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

**APPENDIX TABLE 8**

**Standard errors for table 9: Nonfatal violence excluding simple assault, by presence of firearm and location of crime, 2014–18**

| Location                                                | Total   |         | Firearm violence |         | Nonfirearm violence |         |
|---------------------------------------------------------|---------|---------|------------------|---------|---------------------|---------|
|                                                         | Number  | Percent | Number           | Percent | Number              | Percent |
| Any                                                     | 481,527 | ~       | 170,205          | ~       | 407,640             | ~       |
| Victim's home/lodging                                   | 195,336 | 1.47%   | 54,743           | 2.14%   | 176,588             | 1.66%   |
| Near victim's home                                      | 133,229 | 1.12    | 61,911           | 2.34    | 105,178             | 1.15    |
| In, at, or near friend's/neighbor's/<br>relative's home | 103,032 | 0.91    | 39,475           | 1.64    | 88,022              | 0.99    |
| Commercial place                                        | 89,498  | 0.80    | 36,206           | 1.52    | 75,520              | 0.87    |
| Parking lot/garage                                      | 81,781  | 0.74    | 41,749           | 1.72    | 62,865              | 0.74    |
| School                                                  | 74,706  | 0.68    | 13,364           | 0.61    | 72,067              | 0.83    |
| Open area/on street/<br>public transportation           | 154,825 | 1.26    | 66,071           | 2.44    | 126,012             | 1.32    |
| Other location                                          | 93,160  | 0.83    | 31,971           | 1.37    | 82,145              | 0.93    |

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

**APPENDIX TABLE 9**

**Estimates and standard errors for figure 3: Nonfatal victimizations involving the theft of a firearm, 1993–2018**

| Year | Estimate | Standard error |
|------|----------|----------------|
| 1993 | 277,700  | 49,859         |
| 1994 | 289,500  | 43,265         |
| 1995 | 300,200  | 43,446         |
| 1996 | 216,700  | 37,733         |
| 1997 | 256,700  | 47,389         |
| 1998 | 205,800  | 37,179         |
| 1999 | 198,600  | 39,822         |
| 2000 | 152,000  | 32,551         |
| 2001 | 177,400  | 34,503         |
| 2002 | 151,100  | 33,925         |
| 2003 | 143,700  | 32,001         |
| 2004 | 185,100  | 35,266         |
| 2005 | 127,500  | 30,497         |
| 2006 | 168,000  | 35,373         |
| 2007 | 158,800  | 31,998         |
| 2008 | 178,500  | 42,028         |
| 2009 | 196,100  | 45,921         |
| 2010 | 94,600   | 26,052         |
| 2011 | 155,700  | 33,661         |
| 2012 | 224,200  | 41,845         |
| 2013 | 135,800  | 33,896         |
| 2014 | 166,000  | 36,794         |
| 2015 | 193,900  | 42,595         |
| 2016 | 169,800  | 32,378         |
| 2017 | 121,900  | 26,512         |
| 2018 | 125,400  | 27,777         |

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2018.

**APPENDIX TABLE 10****Standard errors for table 10: Nonfatal violence excluding simple assault, by presence of firearm, injury, and treatment received, 2014–18**

|                      | Total   |         | Firearm violence |         | Nonfirearm violence |         |
|----------------------|---------|---------|------------------|---------|---------------------|---------|
|                      | Number  | Percent | Number           | Percent | Number              | Percent |
| Injury and treatment |         |         |                  |         |                     |         |
| Any                  | 481,527 | ~       | 170,205          | ~       | 407,640             | ~       |
| Not injured          | 359,320 | 1.74%   | 151,795          | 2.32%   | 287,667             | 1.93%   |
| Injured              | 234,485 | 1.64%   | 51,977           | 2.05%   | 218,708             | 1.85%   |
| Serious injuries     | 154,528 | 1.25    | 26,254           | 1.14    | 148,445             | 1.49    |
| Gunshot              | 15,191  | 0.15    | 15,191           | 0.68    | ~                   | ~       |
| Minor injuries       | 140,096 | 1.16    | 40,990           | 1.69    | 126,465             | 1.33    |
| Treatment for injury | 234,485 | ~       | 51,977           | ~       | 218,708             | ~       |
| No treatment         | 151,442 | 2.57    | 34,369           | 6.45    | 141,706             | 2.67    |
| Any treatment        | 140,263 | 2.54    | 33,021           | 6.42    | 130,821             | 2.64    |
| Treatment setting    | 140,263 | ~       | 33,021           | ~       | 130,821             | ~       |
| Medical facility     | 106,672 | 3.30    | 28,403           | 7.56    | 98,315              | 3.47    |
| Nonmedical location  | 70,061  | 3.16    | 13,954           | 7.28    | 67,109              | 3.33    |

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

**APPENDIX TABLE 11****Standard errors for table 11: Nonfatal violence excluding simple assault, by presence of firearm, reporting to police, and reason for not reporting, 2014–18**

|                                                                        | Total   |         | Firearm violence |         | Nonfirearm violence |         |
|------------------------------------------------------------------------|---------|---------|------------------|---------|---------------------|---------|
|                                                                        | Number  | Percent | Number           | Percent | Number              | Percent |
| Reporting to police                                                    |         |         |                  |         |                     |         |
| Total                                                                  | 481,527 | ~       | 170,205          | ~       | 407,640             | ~       |
| Reported                                                               | 311,403 | 1.79%   | 132,280          | 2.91%   | 249,426             | 1.93%   |
| Not reported                                                           | 281,799 | 1.76%   | 78,528           | 2.72%   | 253,527             | 1.93%   |
| Reason not reported                                                    | 281,799 | ~       | 78,528           | ~       | 253,527             | ~       |
| Dealt with it another way                                              | 118,493 | 1.97    | 30,212           | 3.82    | 109,678             | 2.11    |
| Not important enough to respondent                                     | 80,093  | 1.49    | 19,989           | 2.76    | 74,854              | 1.62    |
| Police could/would not do anything to help                             | 102,918 | 1.79    | 38,800           | 4.46    | 88,338              | 1.83    |
| Fear of reprisal                                                       | 56,593  | 1.12    | 24,405           | 3.25    | 47,483              | 1.11    |
| Did not want to get offender in trouble with law/advised not to report | 51,145  | 1.02    | 13,168           | 1.90    | 47,986              | 1.12    |
| Other/unknown/no single most important reason                          | 96,523  | 1.71    | 26,282           | 3.45    | 88,834              | 1.84    |

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.



**APPENDIX TABLE 12****Standard errors for table 12: Self-protective behaviors of victims, by type of crime, 2014–18**

| Self-protective behavior              | Nonfatal violence excluding simple assault |         | Property victimization |         |
|---------------------------------------|--------------------------------------------|---------|------------------------|---------|
|                                       | Number                                     | Percent | Number                 | Percent |
| Total                                 | 481,527                                    | ~       | 870,863                | ~       |
| Victim was present                    | 481,527                                    | ~       | 321,173                | 0.39%   |
| Took no action/kept still             | 244,861                                    | 1.67%   | 262,658                | 1.03    |
| Threatened/attacked with a firearm    | 33,571                                     | 0.32    | 31,096                 | 0.24    |
| Threatened/attacked with other weapon | 35,675                                     | 0.34    | 12,478                 | 0.10    |
| Threatened/attacked without a weapon  | 186,236                                    | 1.43    | 47,932                 | 0.37    |
| Noncombative tactics                  | 217,849                                    | 1.57    | 95,320                 | 0.69    |
| Other                                 | 51,363                                     | 0.49    | 37,098                 | 0.29    |
| Unknown                               | 9,124                                      | 0.09    | 90,653                 | 0.66    |
| Victim was not present                | ~                                          | ~       | 782,271                | 0.43%   |

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.

**APPENDIX TABLE 13****Standard errors for table 13: Incidents of nonfatal firearm violence, by characteristics of U.S. population, offender, and victim, 2014–18**

| Characteristic                      | Number of incidents |         | Percent of incidents |                         |             |                |                         |             |
|-------------------------------------|---------------------|---------|----------------------|-------------------------|-------------|----------------|-------------------------|-------------|
|                                     |                     |         | Offender             |                         |             | Victim         |                         |             |
|                                     |                     |         | Standard error       | 95% confidence interval |             | Standard error | 95% confidence interval |             |
|                                     | Offender            | Victim  |                      | Lower bound             | Upper bound |                | Lower bound             | Upper bound |
| Total                               | 157,962             | 157,962 | ~                    | ~                       | ~           | ~              | ~                       | ~           |
| Sex                                 |                     |         |                      |                         |             |                |                         |             |
| Male                                | 131,700             | 113,983 | 2.81%                | 70.44%                  | 81.45%      | 3.16%          | 54.72%                  | 67.10%      |
| Female                              | 26,074              | 85,565  | 1.27                 | 3.14                    | 8.11        | 3.06           | 33.09                   | 45.09       |
| Both male and female offenders      | 38,536              | ~       | 1.78                 | 7.36                    | 14.35       | ~              | ~                       | ~           |
| Race/ethnicity                      |                     |         |                      |                         |             |                |                         |             |
| White                               | 72,784              | 103,840 | 2.83%                | 24.77%                  | 35.88%      | 3.20%          | 46.51%                  | 59.05%      |
| Black                               | 82,639              | 57,172  | 3.02                 | 31.11                   | 42.94       | 2.43           | 15.89                   | 25.40       |
| Hispanic                            | 49,194              | 53,945  | 2.17                 | 11.94                   | 20.45       | 2.33           | 14.24                   | 23.37       |
| Asian                               | 7,332               | 19,878  | 0.38                 | -0.16                   | 1.32        | 0.99           | 1.59                    | 5.45        |
| Other                               | 24,970              | 22,143  | 1.22                 | 2.84                    | 7.61        | 1.09           | 2.11                    | 6.38        |
| Multiple offenders of various races | 13,763              | ~       | 0.70                 | 0.47                    | 3.20        | ~              | ~                       | ~           |
| Age                                 |                     |         |                      |                         |             |                |                         |             |
| 11 or younger                       | 2,788               | ~       | 0.14%                | -0.19%                  | 0.37%       | ~              | ~                       | ~           |
| 12–17                               | 21,864              | 25,512  | 1.08                 | 2.04                    | 6.27        | 1.24%          | 2.98%                   | 7.85%       |
| 18–29                               | 69,041              | 85,284  | 2.75                 | 22.51                   | 33.28       | 3.06           | 32.90                   | 44.88       |
| 30 or older                         | 83,315              | 107,525 | 3.03                 | 31.56                   | 43.43       | 3.20           | 49.43                   | 61.95       |
| Multiple offenders of various ages  | 41,795              | ~       | 1.91                 | 8.67                    | 16.15       | ~              | ~                       | ~           |

~Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2014–18.



The Bureau of Justice Statistics of the U.S. Department of Justice is the principal federal agency responsible for measuring crime, criminal victimization, criminal offenders, victims of crime, correlates of crime, and the operation of criminal and civil justice systems at the federal, state, tribal, and local levels. BJS collects, analyzes, and disseminates reliable statistics on crime and justice systems in the United States, supports improvements to state and local criminal justice information systems, and participates with national and international organizations to develop and recommend national standards for justice statistics. Doris J. James is the acting director.

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RIGHT-TO-CARRY LAWS AND VIOLENT CRIME:  
A COMPREHENSIVE ASSESSMENT USING PANEL DATA AND  
A STATE-LEVEL SYNTHETIC CONTROL ANALYSIS

John J. Donohue  
Abhay Aneja  
Kyle D. Weber

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Right-to-Carry Laws and Violent Crime: A Comprehensive Assessment Using Panel Data  
and a State-Level Synthetic Control Analysis

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**ABSTRACT**

This paper uses more complete state panel data (through 2014) and new statistical techniques to estimate the impact on violent crime when states adopt right-to-carry (RTC) concealed handgun laws. Our preferred panel data regression specification, unlike the statistical model of Lott and Mustard that had previously been offered as evidence of crime-reducing RTC laws, both satisfies the parallel trends assumption and generates statistically significant estimates showing RTC laws increase overall violent crime. Our synthetic control approach also strongly confirms that RTC laws are associated with 13-15 percent higher aggregate violent crime rates ten years after adoption. Using a consensus estimate of the elasticity of crime with respect to incarceration of 0.15, the average RTC state would need to roughly double its prison population to offset the increase in violent crime caused by RTC adoption.

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# Right-to-Carry Laws and Violent Crime: A Comprehensive Assessment Using Panel Data and a State-Level Synthetic Control Analysis

By John J. Donohue, Abhay Aneja, and Kyle D. Weber\*

October 9, 2018

## Abstract

This paper uses more complete state panel data (through 2014) and new statistical techniques to estimate the impact on violent crime when states adopt right-to-carry (RTC) concealed handgun laws. Our preferred panel data regression specification, unlike the statistical model of Lott and Mustard that had previously been offered as evidence of crime-reducing RTC laws, both satisfies the parallel trends assumption and generates statistically significant estimates showing RTC laws *increase* overall violent crime. Our synthetic control approach also strongly confirms that RTC laws are associated with 13-15 percent *higher* aggregate violent crime rates ten years after adoption. Using a consensus estimate of the elasticity of crime with respect to incarceration of 0.15, the average RTC state would need to roughly double its prison population to offset the increase in violent crime caused by RTC adoption.

## I. Introduction

For two decades, there has been a spirited academic debate over whether “shall issue” concealed carry laws (also known as right-to-carry or RTC laws) have an important impact on crime. The “More Guns, Less Crime” hypothesis originally articulated by John Lott and David Mustard (1997) claimed that RTC laws decreased violent crime (possibly shifting criminals in the direction of

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committing more property crime to avoid armed citizens). This research may well have encouraged state legislatures to adopt RTC laws, arguably making the pair's 1997 paper in the *Journal of Legal Studies* one of the most consequential criminological articles published in the last twenty-five years.

The original Lott and Mustard paper as well as subsequent work by John Lott in his 1998 book *More Guns, Less Crime* used a panel data analysis to support their theory that RTC laws reduce violent crime. A large number of papers examined the Lott thesis, with decidedly mixed results. An array of studies, primarily those using the limited data initially employed by Lott and Mustard for the period 1977-1992, supported the Lott and Mustard thesis, while a host of other papers were skeptical of the Lott findings.<sup>1</sup>

It was hoped that the 2005 National Research Council report *Firearms and Violence: A Critical Review* (hereafter the NRC Report) would resolve the controversy over the impact of RTC laws, but this was not to be. While one member of the committee—James Q. Wilson—did partially endorse the Lott thesis by saying there was evidence that murders fell when RTC laws were adopted, the other 15 members of the panel pointedly criticized Wilson's claim, saying that “the scientific evidence does not support his position.” The majority emphasized that the estimated effects of RTC laws were highly sensitive to the particular choice of explanatory variables and thus concluded that the panel data evidence through 2000 was too fragile to support any conclusion about the true effects of these laws.

This paper answers the call of the NRC report for more and better data and new statistical techniques to be brought to bear on the issue of the impact of RTC laws on crime. First, we revisit the panel data evidence to see if extending the data for an additional 14 years, thereby providing additional crime data for prior RTC states as well as on eleven newly adopting RTC states, offers any clearer picture of the causal impact of allowing citizens to carry concealed weapons. Across an array of different permutations from two major sets of explanatory variables—including our preferred model (DAW) plus the models used by Lott and Mustard (LM)—all of the statistically significant results show RTC laws are associated with *higher* rates of overall violent crime and/or murder.

Second, to address some of the weaknesses of panel data models, we undertake an extensive synthetic control analysis in order to present the type of convincing and robust results that can

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<sup>1</sup>In support of Lott and Mustard (1997), see Lott's 1998 book *More Guns, Less Crime* (and the 2000 and 2010 editions). Ayres and Donohue (2003) and the 2005 National Research Council report *Firearms and Violence: A Critical Review* dismissed the Lott/Mustard hypothesis as lacking credible statistical support, as did Aneja, Donohue, and Zhang (2011) (and Aneja, Donohue, and Zhang (2014) further expanding the latter). Moody and Marvell (2008) and Moody et al. (2014) continued to argue in favor of a crime-reducing effect of RTC laws, although Zimmerman (2014) and McElroy and Wang (2017) find that RTC laws *increase* violent crime and Siegel et al. (2017) find RTC laws increase murders, as discussed in Section III(B).

reliably guide policy in this area.<sup>2</sup> This synthetic control methodology—first introduced in Abadie and Gardeazabal (2003) and expanded in Abadie, Diamond, and Hainmueller (2010) and Abadie, Diamond, and Hainmueller (2014)—uses a matching methodology to create a credible “synthetic control” based on a weighted average of other states that best matches the pre-passage pattern of crime for each “treated” state, which can then be used to estimate the likely path of crime if RTC-adopting states had not adopted an RTC law. By comparing the actual crime pattern for RTC-adopting states with the estimated synthetic controls in the post-passage period, we derive year-by-year estimates for the impact of RTC laws in the ten years following adoption.<sup>3</sup>

To preview our major findings, the synthetic control estimate of the average impact of RTC laws across the 33 states that adopt between 1981 and 2007<sup>4</sup> indicates that violent crime is substantially higher after ten years than would have been the case had the RTC law not been adopted. Essentially, for violent crime, the synthetic control approach provides a similar portrayal of RTC laws as that provided by the DAW panel data model and undermines the results of the LM panel data model. According to the aggregate synthetic control models—whether one uses the DAW or LM covariates—RTC laws led to increases in violent crime of 13-15 percent after ten years, with positive but not statistically significant effects on property crime and murder. The median effect of RTC adoption after ten years is 12.3 percent if one considers all 31 states with ten years of data and 11.1 if one limits the analysis to the 26 states with the most compelling pre-passage fit between the adopting states and their synthetic controls. Comparing our DAW-specification findings with the results generated using placebo treatments, we are able to reject the null hypothesis that RTC laws have no impact on aggregate violent crime.

The structure of the paper proceeds as follows. Part II begins with a discussion of the ways in which increased carrying of guns could either dampen crime (by thwarting or deterring criminals) or increase crime by directly facilitating violence or aggression by permit holders (or others), greatly expanding the loss and theft of guns, and burdening the functioning of the police in ways that diminish their effectiveness in controlling crime. We then show that a simple comparison of the drop in violent crime from 1977-2014 in the states that have resisted the adoption of RTC laws

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<sup>2</sup>Abadie, Diamond, and Hainmueller (2014) identify a number of possible problems with panel regression techniques, including the danger of extrapolation when the observable characteristics of the treated area are outside the range of the corresponding characteristics for the other observations in the sample.

<sup>3</sup>The accuracy of this matching can be qualitatively assessed by examining the root mean square prediction error (RMSPE) of the synthetic control in the pre-treatment period (or a variation on this RMSPE implemented in this paper), and the statistical significance of the estimated treatment effect can be approximated by running a series of placebo estimates and examining the size of the estimated treatment effect in comparison to the distribution of placebo treatment effects.

<sup>4</sup>Note that we do not supply a synthetic control estimate for Indiana, even though it passed its RTC law in 1980, owing to the fact that we do not have enough pre-treatment years to accurately match the state with an appropriate synthetic control. Including Indiana as a treatment state, though, would not meaningfully change our results. Similarly, we do not generate synthetic control estimates for Iowa and Wisconsin (whose RTC laws went into effect in 2011) and for Illinois (2014 RTC law), because of the limited post-passage data.

is almost an order of magnitude greater than in RTC adopting states (a 42.3 percent drop versus a 4.3 percent drop), although a spartan panel data model with only state and year effects reduces the differential to 20.2 percent. Part III discusses the panel data results, showing that the DAW model indicates that RTC laws have increased violent and property crime, while the LM model provides evidence that RTC laws have increased murder. Importantly, the DAW violent crime model satisfies the critical parallel trends assumption, while the LM model does not.

The remainder of the paper shows that, using either the DAW or LM explanatory variables, the synthetic control approach uniformly supports the conclusion that RTC laws lead to substantial increases in violent crime. Part IV describes the details of our implementation of the synthetic control approach and shows that the mean and median estimates of the impact of RTC laws show greater than double digit increases by the tenth year after adoption. Part V provides aggregate synthetic control estimates of the impact of RTC laws, and Part VI concludes.

## **II. The Impact of RTC Laws: Theoretical Considerations and Simple Comparisons**

### **A. Gun Carrying and Crime**

#### **1. Mechanisms of Crime Reduction**

Allowing citizens to carry concealed handguns can influence violent crime in a number of ways, some benign and some invidious. Violent crime can fall if criminals are deterred by the prospect of meeting armed resistance, and potential victims or armed bystanders may thwart or terminate attacks by either brandishing weapons or actually firing on the potential assailants. For example, in 2012, a Pennsylvania concealed carry permit holder got angry when he was asked to leave a bar because he was carrying a weapon and in the ensuing argument, he shot two men, killing one, before another permit holder shot him (Kalinowski 2012). Two years later, a psychiatric patient in Pennsylvania killed his caseworker, and grazed his psychiatrist before the doctor shot back with his own gun, ending the assault by wounding the assailant (Associated Press 2014).

The impact of the Pennsylvania RTC law is somewhat ambiguous in both these cases. In the bar shooting, it was a permit holder who started the killing and another who ended it, so the RTC law may actually have increased crime. The case of the doctor's use of force is more clearly benign, although the RTC law may have made no difference: a doctor who routinely deals with violent and deranged patients would typically be able to secure a permit to carry a gun even under a may-issue

regime. Only an overall statistical analysis can reveal whether extending gun carrying beyond those with a demonstrated need and good character, as shall-issue laws do, imposes or reduces overall costs.

Some defensive gun uses can be socially costly and contentious even if they do avoid a robbery or an assault. For example, in 1984, when four teens accosted Bernie Goetz on a New York City subway, he prevented an anticipated robbery by shooting all four, permanently paralyzing one.<sup>5</sup> In 2010, a Pennsylvania concealed carry holder argued that he used a gun to thwart a beating. After a night out drinking, Gerald Ung, a 28 year old Temple University law student, shot a 23 year old former star lacrosse player from Villanova, Eddie DiDonato, when DiDonato rushed Ung angrily and aggressively after an altercation that began when DiDonato was bumped while doing chin ups on scaffolding on the street in Philadelphia. When prosecuted, Ung testified that he always carried his loaded gun when he went out drinking. A video of the incident shows that Ung was belligerent and had to be restrained by his friends before the dispute became more physical, which raises the question of whether his gun-carrying contributed to his belligerence, and hence was a factor that precipitated the confrontation. Ung, who shot DiDonato six times, leaving DiDonato partially paralyzed with a bullet lodged in his spine, was acquitted of attempted murder, aggravated assault, and possessing an instrument of crime (Slobodzian 2011). While Ung avoided criminal liability and a possible beating, he was still prosecuted and then hit with a major civil action, and did impose significant social costs, as shootings frequently do.<sup>6</sup>

In any event, the use of a gun by a concealed carry permit holder to thwart a crime is a statistically rare phenomenon. Even with the enormous stock of guns in the U.S., the vast majority of the time that someone is threatened with violent crime no gun will be wielded defensively. A five-year study of such violent victimizations in the United States found that victims failed to defend or to threaten the criminal with a gun 99.2 percent of the time—this in a country with 300 million guns in civilian hands (Planty and Truman 2013). Adding 16 million permit holders who often dwell in low-crime areas may not yield many opportunities for effective defensive use for the roughly 1 percent of Americans who experience a violent crime in a given year, especially since criminals tend to attack in ways that preempt defensive measures.

## **2. Mechanisms of Increasing Crime**

Since the statistical evidence presented in this paper suggests that the benign effects of RTC laws are outweighed by the harmful effects, we consider five ways in which RTC laws could increase

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<sup>5</sup>The injury to Darrell Cabey was so damaging that he remains confined to a wheelchair and functions with the intellect of an 8-year-old, for which he received a judgment of \$43 million against Goetz, albeit without satisfaction (Biography.com 2016).

<sup>6</sup>According to the civil lawsuit brought by DiDonato, his injuries included “severe neurological impairment, inability to control his bowels, depression and severe neurologic injuries” (Lat 2012).

crime: a) elevated crime by RTC permit holders or by others, which can be induced by the greater belligerence of permit holders that can attend gun carrying or even through counterproductive attempts by permit holders to intervene protectively; b) increased crime by those who acquire the guns of permit holders via loss or theft; c) a change in culture induced by the hyper-vigilance about one's rights and the need to avenge wrongs that the gun culture can nurture; d) elevated harm as criminals respond to the possibility of armed resistance by increasing their gun carrying and escalating their level of violence; and e) all of the above factors will either take up police time or increase the risks the police face, thereby impairing the crime-fighting ability of police in ways that can increase crime.

#### **a. Crime Committed or Induced by Permit Holders**

RTC laws can lead to an increase in violent crime by increasing the likelihood a generally law-abiding citizen will commit a crime or increasing the criminal behavior of others. Moreover, RTC laws may facilitate the criminal conduct of those who generally have a criminal intent. We consider these two avenues below.

##### **1) The Pathway from the Law-abiding Citizen**

Evidence from a nationally representative sample of 4947 individuals indicates that Americans tend to overestimate their gun-related abilities. For example, 82.6 percent believed they were less likely than the average person to use a gun in anger. When asked about their "ability to responsibly own a handgun," 50 percent of the respondents deemed themselves to be in the top 10 percent and 23 percent placed their ability within the top 1 percent of the U.S. population. Such overconfidence has been found to increase risk-taking and could well lead to an array of socially harmful consequences ranging from criminal misconduct and gun accidents to lost or stolen guns (Stark and Sachau 2016).

There are clearly cases in which concealed carry permit holders have increased the homicide toll by killing someone with whom they became angry over an insignificant issue, ranging from merging on a highway and talking on a phone in a theater to playing loud music at a gas station (Lozano 2017; Levenson 2017; Scherer 2016). For example, on July 19, 2018, Michael Drejka started to hassle a woman sitting in a car in a disabled parking spot while her husband and 5 year old son ran into a store. When the husband emerged, he pushed Drejka to the ground, who then killed him with a shot to the chest. The killing is caught on video and Drejka is being prosecuted for manslaughter in Clearwater, Florida (Simon 2018).

When Philadelphia permit holder Louis Mockewich shot and killed a popular youth football coach (another permit holder carrying his gun) over a dispute concerning snow shoveling in Jan-



uary 2000, Mockewich's car had an NRA bumper sticker reading "Armed with Pride" (Gibbons and Moran 2000). An angry young man, with somewhat of a paranoid streak, who hasn't yet been convicted of a crime or adjudicated as a "mental defective," may be encouraged to carry a gun if he resides in an RTC state.<sup>7</sup> That such individuals will be more likely to be aggressive once armed and hence more likely to stimulate violence by others should not be surprising.

Recent evidence suggests that as gun carrying is increasing with the proliferation of RTC laws, road rage incidents involving guns are rising (Biette-Timmons 2017; Plumlee 2012). In the nightmare case for RTC, two Michigan permit-holding drivers pulled over to battle over a tailgating dispute in September of 2013 and each shot and killed the other (Stuart 2013). Without Michigan's RTC law, this would likely have not been a double homicide. Indeed, two studies – one for Arizona and one for the nation as a whole – found that "the evidence indicates that those with guns in the vehicle are more likely to engage in 'road rage'" (Hemenway, Vrinotis and Miller 2006; Miller et al. 2002).<sup>8</sup> These studies may suggest either that gun carrying emboldens more aggressive behavior or reflects a selection effect for more aggressive individuals.<sup>9</sup> If this is correct, then it may not be a coincidence that there are so many cases in which a concealed carry holder acts belligerently and is shot by another permit holder.<sup>10</sup>

In general, the critique that the relatively low number of permit revocations proves that permit holders don't commit enough crime to substantially elevate violent criminality is misguided for a variety of reasons. First, only a small fraction of one percent of Americans commits a gun crime each year, so we do not expect even a random group of Americans to commit much crime, let alone a group purged of convicted felons. Nonetheless, permit revocations clearly understate the criminal misconduct of permit holders, since not all violent criminals are caught and we have

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<sup>7</sup>The Gun Control Act of 1968 prohibits gun possession by felons and adjudicated "mental defectives" (18 U.S.C. 922 (d) (4) 2016).

<sup>8</sup>A perfect illustration was provided by 25-year-old Minnesota concealed carry permit holder Alexander Weiss, who got into an argument after a fender bender caused by a 17 year old driver. Since the police had been called, it is hard to imagine that this event could end tragically – unless someone had a gun. Unfortunately, Weiss, who had a bumper sticker on his car saying "Gun Control Means Hitting Your Target," killed the 17-year-old with one shot to the chest and has been charged with second-degree murder (KIMT 2018).

<sup>9</sup>While concealed carry permit holders should be free of any felony conviction, and thus show a lower overall rate of violence than a group that contains felons, a study in Texas found that when permit holders do commit a crime, it tends to be a severe one: "the concentration of convictions for weapons offenses, threatening someone with a firearm, and intentionally killing a person stem from the ready availability of a handgun for CHL holders" (Phillips et al. 2013).

<sup>10</sup>We have just cited three of them: the 2012 Pennsylvania bar shooting, the 2000 Philadelphia snow shoveling dispute, and the 2013 Michigan road-rage incident. In yet another recent case, two permit holders glowered at each other in a Chicago gas station, and when one drew his weapon, the second man pulled out his own gun and killed the 43-year old instigator, who died in front of his son, daughter, and pregnant daughter-in-law (Hernandez 2017). A video of the encounter can be found at <https://www.youtube.com/watch?v=I2j9vvDHIBU>. According to the police report obtained by the Chicago Tribune, a bullet from the gun exchange broke the picture window of a nearby garden apartment and another shattered the window of a car with four occupants that was driving past the gas station. No charges were brought against the surviving permit holder, who shot first but in response to the threat initiated by the other permit holder.

just seen four cases where five permit holders were killed, so no permit revocation or criminal prosecution would have occurred regardless of any criminality by the deceased.<sup>11</sup> Second, and perhaps more importantly, RTC laws increase crime by individuals other than permit holders in a variety of ways. The messages of the gun culture, perhaps reinforced by the adoption of RTC laws, can promote fear and anger, which are emotions that can invite more hostile confrontations leading to violence. For example, if permit holder George Zimmerman hassled Trayvon Martin only because he was carrying his weapon, the presence of Zimmerman's gun could be deemed to have encouraged a hostile confrontation, regardless of who ultimately becomes violent.

Even well-intentioned interventions by permit holders intending to stop a crime have elevated the crime count when they ended with the permit holder either being killed by the criminal<sup>12</sup> or shooting an innocent party by mistake.<sup>13</sup> Indeed, an FBI study of 160 active shooter incidents found that in almost half (21 of 45) of the situations in which police engaged the shooter to end the threat, law enforcement suffered casualties, totaling nine killed and 28 wounded (Blair and Schweit 2014). One would assume the danger to an untrained permit holder trying to confront an active shooter would be greater than that of a trained professional, which may in part explain why effective intervention in such cases by permit holders to thwart crime is so rare. While the same FBI report found that in 21 of a total of 160 active shooter incidents between 2000 and 2013, "the situation ended after unarmed citizens safely and successfully restrained the shooter," there was only one case – in a bar in Winnemucca, Nevada in 2008 – in which a private citizen other than an armed security guard stopped a shooter, and that individual was an active-duty Marine (Holzel 2008).

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<sup>11</sup>In addition, NRA efforts to pass state laws that ban the release of information about whether those arrested for even the most atrocious crimes are RTC permit holders make it extremely difficult to monitor their criminal conduct.

<sup>12</sup>In 2016 in Arlington, Texas, a man in a domestic dispute shot at a woman and then tried to drive off (under Texas law it was lawful for him to be carrying his gun in his car, even though he did not have a concealed carry permit.) When he was confronted by a permit holder, the shooter slapped the permit holder's gun out of his hand and then killed him with a shot to the head. Shortly thereafter, the shooter turned himself into the police (Mettler 2016).

In 2014, when armed criminals entered a Las Vegas Walmart and told everyone to get out because "This is a revolution," one permit holder told his friend he would stay to confront the threat. He was gunned down shortly before the police arrived, adding to the death toll rather than reducing it (NBC News 2014).

<sup>13</sup>In 2012, "a customer with a concealed handgun license ... accidentally shot and killed a store clerk" during an attempted robbery in Houston (MacDonald 2012). Similarly, in 2015, also in Houston, a bystander who drew his weapon upon seeing a carjacking incident ended up shooting the victim in the head by accident (KHOU 2015).

An episode in June 2017 underscored that interventions even by well-trained individuals can complicate and exacerbate unfolding crime situations. An off-duty Saint Louis police officer with eleven years of service was inside his home when he heard the police exchanging gunfire with some car thieves. Taking his police-issued weapon, he went outside to help, but as he approached he was told by two officers to get on the ground and then shot in the arm by a third officer who "feared for his safety" (Hauser 2017).

## **2) The Pathway from those Harboring Criminal Intent**

Over the ten-year period from May 2007 through January 2017, the Violence Policy Center (2017) lists 31 instances in which concealed carry permit holders killed three or more individuals in a single incident. Many of these episodes are disturbingly similar in that there was substantial evidence of violent tendencies and/or serious mental illness, but no effort was made to even revoke the carry permit, let alone take effective action to prevent access to guns. For example, on January 6, 2017, concealed handgun permit holder Esteban Santiago, 26, killed five and wounded six others at the Fort Lauderdale-Hollywood Airport, before sitting on the floor and waiting to be arrested as soon as he ran out of ammunition. In the year prior to the shooting, police in Anchorage, Alaska, charged Santiago with domestic violence in January 2016, and visited the home five times during the year for various other complaints (KTUU 2017). In November 2016, Santiago entered the Anchorage FBI office and spoke of “mind control” by the CIA and having “terroristic thoughts,” (Hopkins 2017). Although the police took his handgun at the time, it was returned to him on December 7, 2016 after Santiago spent four days in a mental health facility because, according to federal officials, “there was no mechanism in federal law for officers to permanently seize the weapon”<sup>14</sup> (Boots 2017). Less than a month later, Santiago flew with his gun to Florida and opened fire in the baggage claim area.<sup>15</sup>

In January 2018, the FBI charged Taylor Wilson, a 26-year-old Missouri concealed carry permit holder, with terrorism on an Amtrak train when, while carrying a loaded weapon, he tried to interfere with the brakes and controls of the moving train. According to the FBI, Wilson had 1) previously joined an “alt-right” neo-Nazi group and travelled to the Unite the Right rally in Charlottesville, Virginia in August 2017; 2) indicated his interest in “killing black people” and was the perpetrator of a road-rage incident in which he pointed a gun at a black woman for no apparent reason while driving on an interstate highway in April 2016; and 3) possessed devices and weapons “to engage in criminal offenses against the United States.” It sounds as though Wilson was a person with various criminal designs, and, conceivably, having the permit to legally carry weapons facilitated those designs (Pilger 2018).

In June 2017, Milwaukee Police Chief Ed Flynn pointed out that criminal gangs have taken advantage of RTC laws by having gang members with clean criminal records obtain concealed carry permits and then hold the guns after they are used by the active criminals (Officer.com 2017). Flynn was referring to so-called “human holsters” who have RTC permits and hold guns for those barred from possession. For example, Wisconsin permit holder Darraill Smith was stopped three

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<sup>14</sup>Moreover, in 2012, Puerto Rican police confiscated Santiago’s handguns and held them for two years before returning them to him in May 2014, after which he moved to Alaska (Clary, O’Matz and Arthur 2017).

<sup>15</sup>For a similar story of repeated gun violence and signs of mental illness by a concealed carry permit holder, see the case of Aaron Alexis, who murdered 12 at the Washington Navy Yard in September 2013 (Carter, Lavandera and Perez 2013).

times while carrying guns away from crime scenes before police finally charged him with criminal conspiracy. In the second of these, Smith was “carrying three loaded guns, including one that had been reported stolen,” but that was an insufficient basis to charge him with a crime or revoke his RTC permit (DePrang 2015). Having a “designated permit holder” along to take possession of the guns when confronted by police may be an attractive benefit for criminal elements acting in concert (Fernandez, Stack, and Blinder 2015; Luthern 2015).

### **b. Increased Gun Thefts**

The most frequent occurrence each year involving crime and a good guy with a gun is not self-defense but rather the theft of the good guy’s gun, which occurs hundreds of thousands of times each year.<sup>16</sup> Data from a nationally representative web-based survey conducted in April 2015 of 3949 subjects revealed that those who carried guns outside the home had their guns stolen at a rate over one percent per year (Hemenway, Azrael and Miller 2017). Given the current level of roughly 16 million permit holders, a plausible estimate is that RTC laws result in permit holders furnishing more than 100,000 guns per year to criminals.<sup>17</sup> As Phil Cook has noted, the relationship between gun theft and crime is a complicated one for which little definitive data is currently available (Cook 2018). But if there was any merit to the outrage over the loss of about 1400 guns during the Fast and Furious program that began in 2009 and the contribution that these guns made to crime (primarily in Mexico), it highlights the severity of the vastly greater burdens of guns lost by and stolen from U.S. gun carriers.<sup>18</sup> A 2013 report from the Bureau of Alcohol, Tobacco, Firearms and Explosives concluded that “lost and stolen guns pose a substantial threat to public safety and to law enforcement. Those that steal firearms commit violent crimes with stolen guns, transfer stolen

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<sup>16</sup>According to Larry Keane, senior vice president of the National Shooting Sports Foundation (a trade group that represents firearms manufacturers), “There are more guns stolen every year than there are violent crimes committed with firearms.” More than 237,000 guns were reported stolen in the United States in 2016, according to the FBI’s National Crime Information Center. The actual number of thefts is obviously much higher since many gun thefts are never reported to police, and “many gun owners who report thefts do not know the serial numbers on their firearms, data required to input weapons into the NCIC.” The best survey estimated 380,000 guns were stolen annually in recent years, but given the upward trend in reports to police, that figure likely understates the current level of gun thefts (Freskos 2017b).

<sup>17</sup>While the Hemenway, Azrael and Miller study is not large enough and detailed enough to provide precise estimates, it establishes that those who have carried guns in the last month are more likely to have them stolen. A recent Pew Research Survey found that 26 percent of American gunowners say they carry a gun outside of their home “all of most of the time” (Igielnik and Brown 2017, surveying 3930 U.S. adults, including 1269 gunowners). If one percent of 16 million permit holders have guns stolen each year, that would suggest 160,000 guns were stolen. Only guns stolen outside the home would be attributable to RTC laws, so a plausible estimate of guns stolen per year owing to gun carrying outside the home might be 100,000.

<sup>18</sup>“Of the 2,020 guns involved in the Bureau of Alcohol, Tobacco, Firearms, and Explosives probe dubbed ‘Operation Fast and Furious,’ 363 have been recovered in the United States and 227 have been recovered in Mexico. That leaves 1,430 guns unaccounted for” (Schwarzschild and Griffin 2011). Wayne LaPierre of the NRA was quoted as saying, “These guns are now, as a result of what [ATF] did, in the hands of evil people, and evil people are committing murders and crimes with these guns against innocent citizens” (Horwitz 2011).

firearms to others who commit crimes, and create an unregulated secondary market for firearms, including a market for those who are prohibited by law from possessing a gun” (Office of the Director - Strategic Management 2013; Parsons and Vargas 2017).

For example, after Sean Penn obtained a permit to carry a gun, his car was stolen with two guns in the trunk. The car was soon recovered, but the guns were gone (Donohue 2003). In July 2015 in San Francisco, the theft of a gun from a car in San Francisco led to a killing of a tourist on a city pier that almost certainly would not have occurred if the lawful gun owner had not left it in the car (Ho 2015). Just a few months later, a gun stolen from an unlocked car was used in two separate killings in San Francisco and Marin in October 2015 (Ho and Williams 2015). According to the National Crime Victimization Survey, in 2013 there were over 660,000 auto thefts from households. More guns being carried in vehicles by permit holders means more criminals will be walking around with the guns stolen from permit holders.<sup>19</sup>

As Michael Rallings, the top law enforcement official in Memphis, Tennessee, noted in commenting on the problem of guns being stolen from cars: “Laws have unintended consequences. We cannot ignore that as a legislature passes laws that make guns more accessible to criminals, that has a direct effect on our violent crime rate” (Freskos 2017a). An Atlanta police sergeant elaborated on this phenomenon: “Most of our criminals, they go out each and every night hunting for guns, and the easiest way to get them is out of people’s cars. We’re finding that a majority of stolen guns that are getting in the hands of criminals and being used to commit crimes were stolen out of vehicles” (Freskos 2017c). Another Atlanta police officer stated that weapons stolen from cars “are used in crimes to shoot people, to rob people,” because criminals find these guns to be easy to steal and hard to trace. “For them, it doesn’t cost them anything to break into a car and steal a gun” (Freskos 2016).<sup>20</sup>

Of course, the permit holders whose guns are stolen are not the killers, but they can be the but-for cause of the killings. Lost, forgotten, and misplaced guns are another dangerous by-product of RTC laws.<sup>21</sup>

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<sup>19</sup>In early December 2017, the Sheriff in Jacksonville, Florida announced that his office knew of 521 guns that had been stolen so far in 2017 – from unlocked cars alone! (Campbell 2017).

<sup>20</sup>Examples abound: Tario Graham was shot and killed during a domestic dispute in February 2012 with a revolver stolen weeks earlier out of pickup truck six miles away in East Memphis (Perrusquia 2017). In Florida, a handgun stolen from an unlocked Honda Accord in mid-2014 helped kill a police officer a few days before Christmas that year (Sampson 2014). A gun stolen from a parked car during a Mardi Gras parade in 2017 was used a few days later to kill 15-year-old Nia Savage in Mobile, Alabama, on Valentine’s Day (Freskos 2017a).

<sup>21</sup>The growing TSA seizures in carry-on luggage are explained by the increase in the number of gun carriers who simply forget they have a gun in their luggage or briefcase (Williams and Waltrip 2004). A chemistry teacher at Marjory Stoneman Douglas High School in Parkland, Fla., who had said he would be willing to carry a weapon to protect students at the school, was criminally charged for leaving a loaded pistol in a public restroom. The teacher’s 9mm Glock was discharged by an intoxicated homeless man who found it in the restroom (Stanglin 2018).



### **c. Enhancing a Culture of Violence**

The South has long had a higher rate of violent crime than the rest of the country. For example, in 2012, while the South had about one-quarter of the U.S. population, it had almost 41 percent of the violent crime reported to police (Fuchs 2013). Social psychologists have argued that part of the reason the South has a higher violent crime rate is that it has perpetuated a “subculture of violence” predicated on an aggrandized sense of one’s rights and honor that responds negatively to perceived insults. A famous experiment published in the *Journal of Personality and Social Psychology* found that Southern males were more likely than Northern males to respond aggressively to being bumped and insulted. This was confirmed by measurement of their stress hormones and their frequency of engaging in aggressive or dominant behavior after being insulted (Cohen et al. 1996). To the extent that RTC laws reflect and encourage this cultural response, they can promote violent crime not only by permit holders, but by all those with or without guns who are influenced by this crime-inducing worldview.

Even upstanding citizens, such as Donald Brown, a 56-year-old retired Hartford firefighter with a distinguished record of service, can fall prey to the notion that resort to a lawful concealed weapon is a good response to a heated argument. Brown was sentenced to seven years in prison in January 2018 by a Connecticut judge who cited his “poor judgment on April 24, 2015, when he drew his licensed 9mm handgun and fired a round into the abdomen of Lascelles Reid, 33.” The shooting was prompted by a dispute “over renovations Reid was performing at a house Brown owns” (Owens 2018). Once again, we see that the RTC permit was the pathway to serious violent crime by a previously law abiding citizen.

### **d. Increasing Violence by Criminals**

The argument for RTC laws is often predicated on the supposition that they will encourage good guys to have guns, leading only to benign effects on the behavior of bad guys. This is highly unlikely to be true.<sup>22</sup> Indeed, the evidence that gun prevalence in a state is associated with higher

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<sup>22</sup>Consider in this regard, David Friedman’s theoretical analysis of how right to carry laws will reduce violent crime: “Suppose one little old lady in ten carries a gun. Suppose that one in ten of those, if attacked by a mugger, will succeed in killing the mugger instead of being killed by him—or shooting herself in the foot. On average, the mugger is much more likely to win the encounter than the little old lady. But—also on average—every hundred muggings produce one dead mugger. At those odds, mugging is a very unattractive profession—not many little old ladies carry enough money in their purses to justify one chance in a hundred of being killed getting it. The number of muggers—and muggings—declines drastically, not because all of the muggers have been killed but because they have, rationally, sought safer professions” (Friedman 1990).

There is certainly no empirical support for the conjecture that muggings will “decline drastically” in the wake of RTC adoption. What Friedman’s analysis overlooks is that muggers can decide not to mug (which is what Friedman posits) or they can decide to initiate their muggings by cracking the old ladies over the head or by getting prepared to shoot them if they start reaching for a gun (or even wear body armor). Depending on the response of the criminals to increased gun carrying by potential victims, the increased risk to the criminals may be small compared to the increased

rates of lethal force by police (even controlling for homicide rates) suggests that police may be more fearful and shoot quicker when they are more likely to interact with an armed individual (Nagin 2018).<sup>23</sup> Presumably, criminals would respond in a similar fashion, leading them to arm themselves more frequently, attack more harshly, and shoot more quickly when citizens are more likely to be armed. In one study, two-thirds of prisoners incarcerated for gun offenses “reported that the chance of running into an armed victim was very or somewhat important in their own choice to use a gun” (Cook, Ludwig and Samaha 2009). Such responses by criminals will elevate the toll of the crimes that do occur.

Indeed, a panel data estimate over the years 1980 to 2016 reveals that the percentage of robberies committed with a firearm rises by 18 percent in the wake of RTC adoption ( $t = 2.60$ ).<sup>24</sup> Our synthetic controls assessment similarly shows that the percentage of robberies committed with a firearm increases by 35 percent over 10 years ( $t = 4.48$ ).<sup>25</sup> Moreover, there is no evidence that RTC laws are reducing the overall level of robberies: the panel data analysis associates RTC laws with a 9 percent higher level of overall robberies ( $t = 1.85$ ) and the synthetic controls analysis suggests a 7 percent growth over 10 years ( $t=1.19$ ).

#### **e. Impairing Police Effectiveness**

According to an April 2016 report of the Council of Economic Advisers, “Expanding resources for police has consistently been shown to reduce crime; estimates from economic research suggests that a 10% increase in police size decreases crime by 3 to 10%” (CEA 2016, p. 4). In summarizing the evidence on fighting crime in the *Journal of Economic Literature*, Aaron Chalfin and Justin McCrary note that adding police manpower is almost twice as effective in reducing violent crime as it is in reducing property crime (Chalfin and McCrary 2017). Therefore, anything that RTC laws do to occupy police time, from processing permit applications to checking for permit validity to dealing with gunshot victims, inadvertent gun discharges, and the staggering number of stolen guns is likely to have an opportunity cost expressed in higher violent crime.

The presence of more guns on the street can complicate the job of police as they confront (or shy away from) armed citizens. A Minnesota police officer who stopped Philando Castile for a broken tail light shot him seven times only seconds after Castile indicated he had a permit to carry a weapon because the officer feared the permit holder might be reaching for the gun. After a similar experience between an officer and a permit holder, the officer told the gun owner, “Do you realize

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risk to the victims. Only an empirical evaluation can answer this question.

<sup>23</sup>See footnote 28 and accompanying text for examples of this pattern of police use of lethal force.

<sup>24</sup>The panel data model uses the DAW explanatory variables set forth in Table 2.

<sup>25</sup>The weighted average proportion of robberies committed by firearm in the year prior to RTC adoption (for states that adopted RTC between 1981 and 2014) is 36 percent while the similar proportion in 2014 for the same RTC states is 43 percent (and for non-RTC states is 29 percent).

you almost died tonight?” (Kaste 2016).<sup>26</sup>

A policemen trying to give a traffic ticket has more to fear if the driver is armed. When a gun is found in a car in such a situation, a greater amount of time is needed to ascertain the driver’s status as a permit holder. A lawful permit holder who happens to have forgotten his permit may end up taking up more police time through arrest and/or other processing.

Moreover, police may be less enthusiastic about investigating certain suspicious activities or engaging in effective crime-fighting actions given the greater risks that widespread gun carrying poses to them, whether from permit holders or the criminals who steal their guns.<sup>27</sup> In a speech at the University of Chicago Law School in October of 2015, then-FBI Director James Comey argued that criticism of overly aggressive policing led officers to back away from more involved policing, causing violent crime to rise (Donohue 2017a). If the more serious concern of being shot by an angry gun toter impairs effective policing, the prospect of increased crime following RTC adoption could be far more substantial than the issue that Comey highlighted.<sup>28</sup>

The presence of multiple gun carriers can also complicate police responses to mass shootings and other crimes. For example, according to the police, when a number of Walmart customers (fecklessly) pulled out their weapons during a shooting on November 1, 2017, their “presence ‘absolutely’ slowed the process of determining who, and how many, suspects were involved in the shootings, said Thornton [Colorado] police spokesman Victor Avila” (Simpson 2017).

Similarly, in 2014, a concealed carry permit holder in Illinois fired two shots at a fleeing armed

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<sup>26</sup>A permit to carry instructor has posted a YouTube video about “How to inform an officer you are carrying a handgun and live” that is designed to “keep yourself from getting shot unintentionally” by the police. The video, which has over 4.2 million views, has generated comments from non-Americans that it “makes the US look like a war zone” and leads to such unnatural and time-consuming behavior that “an English officer . . . would look at you like a complete freak” (Soderling 2016).

<sup>27</sup>“Every law enforcement officer working today knows that any routine traffic stop, delivery of a warrant or court order, or response to a domestic disturbance anywhere in the country involving people of any race or age can put them face to face with a weapon. Guns are everywhere, not just in the inner city” (Wilson 2016).

In offering an explanation for why the US massively leads the developed world in police shootings, criminologist David Kennedy stated that “Police officers in the United States in reality need to be conscious of and are trained to be conscious of the fact that literally every single person they come in contact with may be carrying a concealed firearm.” For example, police in England and Wales shot and killed 55 people over the 15 year period from 1990-2014, while in just the first 24 days of 2015, the US (with six times the population) had a higher number of fatal shootings by police (Lopez 2018).

<sup>28</sup>A vivid illustration of how even the erroneous perception that someone accosted by the police is armed can lead to deadly consequences is revealed in the chilling video of five Arizona police officers confronting an unarmed man they incorrectly believed had a gun. During the prolonged encounter, the officers shouted commands at an intoxicated 26 year-old father of two, who begged with his hands in the air not to be shot. The man was killed by five bullets when, following orders to crawl on the floor towards police, he paused to pull up his slipping pants.

A warning against the open carry of guns issued by the San Mateo County, California, Sheriff’s Office makes the general point that law enforcement officers become hypervigilant when encountering an armed individual: “Should the gun carrying person fail to comply with a law enforcement instruction or move in a way that could be construed as threatening, the police are forced to respond in kind for their own protection. It’s well and good in hindsight to say the gun carrier was simply ‘exercising their rights’ but the result could be deadly” (Lunny 2010).

robber at a phone store, thereby interfering with a pursuing police officer. According to the police, “Since the officer did not know where the shots were fired from, he was forced to terminate his foot pursuit and take cover for his own safety” (Glanton and Sadovi 2014).

Even benign interventions can end in tragedy for the good guy with a gun. On July 27, 2018, police officers arrived as a “good Samaritan” with a concealed carry permit was trying to break up a fight in Portland, Oregon. The police saw the gun held by the permit holder – a Navy veteran, postal worker, and father of three – and in the confusion shot and killed him (Gueverra 2018).

Indeed, preventive efforts to get guns off the street in high-crime neighborhoods are less feasible when carrying guns is presumptively legal. The passage of RTC laws normalizes the practice of carrying guns in a way that may enable criminals to carry guns more readily without prompting a challenge, while making it harder for the police to know who is and who is not allowed to possess guns in public.

Furthermore, negligent discharges of guns, although common, rarely lead to charges of violent crime but they can take up valuable police time for investigation and in determining whether criminal prosecution or permit withdrawal is warranted. For example, on November 16, 2017, Tennessee churchgoers were reflecting on the recent Texas church massacre in Sutherland Springs when a permit holder mentioned he always carries his gun, bragging that he would be ready to stop any mass shooter. While proudly showing his Ruger handgun, the permit holder inadvertently shot himself in the palm, causing panic in the church as the bullet “ripped through [his wife’s] lower left abdomen, out the right side of her abdomen, into her right forearm and out the backside of her forearm. The bullet then struck the wall and ricocheted, landing under the wife’s wheelchair.” The gun discharge prompted a 911 call, which in the confusion made the police think an active shooting incident was underway. The result was that the local hospital and a number of schools were placed on lockdown for 45 minutes until the police finally ascertained that the shooting was accidental (Eltagouri 2017).<sup>29</sup>

Everything that takes up added police time or complicates the job of law enforcement will serve as a tax on police, rendering them less effective on the margin, and thereby contributing to

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<sup>29</sup>Negligent discharges by permit holders have occurred in public and private settings from parks, stadiums, movie theaters, restaurants, and government buildings to private households (WFTV 2015; Heath 2015). 39-year-old Mike Lee Dickey, who was babysitting an eight year old boy, was in the bathroom removing his handgun from his waistband when it discharged. The bullet passed through two doors, before striking the child in his arm while he slept in a nearby bedroom (Associated Press 2015).

In April 2018, a 21-year-old pregnant mother of two in Indiana was shot by her 3-year-old daughter, when the toddler’s father left the legal but loaded 9mm handgun between the console and the front passenger seat after he exited the vehicle to go inside a store. The child climbed over from the backseat and accidentally fired the gun, hitting her mother though the upper right part of her torso. (Palmer 2018)

See also: (Barbash 2018) (California teacher demonstrating gun safety accidentally discharges weapon in a high school classroom in March 2018, injuring one student); (Fortin 2018) (in February 2018, a Georgia teacher fired his gun while barricaded in his classroom); and (US News 2018)(in April 2018, an Ohio woman with a valid concealed carry permit accidentally killed her 2-year-old daughter at an Ohio hotel while trying to turn on the gun’s safety).

crime. Indeed, this may in part explain why RTC states tend to increase the size of their police forces (relative to non-adopting states) after RTC laws are passed, as shown in Table 1, below.<sup>30</sup>

## B. A Simple Difference-in Differences Analysis

We begin by showing how violent crime evolved over our 1977-2014 data period for RTC and non-RTC states.<sup>31</sup> Figure 1 depicts percentage changes in the violent crime rate over our entire data period for three groups of states: those that never adopted RTC laws, those that adopted RTC laws sometime between 1977 and before 2014, and those that adopted RTC laws prior to 1977. It is noteworthy that the 42.3 percent drop in violent crime in the nine states that never adopted RTC laws is almost an order of magnitude greater than the 4.3 percent reduction experienced by states that adopted RTC laws during our period of analysis.<sup>32</sup>

The NRC Report presented a “no-controls” estimate, which is just the coefficient estimate on the variable indicating the date of adoption of an RTC law in a crime rate panel data model with state and year fixed effects. According to the NRC Report, “Estimating the model using data to 2000 shows that states adopting right-to-carry laws saw 12.9 percent increases in violent crime—and 21.2 percent increases in property crime—relative to national crime patterns.” Estimating this same model using 14 additional years of data (through 2014) and eleven additional adopting states (listed at the bottom of Appendix Table C1) reveals that the average post-passage increase in violent crime was 20.2 percent, while the comparable increase in property crime was 19.2 percent (both having p-values less than 5 percent).<sup>33</sup>

Of course, simply because RTC states experience a worse post-passage crime pattern, this does not prove that RTC laws increase crime. For example, it might be the case that some states decided to fight crime by allowing citizens to carry concealed handguns while others decided to hire more police and incarcerate a greater number of convicted criminals. If police and prisons were more effective in stopping crime, the “no controls” model might show that the crime experience in RTC states was worse than in other states even if this were not a true causal result of the adoption of

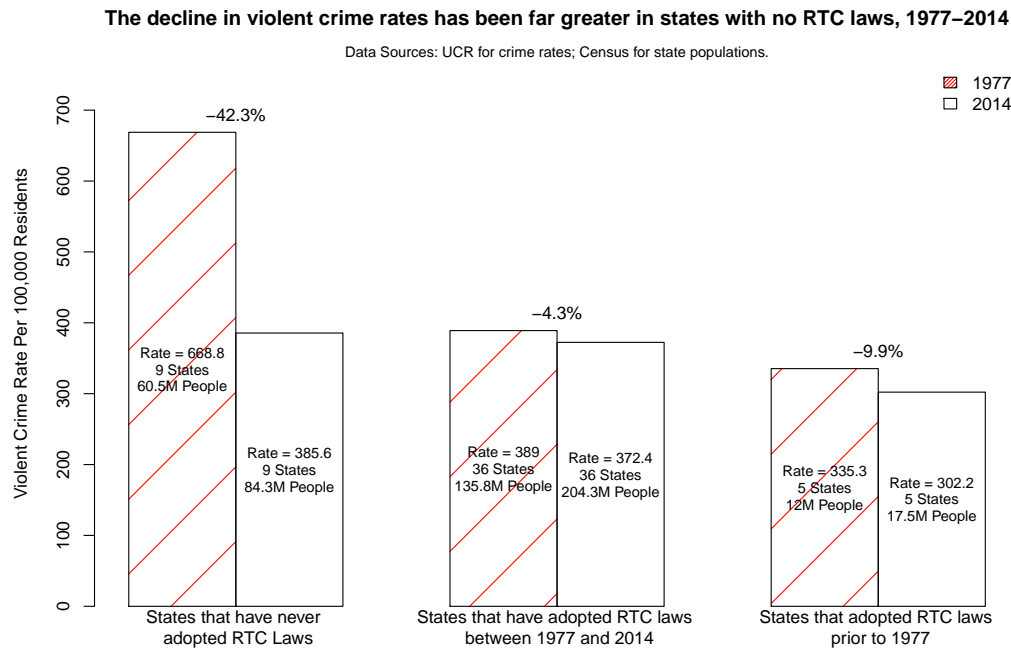
<sup>30</sup>See Adda, McConnell and Rasul (2014), describing how local depenalization of cannabis enabled the police to re-allocate resources, thereby reducing violent crime.

<sup>31</sup>The FBI violent crime category includes murder, rape, robbery, and aggravated assault.

<sup>32</sup>Over the same 1977-2014 period, the states that avoided adopting RTC laws had substantially smaller increases in their rates of incarceration and police employment. The nine never-adopting states increased their incarceration rate by 205 percent, while the incarceration rates in the adopting states rose by 262 and 259 percent, for those adopting RTC laws before and after 1977 respectively. Similarly, the rate of police employment rose by 16 percent in the never-adopting states and by 38 and 55 percent, for those adopting before and after 1977, respectively.

<sup>33</sup>The dummy variable model reports the coefficient associated with an RTC variable that is given a value of zero if an RTC law is not in effect in that year, a value of one if an RTC law is in effect that entire year, and a value equal to the portion of the year an RTC law is in effect otherwise. The date of adoption for each RTC state is shown in Appendix Table A1.





Note: Illinois excluded since its concealed carry law did not go into effect until 2014. From 1977-2013, the violent crime rate in Illinois fell by 36 percent, from 631 to 403 crimes per 100,000 people.

Figure 1

RTC laws. As it turns out, though, RTC states not only experienced higher rates of violent crime but they also had larger increases in incarceration and police than other states. Table 1 provides panel data evidence on how incarceration and two measures of police employment changed after RTC adoption (relative to non-adopting states). All three measures rose in RTC states, and the 7-8 percent greater increases in police in RTC states are statistically significant. In other words, Table 1 confirms that RTC states did *not* have relatively declining rates of incarceration or total police employees after adopting their RTC laws that might explain their comparatively poor post-passage crime performance.

### III. A Panel Data Analysis of RTC Laws

#### A. Estimating Two Models on the Full Data Period 1977-2014

We have just seen that RTC law adoption is followed by *higher* rates of violent and property crime (relative to national trends) and that the poorer crime performance after RTC law adoption occurs

**Table 1: Panel Data Estimates Showing Greater Increases in Incarceration and Police Following RTC Adoption: State- and Year-Fixed Effects, and No Other Regressors, 1977-2014**

|                      | <i>Incarceration</i> | <i>Police Employment Per 100k</i> | <i>Police Officers Per 100k</i> |
|----------------------|----------------------|-----------------------------------|---------------------------------|
|                      | (1)                  | (2)                               | (3)                             |
| Dummy variable model | 6.78 (6.22)          | 8.39*** (3.15)                    | 7.08** (2.76)                   |

OLS estimations include state- and year-fixed effects and are weighted by population. Robust standard errors (clustered at the state level) are provided next to point estimates in parentheses. The police employment and sworn police officer data is from the Uniform Crime Reports (UCR). The source of the incarceration rate is the Bureau of Justice Statistics (BJS). \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . All figures reported in percentage terms.

despite the fact that RTC states actually invested relatively more heavily in prisons and police than non-RTC states. While the theoretical predictions about the effect of RTC laws on crime are indeterminate, these two empirical facts based on the actual patterns of crime and crime-fighting measures in RTC and non-RTC states suggest that the most plausible working hypothesis is that RTC laws *increase* crime. The next step in a panel data analysis of RTC laws would be to test this hypothesis by introducing an appropriate set of explanatory variables that plausibly influence crime.

The choice of these variables is important because any variable that both influences crime and is simultaneously correlated with RTC laws must be included if we are to generate unbiased estimates of the impact of RTC laws. At the same time, including irrelevant and/or highly collinear variables can also undermine efforts at valid estimation of the impact of RTC laws. At the very least, it seems advisable to control for the levels of police and incarceration because these have been the two most important criminal justice policy instruments in the battle against crime.

## 1. The DAW Panel Data Model

In addition to the state and year fixed effects of the no-controls model and the identifier for the presence of an RTC law, our preferred “DAW model” includes an array of other factors that might be expected to influence crime, such as the levels of police and incarceration, various income, poverty and unemployment measures, and six demographic controls designed to capture the presence of males in three racial categories (Black, White, other) in two high-crime age groupings (15-19 and 20-39). Table 2 lists the full set of explanatory variables for both the DAW model and the comparable panel data model used by Lott and Mustard (LM).<sup>34</sup>

<sup>34</sup>While we attempt to include as many state-year observations in these regressions as possible, District of Columbia incarceration data is missing after the year 2001. In addition, a handful of observations are also dropped from the LM

**Table 2: Table of Explanatory Variables For Four Panel Data Studies**

| <u>Explanatory Variables</u>                                                                                                                                                                                                                               | <u>DAW</u> | <u>LM</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| Right to carry law                                                                                                                                                                                                                                         | x          | x         |
| Lagged per capita incarceration rate                                                                                                                                                                                                                       | x          |           |
| Lagged police staffing per 100,000 residents                                                                                                                                                                                                               | x          |           |
| Poverty rate                                                                                                                                                                                                                                               | x          |           |
| Unemployment rate                                                                                                                                                                                                                                          | x          |           |
| Per capita ethanol consumption from beer                                                                                                                                                                                                                   | x          |           |
| Percentage of state population living in metropolitan statistical areas (MSA)                                                                                                                                                                              | x          |           |
| Real per capita personal income                                                                                                                                                                                                                            | x          | x         |
| Real per capita income maintenance                                                                                                                                                                                                                         |            | x         |
| Real per capita retirement payments                                                                                                                                                                                                                        |            | x         |
| Real per capita unemployment insurance payments                                                                                                                                                                                                            |            | x         |
| Population density                                                                                                                                                                                                                                         |            | x         |
| Lagged violent or property arrest rate                                                                                                                                                                                                                     |            | x         |
| State population                                                                                                                                                                                                                                           |            | x         |
| 6 Age-sex-race demographic variables<br>-all 6 combinations of black, white, and other males in 2 age groups (15-19, 20-39) indicating the percentage of the population in each group                                                                      | x          |           |
| 36 Age-sex-race demographic variables<br>-all possible combinations of black and white males in 6 age groups (10-19, 20-29, 30-39, 40-49, 50-64 and over 65) and repeating this all for females, indicating the percentage of the population in each group |            | x         |

Note: The DAW model is advanced in this paper and the LM model was previously published by Lott and Mustard.

Mathematically, the dummy model takes the following form:

$$\ln(\text{crime rate}_{it}) = \beta X_{it} + \gamma RTC_{it} + \alpha_t + \delta_i + \varepsilon_{it} \quad (1)$$

where  $\gamma$  is the coefficient on the RTC dummy, reflecting the average estimated impact of adopting a RTC law on crime. The matrix  $X_{it}$  contains either the DAW or LM covariates and demographic controls for state  $i$  in year  $t$ . The vectors  $\alpha$  and  $\delta$  are year and state fixed effects, respectively, while  $\varepsilon_{it}$  is the error term.

The spline model uses the same set of covariates and comparable state and year fixed effects

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regressions owing to states that did not report any usable arrest data in various years. Our regressions are performed with robust standard errors that are clustered at the state level, and we lag the arrest rates used in the LM regression models. The rationales underlying both of these changes are described in more detail in Aneja, Donohue, and Zhang (2014). All of the regressions presented in this paper are weighted by state population.

and error term, but drops the RTC dummy and allows RTC laws to change the trend in crime, as reflected in the following equation:<sup>35</sup>

$$\ln(\text{crime rate}_{it}) = \beta X_{it} + \gamma \text{AFTER}_{it} * \text{CHG}_i + \zeta \text{TREND}_t * \text{CHG}_i + \alpha_t + \delta_i + \varepsilon_{it} \quad (2)$$

The coefficient of interest,  $\gamma$ , now measures the change in trend for each post-passage year in RTC adopting states relative to those that do not adopt RTC. AFTER measures the number of years after RTC adoption. CHG (change) is a binary variable that is equal to one if the state adopts an RTC law during our analysis period. TREND is a time trend that measures the number of years since the beginning of the analysis period (1979 for the DAW panel data model).<sup>36</sup>

The DAW panel data estimates of the impact of RTC laws on crime are shown in Table 3.<sup>37</sup> The results are consistent with, although smaller in magnitude than, those observed in the no-controls model: RTC laws on average increased violent crime by 9.0 percent and property crime by 6.5 percent in the years following adoption according to the dummy model, but again showed no statistically significant effect in the spline model.<sup>38</sup> As in the no-controls model, the estimated effect of RTC laws in Table 3 on the murder rate is very imprecisely estimated and not statistically significant.

We should also note one caveat to our results. Panel data analysis assumes that the treatment in any one state does not influence crime in non-treatment states. But as we noted above,<sup>39</sup> RTC laws tend to lead to substantial increases in gun thefts and those guns tend to migrate to states with more restrictive gun laws, where they elevate violent crime. This flow of guns from RTC to non-RTC states has been documented by gun trace data (Knight 2013).<sup>40</sup> As a result, our panel data estimates of the impact of RTC laws are downward biased by the amount that RTC laws induce

<sup>35</sup>The spline model reports results for a variable that is assigned a value of zero before the RTC law is in effect and a value equal to the portion of the year the RTC law was in effect in the year of adoption. After this year, the value of this variable is incremented by one annually for states that adopted RTC laws between 1977 and 2014. The spline model also includes a second trend variable representing the number of years that have passed since 1977 for the states adopting RTC laws over the sample period.

<sup>36</sup> $t$  starts with 1977 for LM. The interaction of AFTER and TREND with CHG in equation (2) ensures that pre-1977 adopters such as Vermont do not contribute to our spline effect.

<sup>37</sup>The complete set of estimates for all explanatory variables (except the demographic variables) for the DAW and LM dummy and spline models is shown in appendix Table B1.

<sup>38</sup>Defensive uses of guns are more likely for violent crimes because the victim will clearly be present. For property crimes, the victim is typically absent, thus providing less opportunity to defend with a gun. It is unclear whether the many ways in which RTC laws could lead to more crime, which we discuss in Section II(A.2), would be more likely to facilitate violent or property crime, but our intuition is that violent crime would be more strongly influenced, which is in fact what Table 3 suggests.

<sup>39</sup>See text at footnotes 17-19.

<sup>40</sup>“Seventy-five percent of traceable guns recovered by authorities in New Jersey [a non-RTC state] are purchased in states with weaker gun laws, according to . . . firearms trace data . . . compiled by the federal Bureau of Alcohol, Tobacco, Firearms and Explosives . . . between 2012 and 2016” (Pugliese 2018). See also (Freskos 2018).

crime spillovers into non-RTC states.<sup>41</sup>

**Table 3: Panel Data Estimates Suggesting that RTC Laws increase Violent and Property Crime: State and Year Fixed Effects, DAW Regressors, 1979-2014**

|                      | <i>Murder Rate</i> | <i>Murder Count</i> | <i>Violent Crime Rate</i> | <i>Property Crime Rate</i> |
|----------------------|--------------------|---------------------|---------------------------|----------------------------|
|                      | (1)                | (2)                 | (3)                       | (4)                        |
| Dummy variable model | 0.21 (5.33)        | 1.05 (0.05)         | 9.02*** (2.90)            | 6.49** (2.74)              |
| Spline model         | -0.33 (0.53)       | 1.00 (0.00)         | 0.01 (0.64)               | 0.11 (0.39)                |

All models include year and state fixed effects, and OLS estimates are weighted by state population. Robust standard errors (clustered at the state level) are provided next to point estimates in parentheses. In Column 2 we present Incidence Rate Ratios (IRR) estimated using negative binomial regression, where population is included as a control variable, as STATA does not have a weighting function for nbreg. The null hypothesis is that the IRR equals 1. The crime data is from the Uniform Crime Reports (UCR). Six demographic variables (based on different age-sex-race categories) are included as controls in the regression above. Other controls include the lagged incarceration rate, the lagged police employee rate, real per capita personal income, the unemployment rate, poverty rate, beer, and percentage of the population living in MSAs. \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . All figures reported in percentage terms.

## 2. The LM Panel Data Model

Table 2's recitation of the explanatory variables contained in the Lott and Mustard (LM) panel data model reveals two obvious omissions: there are no controls for the levels of police and incarceration in each state, even though a substantial literature has found that these factors have a large impact on crime. Indeed, as we saw above in Table 1, both of these factors grew substantially and statistically significantly after RTC law adoption. A Bayesian analysis of the impact of RTC laws found that "the incarceration rate is a powerful predictor of future crime rates," and specifically faulted this omission from the Lott and Mustard model (Strnad 2007: 201, fn. 8). Without more, then, we have reason to believe that the LM model is mis-specified, but in addition to the obvious omitted variable bias, we have discussed an array of other infirmities with the LM model in Aneja, Donohue, and Zhang (2014), including their reliance on flawed pseudo-arrest rates, and highly collinear demographic variables.

As noted in Aneja, Donohue, and Zhang (2014),

<sup>41</sup>Some of the guns stolen from RTC permit holders may also end up in foreign countries, which will stimulate crime there but not bias our panel data estimates. For example, a recent analysis of guns seized by Brazilian police found that 15 percent came from the United States. Since many of these were assault rifles, they were probably not guns carried by American RTC permit holders (Paraguassu and Brito 2018).



“The Lott and Mustard arrest rates . . . are a ratio of arrests to crimes, which means that when one person kills many, for example, the arrest rate falls, but when many people kill one person, the arrest rate rises, since only one can be arrested in the first instance and many can in the second. The bottom line is that this “arrest rate” is not a probability and is frequently greater than one because of the multiple arrests per crime. For an extended discussion on the abundant problems with this pseudo arrest rate, see Donohue and Wolfers (2009).”

The LM arrest rates are also econometrically problematic since the denominator of the arrest rate is the numerator of the dependent variable crime rate, improperly leaving the dependent variable on both sides of the regression equation. We lag the arrest rates by one year to reduce this problem of ratio bias.

Lott and Mustard’s use of 36 demographic variables is also a potential concern. With so many enormously collinear variables, the high likelihood of introducing noise into the estimation process is revealed by the wild fluctuations in the coefficient estimates on these variables. For example, consider the LM explanatory variables “neither black nor white male aged 30-39” and the identical corresponding female category. The LM dummy variable model for violent crime suggests that the male group will vastly *increase* crime (the coefficient is 219!), but their female counterparts have an enormously dampening effect on crime (with a coefficient of -258!). Both of those highly implausible estimates (not shown in Appendix Table B1) are statistically significant at the 0.01 level, and they are almost certainly picking up noise rather than revealing true relationships. Bizarre results are common in the LM estimates among these 36 demographic variables.<sup>42</sup>

Table 4, Panel A shows the results of the LM panel data model estimated over the period 1977-2014. As seen above, the DAW model generated estimates that RTC laws raised violent and property crime (in the dummy model of Table 3), while the estimated impact on murders was too imprecise to be informative. The LM model flips these predictions by showing strong estimates of increased murder (in the spline model) and imprecise and not statistically significant estimates for violent and property crime. We can almost perfectly restore the DAW Table 3 findings, however, by simply limiting the inclusion of 36 highly collinear demographic variables to the more typical array used in the DAW regressions, as seen in Panel B of Table 4. This modified LM dummy variable model suggests that RTC laws increase violent and property crime, mimicking the DAW

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<sup>42</sup>Aneja, Donohue, and Zhang (2014) test for the severity of the multicollinearity problem using the 36 LM demographic variables, and the problem is indeed serious. The Variance Inflation Factor (VIF) is shown to be in the range of six to seven for the RTC variable in both the LM dummy and spline models when the 36 demographic controls are used. Using the six DAW variables reduces the multicollinearity for the RTC dummy to a tolerable level (with VIFs always below the desirable threshold of 5). Indeed, the degree of multicollinearity for the individual demographics of the black-male categories are astonishingly high with 36 demographic controls—with VIFs in the neighborhood of 14,000! This analysis makes us wary of estimates of the impact of RTC laws that employ the LM set of 36 demographic controls.

dummy variable model estimates, and this same finding persists if we add in controls for police and incarceration, as seen in Panel C of Table 4.

**Table 4: Panel Data Estimates of the Impact of RTC Laws: State and Year Fixed Effects, Using Actual and Modified LM Regressors, 1977-2014**

| <i>Panel A: LM Regressors Including 36 Demographic Variables</i> |                    |                     |                           |                            |
|------------------------------------------------------------------|--------------------|---------------------|---------------------------|----------------------------|
|                                                                  | <i>Murder Rate</i> | <i>Murder Count</i> | <i>Violent Crime Rate</i> | <i>Property Crime Rate</i> |
|                                                                  | (1)                | (2)                 | (3)                       | (4)                        |
| Dummy variable model                                             | -4.60 (3.43)       | 1.03 (0.03)         | -1.38 (3.16)              | -0.34 (1.71)               |
| Spline model                                                     | 0.65** (0.33)      | 1.01** (0.00)       | 0.41 (0.47)               | 0.28 (0.28)                |

| <i>Panel B: LM Regressors with 6 DAW Demographic Variables</i> |                    |                     |                           |                            |
|----------------------------------------------------------------|--------------------|---------------------|---------------------------|----------------------------|
|                                                                | <i>Murder Rate</i> | <i>Murder Count</i> | <i>Violent Crime Rate</i> | <i>Property Crime Rate</i> |
|                                                                | (1)                | (2)                 | (3)                       | (4)                        |
| Dummy variable model                                           | 2.81 (6.04)        | 1.07 (0.05)         | 10.03** (4.81)            | 7.59** (3.72)              |
| Spline model                                                   | 0.37 (0.46)        | 1.00 (0.00)         | 0.56 (0.62)               | 0.49 (0.35)                |

| <i>Panel C: LM Regressors with 6 DAW Demographic Variables and Adding Controls for Incarceration and Police</i> |                    |                     |                           |                            |
|-----------------------------------------------------------------------------------------------------------------|--------------------|---------------------|---------------------------|----------------------------|
|                                                                                                                 | <i>Murder Rate</i> | <i>Murder Count</i> | <i>Violent Crime Rate</i> | <i>Property Crime Rate</i> |
|                                                                                                                 | (1)                | (2)                 | (3)                       | (4)                        |
| Dummy variable model                                                                                            | 3.61 (5.69)        | 1.06 (0.05)         | 10.05** (4.54)            | 8.10** (3.63)              |
| Spline model                                                                                                    | 0.30 (0.43)        | 1.00 (0.00)         | 0.50 (0.57)               | 0.50 (0.34)                |

All models include year and state fixed effects, and OLS estimates are weighted by state population. Robust standard errors (clustered at the state level) are provided next to point estimates in parentheses. In Panel A, 36 demographic variables (based on different age-sex-race categories) are included as controls in the regressions above. In Panel B, only 6 demographic variables are included. In Panel C, only 6 demographic variables are included and controls are added for incarceration and police. For both Panels, other controls include the previous year's violent or property crime arrest rate (depending on the crime category of the dependent variable), state population, population density, real per capita income, real per capita unemployment insurance payments, real per capita income maintenance payments, and real retirement payments per person over 65. \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . All figures reported in percentage terms.

In summary, the LM model that had originally been employed using data through 1992 to

argue that RTC laws *reduce* crime, no longer shows any statistically significant evidence of crime reduction. Indeed, using more complete data, the LM spline model (Panel A of Table 4) suggests that RTC laws *increase* the murder rate by 6-7 percent (and the murder count by ten percent) after ten years, which are the only statistically significant results in Panel A. Those who are skeptical of these results because the LM specification includes too many highly collinear demographic variables might prefer the estimates in Panel B and C, which simply limit the LM demographic variables from 36 to 6, thereby restoring the Table 3 DAW dummy variable model result that RTC laws *increase* both violent and property crime. The following section reveals the fundamental problem with the LM model, which confirms why it cannot generate reliable estimates of the impact of RTC laws.

We also conducted a panel data assessment looking at the 11 states that adopted RTC laws in the period from 2000-2014 when the confounding effect of the crack epidemic had subsided. The results provide further support that RTC laws increase crime. See discussion and relevant estimates in Appendix C.

### **3. Testing the DAW and LM Models for the Parallel Trends Assumption**

We have already registered concerns about the choice of controls included in the LM model, but we have yet to evaluate whether either the DAW or LM models satisfy the critical assumption of parallel trends in the period prior to adoption of the RTC laws. As we will see, the LM model uniformly violates the assumption of parallel trends, and the DAW model – particularly for violent crime – illustrates nearly perfect parallel trends in the decade prior to RTC adoption.

To implement this test, we ran regressions showing the values on dummy variables for 10 years prior to RTC adoption to 10 years after RTC adoption. If the key parallel trends assumption of panel data analysis is valid, we should see values of the pre-adoption dummies that show no trend and are close to zero. Figure 2 shows that the DAW violent crime model performs extremely well: the pre-adoption dummies are virtually all zero (and hence totally flat) for the 8 years prior to adoption, and violent crime starts rising in the year of adoption, showing statistically significant increases after the law has been in effect for at least a full year. The upward trend in violent crime continues for the entire decade after adoption.

In contrast to the ideal performance of the DAW violent crime model, the LM violent crime model performs extremely poorly, as shown in Appendix Figure D1. The pattern of declining dummy estimates throughout the decade prior to adoption shows that the parallel trends assumption is violated in the LM model. Appendix Figure D1 also illustrates why the LM dummy model estimate on violent crime in Table 4.A was not positive and statistically significant (as it was for the DAW model in Table 3 and the modified LM models in Table 4.B and 4.C): Appendix Figure

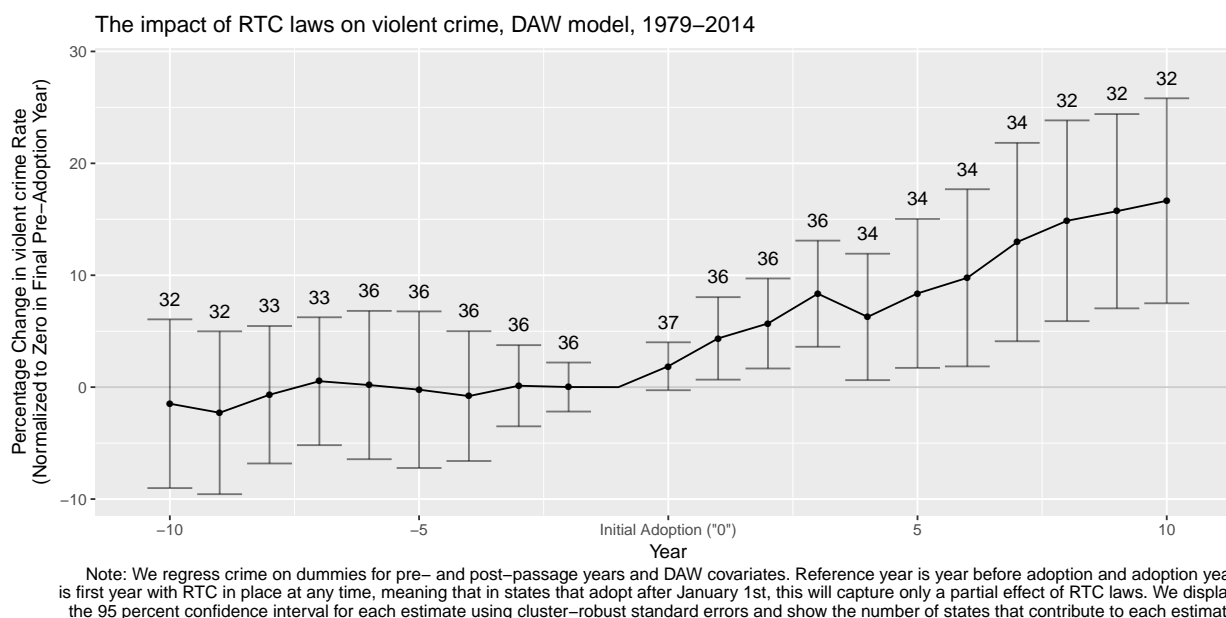


Figure 2

D1 reveals that, for the LM model, violent crime was trending down throughout the pre-adoption period dropping from 5 percentage points to zero over that decade, at which point it reverses and violent crime increases to roughly a 6 percent increase by 10 years after RTC adoption. The v-shape pattern over that two-decade period leads the LM dummy model to obscure the increase in violent crime that is clearly seen in Appendix Figure D1.

For the DAW and LM property crime panel data estimates, we see almost the same pattern. While the pre-adoption performance of the DAW property crime model (see Appendix Figure D2) is not quite as perfect as it was for violent crime, it still shows a roughly flat pattern for the eight years prior to adoption, followed by a persistent pattern of increasing property crime in the ten years after RTC adoption. The increase in property crime turns statistically significant at the time of adoption. In Appendix Figure D3, however, we again see the same deficient pattern observed for the LM model in Appendix Figure D1: property crime falls in the 10 years prior to adoption, and the pattern reverses itself leading to increasing property crime in the decade following RTC adoption.

Repeating this exercise for the DAW and LM murder rate estimates in Appendix Figures D4 and D5 once again confirms that the LM model clearly violates the parallel trends assumption, now falling from 10 percent down to zero in the decade prior to RTC adoption. The downward trend levels out about two years after adoption, suggesting that adoption of a RTC law puts an end to a benign pre-passage trend in the murder rate. The DAW murder rate graph of Appendix Figure D4 is again not quite as pristine as the near-perfect fit of the violent crime graph (Figure 2), but

it performs reasonably well, at least in the six years prior to RTC adoption. Nine of the eleven post-adoption dummies are positive, suggesting increases in murder, but the increases are rather small and the confidence intervals are so wide that we can't say much about the likely impact of RTC laws on murder from this panel data analysis.<sup>43</sup>

## **B. Summary of Panel Data Analysis**

The uncertainty about the impact of RTC laws on crime expressed in the NRC Report was based on an analysis of data only through 2000. The preceding evaluation of an array of different specifications over the full data period from the late 1970s through 2014 has eliminated any statistically significant evidence of benign effects on crime from the adoption of RTC laws. Considerable evidence that RTC laws increase murder and/or overall violent crime has now been amassed. In addition, two of the three models estimated on post-crack-era data (Zimmerman 2014, and DAW) provide further support for this conclusion, as does the recent work by Donohue (2017*b*) and Siegel et al. (2017) concluding that RTC laws increase firearm and handgun homicide. Pending work by McElroy and Wang (2017) reinforces this conclusion, with results from a dynamic model that accounts for forward-looking behavior finding that violent crime would be one-third lower if RTC laws had not been passed.

Despite the substantial panel data evidence in the post-NRC literature that supports the finding of the pernicious influence of RTC laws on crime, the NRC suggestion that new techniques should be employed to estimate the impact of these laws is fitting. The important paper by Strnad (2007) used a Bayesian approach to argue that none of the published models used in the RTC evaluation literature rated highly in his model selection protocol when applied to data from 1977-1999.

Durlauf, Navarro, and Rivers (2016) attempt to sort out the different specification choices in evaluating RTC laws by using their own Bayesian model averaging approach using county data from 1979-2000. Applying this technique, the authors find that in their preferred spline (trend) model, RTC laws elevate violent crime in the three years after RTC adoption: "As a result of the law being introduced, violent crime increases in the first year and continues to increase afterwards" (50). By the third year, their preferred model suggests a 6.5 percent increase in violent crime. Since their paper only provides estimates for three post-passage years, we cannot draw conclusions beyond this but note that their finding that violent crime increases by over two percent per year owing to RTC laws is a substantial crime increase. Moreover, the authors note that "For our

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<sup>43</sup> Appendix D also shows the comparable set of graphs for the negative binomial estimates of the impact of RTC laws on murders (as opposed to the murder rate) – see Appendix Figures D6 and D7. Since the dummy values in these two figures are even more volatile in the pre-adoption period and have even wider confidence intervals in the post-adoption period than the comparable murder rate dummy values of Appendix Figures D4 and D5, there is less to be learned from these negative binomial results.



estimates, the effect on crime of introducing guns continues to grow over time” (50).

Owing to the substantial challenges of estimating effects from observational data, it will be useful to see if yet another statistical approach that has different attributes from the panel data methodology can enhance our understanding of the impact of RTC laws. The rest of this paper will use this synthetic control approach, which has been deemed “arguably the most important innovation in the policy evaluation literature in the last 15 years” (Athey and Imbens 2017).

## IV. Estimating the Impact of RTC Laws Using Synthetic Controls

The synthetic control methodology, which is becoming increasingly prominent in economics and other social sciences, is a promising new statistical approach for addressing the impact of RTC laws.<sup>44</sup> While most synthetic control papers focus on a single treatment in a single geographic region, we look at 33 RTC adoptions occurring over three decades throughout the country. For each adopting (“treated”) state we will find a weighted average of other states (“a synthetic control”) designed to serve as a good counter-factual for the impact of RTC laws because it had a similar pattern of crime to the adopting state prior to RTC adoption. By comparing what actually happened to crime after RTC adoption to the crime performance of the synthetic control over the same period, we generate estimates of the causal impact of RTC laws on crime.<sup>45</sup>

### A. The Basics of the Synthetic Control Methodology

The synthetic control method attempts to generate representative counterfactual units by comparing a treatment unit (*i.e.*, a state adopting an RTC law) to a set of control units across a set of explanatory variables over a pre-intervention period. The algorithm searches for similarities between the treatment state of interest and the control states during this period and then generates a synthetic counterfactual unit for the treatment state that is a weighted combination of the component control states.<sup>46</sup> Two conditions are placed on these weights: they must be non-negative

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<sup>44</sup>The synthetic control methodology has been deployed in a wide variety of fields, including health economics (Engelen, Nonnemaker, and Shive 2011), immigration economics (Bohn, Lofstrom, and Raphael 2014), political economy (Keele 2009), urban economics (Ando 2015), the economics of natural resources (Mideksa 2013), and the dynamics of economic growth (Cavallo et al. 2013).

<sup>45</sup>For a more detailed technical description of this method, we direct the reader to Abadie and Gardeazabal (2003), Abadie, Diamond, and Hainmueller (2010), and Abadie, Diamond, and Hainmueller (2014).

<sup>46</sup>Our analysis is done in Stata using the *synth* software package developed by Alberto Abadie, Alexis Diamond, and Jens Hainmueller.

and they must sum to one. In general, the matching process underlying the synthetic control technique uses pre-treatment values of both the outcome variable of interest (in our case, some measure of crime) and other predictors believed to influence this outcome variable.<sup>47</sup> For the reasons set forth in Appendix J, we use every lag of the dependent variable as predictors in the DAW and LM specifications. Once the synthetic counterfactual is generated and the weights associated with each control unit are assigned, the *synth* program then calculates values for the outcome variable associated with this counterfactual and the root mean squared prediction error (RMSPE) based on differences between the treatment and synthetic control units in the pre-treatment period. The effect of the treatment can then be estimated by comparing the actual values of the dependent variable for the treatment unit to the corresponding values of the synthetic control.

## B. Generating Synthetic Controls for 33 States Adopting RTC Laws During our Data Period

To illustrate the procedure outlined above, consider the case of Texas, whose RTC law went into effect on January 1, 1996. The potential control group for each treatment state consists of all nine states with no RTC legislation as of the year 2014, as well as states that pass RTC laws at least ten years after the passage of the treatment state (e.g., in this case, the five states passing RTC laws after 2006, such as Nebraska and Kansas, whose RTC laws went into effect at the beginning of 2007). Since we estimate results for up to ten years post-passage,<sup>48</sup> this restriction helps us avoid including states with their own permissive concealed carry laws in the synthetically constructed unit (which would mar the control comparison).

After entering the necessary specification information into the *synth* program (e.g., treatment unit, list of control states, explanatory variables, etc.), the algorithm proceeds to construct the synthetic unit from the list of control states specific to Texas and generates values of the dependent variable for the counterfactual for both the pre-treatment and post-treatment periods. The rationale behind this methodology is that a close fit in the pre-passage time series of crime between the treatment state and the synthetic control generates greater confidence in the accuracy of the constructed counterfactual. Computing the post-treatment difference between the dependent variables

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<sup>47</sup>Roughly speaking, the algorithm that we use finds  $\mathbf{W}$  (the weights of the components of the synthetic control) that minimizes  $\sqrt{(\mathbf{X}_1 - \mathbf{X}_0\mathbf{W})'\mathbf{V}(\mathbf{X}_1 - \mathbf{X}_0\mathbf{W})}$ , where  $\mathbf{V}$  is a diagonal matrix incorporating information about the relative weights placed on different predictors,  $\mathbf{W}$  is a vector of non-negative weights that sum to one,  $\mathbf{X}_1$  is a vector containing pre-treatment information about the predictors associated with the treatment unit, and  $\mathbf{X}_0$  is a matrix containing pre-treatment information about the predictors for all of the control units.

<sup>48</sup>Our choice of ten years is informed by the tradeoffs associated with using a different time frame. Tables 5 and 6 indicate that the increase in violent crime due to RTC laws is statistically significant at the .01 level for all years after 7 years post-adoption.

of the treatment state and the synthetic control unit provides the synthetic control estimate of the treatment effect attributable to RTC adoption in that state.

## 1. Synthetic Control Estimates of Violent Crime in Two States

Figure 3 shows the synthetic control graph for violent crime in Texas over the period from 1977 through 2006 (ten years after the adoption of Texas’s RTC law). The solid black line shows the actual pattern of violent crime for Texas, and the vertical line indicates when the RTC law went into effect. Implementing the synthetic control protocol identifies three states that generate a good fit for the pattern of crime experienced by Texas in the pre-1996 period. These states are California, which gets a weight of 57.7 percent owing to its similar attributes compared to Texas, Nebraska with a weight of 9.7 percent, and Wisconsin with a weight of 32.6 percent.

One of the advantages of the synthetic control methodology is that one can assess how well the synthetic control (call it “synthetic Texas,” which is identified in Figure 3 by the dashed line) matches the pre-RTC-passage pattern of violent crime to see whether the methodology is likely to generate a good fit in the ten years of post-passage data. Here the fit looks rather good in mimicking the rises and falls in Texas violent crime from 1977-1995. This pattern increases our confidence that synthetic Texas will provide a good prediction of what would have happened in Texas had it not adopted an RTC law.

Looking at Figure 3, we see that while both Texas and synthetic Texas (the weighted average violent crime performance of the three mentioned states) show declining crime rates in the post-passage decade after 1996, the crime drop is substantially greater in synthetic Texas, which had no RTC law over that period, than in actual Texas, which did. As Figure 3 notes, ten years after adopting its RTC law, violent crime in Texas was 16.9 percent *higher* than we would have expected had it not adopted an RTC law.<sup>49</sup>

Figure 3 also illustrates perhaps the most important lesson of causal inference: one cannot simply look before and after an event to determine the consequence of the event. Rather, one needs to estimate the difference between what did unfold and the counterfactual of what would have unfolded without the event. The value of the synthetic control methodology is that it provides a highly transparent estimate of that counterfactual. Thus, when Lott (2010) quotes a Texas District Attorney suggesting that he had reversed his earlier opposition to the state’s RTC law in light of the

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<sup>49</sup>Texas’ violent crime rate ten years post-adoption exceeds that of “synthetic Texas” by 20.41 percent =  $\frac{517.3 - 429.6}{429.6} \times 100\%$ . While some researchers would take that value as the estimated effect of RTC, we chose to subtract off the discrepancy in 1996 between the actual violent crime rate and the synthetic control value in that year. This discrepancy is 3.55 percent =  $\frac{644.4 - 622.3}{622.3} \times 100\%$  (shown in the line just below the graph of Figure 3). See footnote 55 for further discussion of this calculation. Figure 3 shows a (rounded) estimated violent crime increase in Texas of 16.9 percent. We arrive at this estimate by subtracting the 1996 discrepancy of 3.55 percent from the 20.41 percent tenth year discrepancy, which generates a TEP of 16.86 percent.

perceived favorable experience with the law, we see why it can be quite easy to draw the inaccurate causal inference that Texas' crime decline was facilitated by its RTC law. The public may perceive the falling crime rate post-1996 (the solid black line) but our analysis suggests that Texas would have experienced a more sizable violent crime decline if it had not passed an RTC law (the dotted line). More specifically, Texas experienced a 19.7 percent decrease in its aggregate violent crime rate in the ten years following its RTC law (between 1996 and 2006), while the state's synthetic control experienced a larger 31.0 percent decline. This counterfactual would not be apparent to residents of the state or to law enforcement officials, but our results suggest that Texas's RTC law imposed a large social cost on the state.

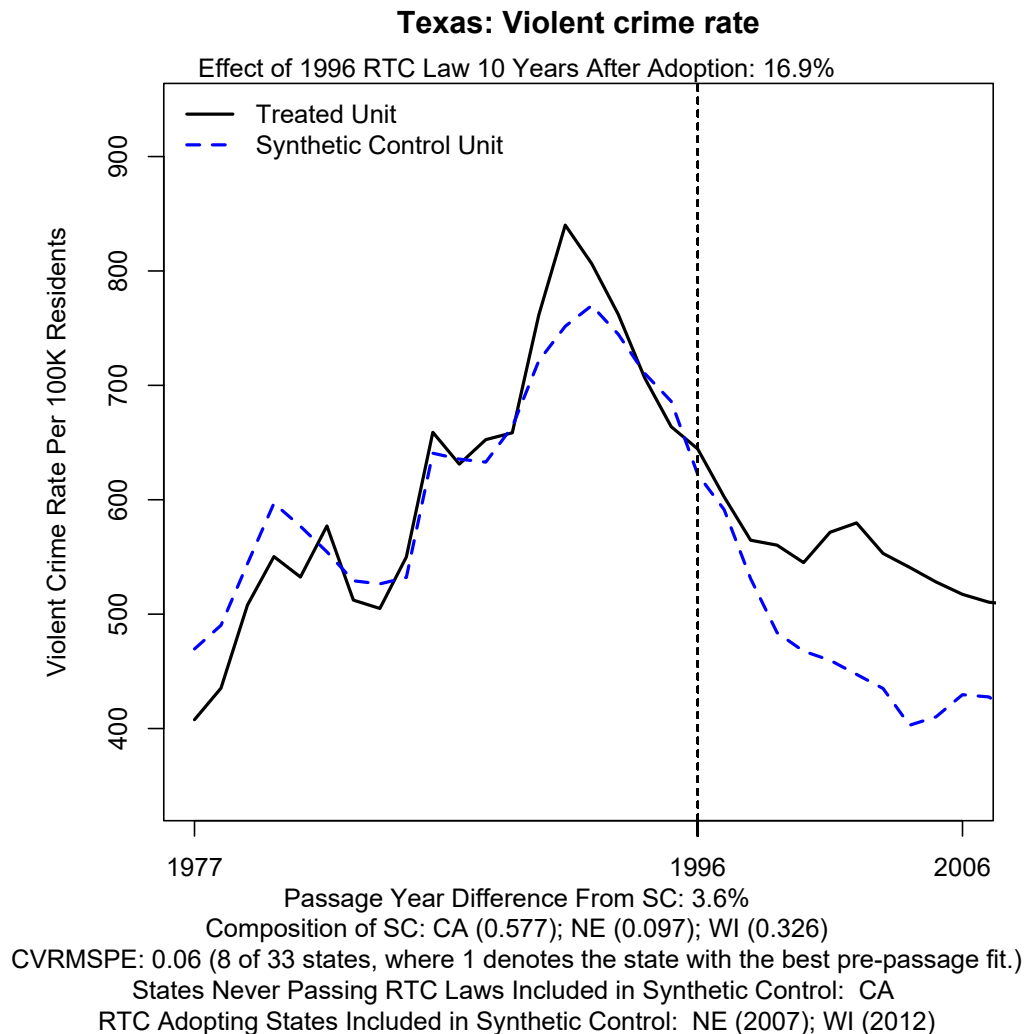


Figure 3

The greater transparency of the synthetic control approach is one advantage of this methodology over the panel data models that we considered above. Figure 3 makes clear what Texas is being

compared to, and we can reflect on whether this match is plausible and whether anything other than RTC laws changed in these three states during the post-passage decade that might compromise the validity of the synthetic control estimate of the impact of RTC laws.

Figure 4 shows our synthetic control estimate for Pennsylvania, which adopted an RTC law in 1989 that did not extend to Philadelphia until a subsequent law went into effect on October 11, 1995. In this case, synthetic Pennsylvania is comprised of eight states and the pre-passage fit is nearly perfect. Following adoption of the RTC laws, synthetic Pennsylvania shows substantially better crime performance than actual Pennsylvania after the RTC law is extended to Philadelphia in late 1995, as illustrated by the second vertical line at 1996. The synthetic control method estimates that RTC laws in Pennsylvania increased its violent crime rate by 24.4 percent after ten years.<sup>50</sup>

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<sup>50</sup>In Appendix I, we include all 33 graphs showing the path of violent crime for the treatment states and the synthetic controls, along with information about the composition of these synthetic controls, the dates of RTC adoption (if any) for states included in these synthetic controls, and the estimated treatment effect (expressed in terms of the percent change in a particular crime rate) ten years after adoption (or seven years after adoption for two states that adopted RTC laws in 2007, since our data ends in 2014). The figures also document the discrepancy in violent crime in the year of adoption between the actual and synthetic control values.



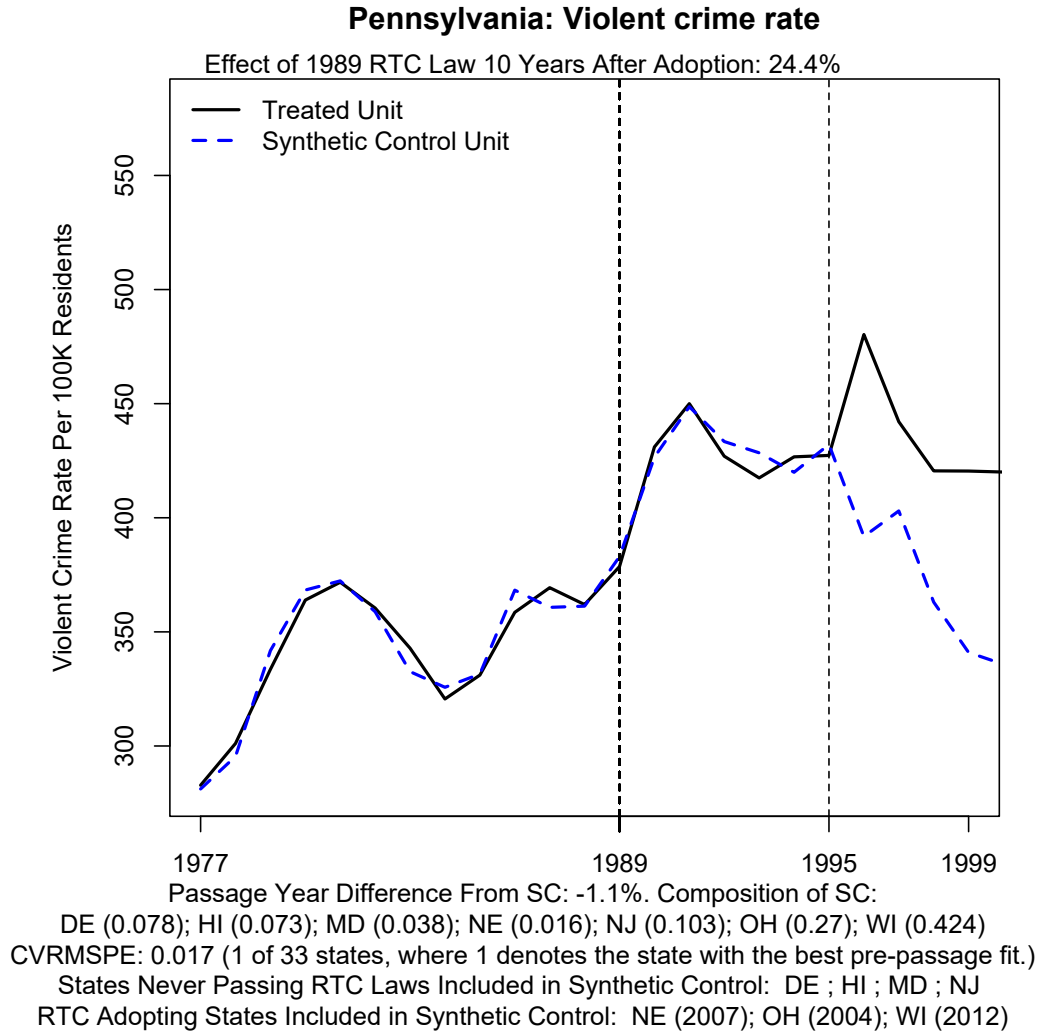


Figure 4

## 2. State-Specific Estimates Across all RTC States

Because we are projecting the violent crime experience of the synthetic control over a ten-year period, there will undoubtedly be a deviation from the “true” counterfactual and our estimated counterfactual. If we were only estimating the impact of a legal change for a single state, we would have an estimate marred by this purely stochastic aspect of changing crime. Since we are estimating an average effect across a large number of states, the stochastic variation will be diminished as the over-estimates and under-estimates will tend to wash out in our mean treatment estimates. Figure 5 shows the synthetic control estimates on violent crime for all 31 states for which we have ten years of post-passage data. For 23 of the 31 states adopting RTC laws, the increase in

violent crime is noteworthy.<sup>51</sup> While three states were estimated to have crime reductions greater than the -1.6 percent estimate of South Dakota, if one averages across all 31 states, the (population-weighted) mean treatment effect after ten years is a 14.3 percent *increase* in violent crime. If one instead uses an (unweighted) median measure of central tendency, RTC laws are seen to *increase* crime by 12.3 percent.

### 3. Less Effective Pre-Passage Matches

Section 1 above provided two examples of synthetic controls that matched the crime of the treatment states well in the pre-passage period, but this does not always happen. For example, we would have considerably less confidence in the quality of the synthetic control estimates for Maine, whose poor estimate is depicted in Appendix Figure I11. Maine also happens to be the state showing the greatest reduction in violent crime following RTC adoption, as indicated in Figure 5.

For Maine, one sees that the synthetic control and the state violent crime performance diverged long before RTC adoption in 1986, and that, by the date of adoption, Maine's violent crime rate was already 37.9 percent below the synthetic control estimate. The violent crime rate of actual Maine was trending down, while the synthetic control estimate had been much higher and trending up in the immediate pre-adoption period. The difficulty in generating good pre-passage matches for states like Maine stems from their unusually low violent crime in the pre-passage period.

Appendix Figure D9 reproduces Figure 5 while leaving out the five states for which the quality of pre-passage fit is clearly lower than in the remaining 26 states.<sup>52</sup> This knocks out ND, SD, ME, MT, and WV, thereby eliminating three of the five outlier estimates at both ends of the scale, and leaving the mean and median effects of RTC laws relatively unchanged from Figure 5. As Appendix Figure D9 shows, the (weighted) mean increase in crime across the listed 26 RTC-adopting states is 13.7 percent while the (unweighted) median increase is now 11.1 percent. Increases in violent crime of this magnitude are troubling. Consensus estimates of the elasticity of crime with respect to incarceration hover around .15 today, which suggests that to offset the increase in crime caused by RTC adoption, the average RTC state would need to approximately double its prison population.

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<sup>51</sup>The smallest of these, Kentucky, had an increase of 4.6 percent.

<sup>52</sup>In particular, for these five states, the pre-passage CVRMSPE—that is, the RMSPE transformed into a coefficient of variation by dividing by the average pre-passage crime rate—was 19 percent or greater. See Footnote 58 for further discussion of this statistic.

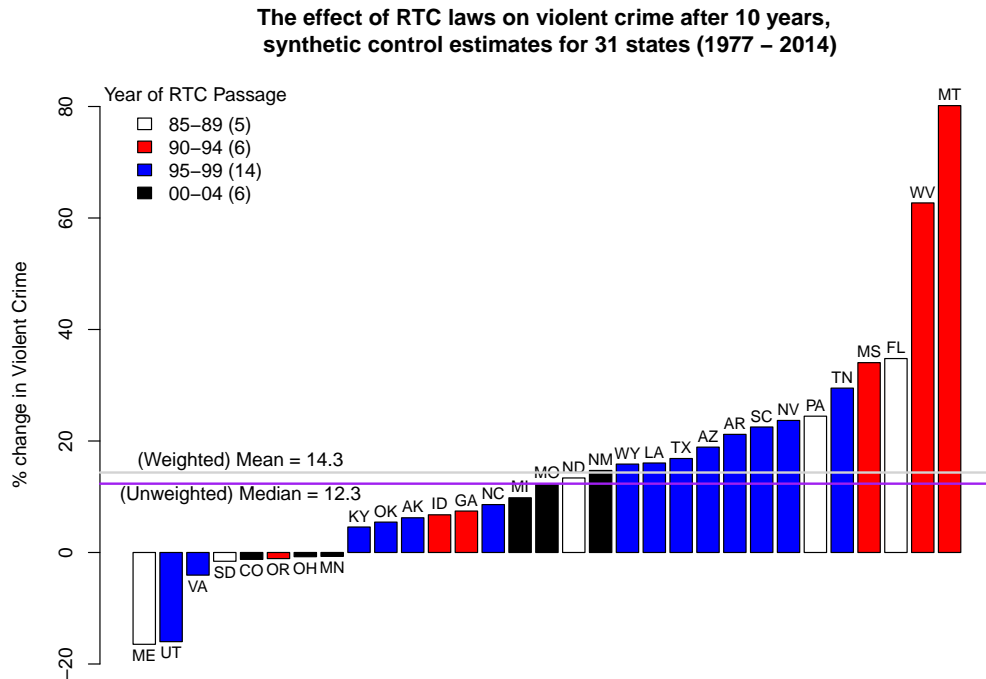


Figure 5

## V. Aggregation Analysis Using Synthetic Controls

A small but growing literature applies synthetic control techniques to the analysis of multiple treatments.<sup>53</sup> We estimate the percentage difference in violent crime between each treatment (RTC-adopting) state and the corresponding synthetic control in both the year of the treatment and in the ten years following it. This estimate of the treatment effect percentage (TEP) obviously uses data

<sup>53</sup>The closest paper to the present study is Arindrajit Dube and Ben Zipperer (2013), who introduce their own methodology for aggregating multiple events into a single estimated treatment effect and calculating its significance. Their study centers on the effect of increases in the minimum wage on employment outcomes, and, as we do, the authors estimate the percentage difference between the treatment and the synthetic control in the post-treatment period. While some papers analyze multiple treatments by aggregating the areas affected by these treatments into a single unit, this approach is not well-equipped to deal with a case such as RTC law adoption where treatments affect the majority of panel units and more than two decades separate the dates of the first and last treatment under consideration, as highlighted in Figure 5.

from fewer post-treatment years for the two treatment states<sup>54</sup> in which RTC laws took effect less than ten years before the end of our sample.

We could use each of these ten percentage differences as our estimated effects of RTC laws on violent crime for the ten post-passage years, but, as noted above, we make one adjustment to these figures by subtracting from each the percentage difference in violent crime in the adoption year between the treatment and synthetic control states. In other words, if ten years after adopting an RTC law, the violent crime rate for the state was 440 and the violent crime rate for the synthetic control was 400, one estimate of the effect of the RTC law could be ten percent ( $= \frac{440-400}{400}$ ). Rather than use this estimate, however, we have subtracted from this figure the percentage difference between the synthetic and treatment states in the year of RTC adoption. If, say, the violent crime rate in the treatment state that year was two percent higher than the synthetic control value, we would subtract two from ten to obtain an estimated tenth-year effect of RTC laws of eight percent.<sup>55</sup> We then look across all the state-specific estimates of the impact of RTC laws on violent crime for each of the ten individual post-passage years and test whether they are significantly different from zero.<sup>56</sup>

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<sup>54</sup>These two states are Kansas and Nebraska, which adopted RTC laws in 2007. See footnote 4 discussing the states for which we cannot estimate the impact of RTC laws using synthetic controls.

<sup>55</sup>It is unclear whether one should implement this subtraction. The intuitive rationale for our choice of outcome variable was that pre-treatment differences between the treatment state and its synthetic control at the time of RTC adoption likely reflected imperfections in the process of generating a synthetic control and should not contribute to our estimated treatment effect if possible. In other words, if the treatment state had a crime rate that was five percent greater than that of the synthetic control in both the pre-treatment and post-treatment period, it would arguably be misleading to ignore the pre-treatment difference and declare that the treatment increased crime rates by five percent. On the other hand, subtracting off the initial discrepancy might be adding noise to the subsequent estimates.

We resolve this issue with the following test of our synthetic control protocol: we pretend that each RTC-adopting state actually adopted its RTC law five years before it did. We then generate synthetic control estimates of this phantom law over the next five years of actual pre-treatment data. If our synthetic control approach is working perfectly, it should simply replicate the violent crime pattern for the five pre-treatment years. Consequently, the estimated “effect” of the phantom law should be close to zero. Indeed, when we follow our subtraction protocol, the synthetic controls match the pre-treatment years more closely than when we do not provide this normalization. Specifically, with subtraction the estimated “effect” in the final pre-treatment year is a wholly insignificant 3.2 percent; without subtraction, it jumps to a statistically significant 5.3 percent. Consequently, normalization is the preferred approach for violent crime. It should also be noted that our actual synthetic control estimates will be expected to perform better than this phantom RTC estimate since we will be able to derive our synthetic controls from five additional years of data, thereby improving our pre-treatment fit.

As it turns out, the choice we made to subtract off the initial-year crime discrepancy is a conservative one, in that the estimated crime increases from RTC laws would be *greater* without subtraction. We provide synthetic control estimates for the DAW model without subtraction of the adoption-year percentage difference for violent crime, murder and property crime in Appendix F. Comparison of these Appendix F estimates with those in the text (Table 5) reveals that our preferred method of subtracting yields more conservative results (*i.e.*, a smaller increase in violent crime due to RTC). In Table 5, we estimate the tenth year TEP for violent crime is roughly 13.5 to 14 percent, while the comparable estimates without subtraction are roughly 17-18 percent, as seen in Appendix Tables F1, F2 and F3.

<sup>56</sup>This test is performed by regressing these differences in a model using only a constant term and examining whether that constant is statistically significant. These regressions are weighted by the population of the treatment state in the post-treatment year under consideration. Robust standard errors corrected for heteroskedasticity are used in this analysis.

## A. RTC Laws Increase Violent Crime

We begin our analysis of the aggregated synthetic control results using predictors derived from the DAW specification. Table 5 shows our results on the full sample examining violent crime.<sup>57</sup> Our estimates of the normalized average treatment effect percentage (TEP) suggest that states that passed RTC laws experienced more deleterious changes in violent criminal activity than their synthetic controls in the ten years after adoption. On average, treatment states had aggregate violent crime rates that were almost seven percent higher than their synthetic controls five years after passage and around 14 percent higher ten years after passage. Table 5 suggests that the longer the RTC law is in effect (up to the tenth year that we analyze), the greater the cost in terms of increased violent crime.

**Table 5: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, 1977-2014**

|                        | (1)               | (2)               | (3)               | (4)                | (5)                 | (6)                | (7)                  | (8)                  | (9)                  | (10)                 |
|------------------------|-------------------|-------------------|-------------------|--------------------|---------------------|--------------------|----------------------|----------------------|----------------------|----------------------|
| Average normalized TEP | -0.117<br>(1.076) | 2.629*<br>(1.310) | 3.631*<br>(1.848) | 4.682**<br>(2.068) | 6.876***<br>(2.499) | 7.358**<br>(3.135) | 10.068***<br>(2.823) | 12.474***<br>(3.831) | 14.021***<br>(3.605) | 14.344***<br>(2.921) |
| N                      | 33                | 33                | 33                | 33                 | 33                  | 33                 | 33                   | 31                   | 31                   | 31                   |
| Pseudo p-value         | 0.936             | 0.274             | 0.220             | 0.192              | 0.094               | 0.106              | 0.060                | 0.038                | 0.032                | 0.032                |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

As we saw in Figures 4 (Pennsylvania) and I11(Maine), the validity of using the post-treatment difference between crime rates in the treatment state (the particular state adopting an RTC law that we are analyzing) and its corresponding synthetic control as a measure of the effect of the RTC law depends on the strength of the match between these two time series in the pre-treatment period. To generate an estimate of pre-treatment fit that takes into account differences in pre-treatment crime levels, we estimate the coefficient of variation for the root mean squared prediction error (RMSPE), which is the ratio of the synthetic control's pre-treatment RMSPE to the pre-treatment average level of the outcome variable for the treatment state.<sup>58</sup>

<sup>57</sup>We discuss the synthetic control estimates for murder and property crime in section V(F) below.

<sup>58</sup>While the RMSPE is often used to assess this fit, we believe that the use of this measure is not ideal for comparing fit across states, owing to the wide variation that exists in the average pre-treatment crime rates among the 33 treatment states that we consider. For example, the pre-treatment RMPSE associated with our synthetic control analysis using the DAW predictor variables and aggregate violent crime as the outcome variable is nearly identical for Texas (37.1) and Maine (36.4), but the pre-treatment levels of Texas's aggregate violent crime rate are far greater than Maine's. To be more specific, Texas's average violent crime rate prior to the implementation of its RTC law (from 1977 through 1995) was 617 violent crimes per 100,000 residents, while the corresponding figure for Maine was 186 violent crimes per 100,000 residents, less than one-third of Texas's rate. The more discerning CV of the RMSPE is .06 for Texas



To evaluate the sensitivity of the aggregate synthetic control estimate of the crime impact of RTC laws in Table 5, we consider two subsamples of treatment states: states whose coefficients of variation are less than two times the average coefficient of variation for all thirty-three treatments and states whose coefficients of variation are less than this average. We then re-run our synthetic control protocol using each of these two subsamples to examine whether restricting our estimation of the average treatment effect to states for which a relatively “better” synthetic control could be identified would meaningfully change our findings.

It is striking how all three samples yield roughly identical conclusions: RTC laws are consistently shown to increase violent crime, with the tenth-year increase ranging from a low of 13.5 to a high of 14.3 percent (Table 5).

## B. The Placebo Analysis

Our ability to make valid inferences from our synthetic control estimates depends on the accuracy of our standard error estimation. To test the robustness of the standard errors that we present under the first row of Table 5, we incorporate an analysis using placebo treatment effects similar to Ando (2015).<sup>59</sup> For this analysis, we generate 500 sets of randomly generated RTC dates that are designed to resemble the distribution of actual RTC passage dates that we use in our analysis.<sup>60</sup> For each of the 500 sets of randomly generated RTC dates, we then use the synthetic control methodology and the DAW predictors to estimate synthetic controls for each of the 33 states whose randomly generated adoption year is between 1981 and 2010. We use this data to estimate the per-

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(with a year of adoption discrepancy of only 3.6 percent), while for Maine, the CV is a dramatically higher .196 (with an initial year discrepancy of -37.9 percent). Accordingly, since the percentage imprecision in our synthetic pre-treatment match for Maine is so much greater than for Texas, we have greater confidence in our estimates that in the tenth year, Texas’s RTC law had increased violent crime by 16.9 percent than we do in an estimate that Maine’s law had decreased violent crime by 16.5 percent.

<sup>59</sup>Ando (2015) examines the impact of constructing nuclear plants on local real per capita taxable income in Japan by generating a synthetic control for every coastal municipality that installed a nuclear plant. While the average treatment effect measured in our paper differs from the one used by Ando, we follow Ando in repeatedly estimating average placebo effects by randomly selecting different areas to serve as placebo treatments. (The sheer number of treatments that we are considering in this analysis prevents us from limiting our placebo treatment analysis to states that never adopt RTC laws, but this simply means that our placebo estimates will likely be biased *against* finding a qualitatively significant effect of RTC laws on crime, since some of our placebo treatments will be capturing the effect of the passage of RTC laws on crime rates.) Our estimated average treatment effect can then be compared to the distribution of average placebo treatment effects. Heersink and Peterson (2014) and Cavallo et al. (2013) also perform a similar randomization procedure to estimate the significance of their estimated average treatment effects, although the randomization procedure in the latter paper differs from ours by restricting the timing of placebo treatments to the exact dates when actual treatments took place.

<sup>60</sup>More specifically, we randomly choose eight states to never pass RTC laws, six states to pass RTC laws before 1981, 33 states to pass RTC laws between 1981 and 2010, and three states to pass their RTC laws between 2011 and 2014. (Washington, D.C. is not included in the placebo analysis since it is excluded from our main analysis.) These figures were chosen to mirror the number of states in each of these categories in our actual data set.

centage difference between each placebo treatment and its corresponding synthetic control during both the year of the treatment and each of the ten post-treatment years (for which we have data) that follow it. Using the methodology described in footnotes 49 and 55, we then test whether the estimated treatment effect for each of the ten post-treatment years is statistically significant.

To further assess the statistical significance of our results, we compare each of the ten coefficient estimates in Table 5 with the distribution of the 500 average placebo treatment effects that use the same crime rate, post-treatment year, and sample as the given estimate. To assist in this comparison process, we report a pseudo p-value which is equal to the proportion of our placebo treatment effects whose absolute value is greater than the absolute value of the given estimated treatment effect. This pseudo p-value provides another intuitive measure of whether our estimated average treatment effects are qualitatively large compared to the distribution of placebo effects. Our confidence that the treatment effect that we are measuring for RTC laws is real increases if our estimated treatment effect is greater than the vast majority of our estimated average placebo treatment effects. Examining our pseudo p-values in Table 5, we see that our violent crime results are always statistically significant in comparison to the distribution of placebo coefficients at the .05 level eight years or more past RTC adoption.

## **C. Synthetic Control Estimates Using LM's Explanatory Variables**

In our Part III panel data analysis, we saw that RTC laws were associated with significantly higher rates of violent crime in the DAW model (Table 3), but not in the LM model (Table 4, Panel A), although the LM spline model did show RTC laws increased murder. Table 6 estimates the impact of RTC laws on violent crime using the LM specification in the synthetic control methodology. The detrimental effects of RTC laws on violent crime rates are statistically significant at the .05 level starting three years after the passage of an RTC law, and appear to increase over time. The treatment effects associated with violent crime in Table 6 range from 11.7 percent in the seventh post-treatment year to 14.3 percent in the ninth post-treatment year. Remarkably, the DAW and LM synthetic control estimates of the impact of RTC laws on violent crime are nearly identical (compare Tables 5 and 6), and this is true even when we limit the sample of states in the manner described above.<sup>61</sup>

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<sup>61</sup>The tenth-year effect in the synthetic control analysis using the LM variables is 13.9 percent when we eliminate the three states with more than twice the average CV of the RMSPE. Knocking out the six states with above-average values of this CV generates a similar 13.5 percent effect.

**Table 6: The Impact of RTC Laws on the Violent Crime Rate, LM covariates, Full Sample, 1977-2014**

|                        | (1)              | (2)               | (3)                | (4)                | (5)                 | (6)                | (7)                  | (8)                  | (9)                  | (10)                 |
|------------------------|------------------|-------------------|--------------------|--------------------|---------------------|--------------------|----------------------|----------------------|----------------------|----------------------|
| Average normalized TEP | 0.280<br>(1.182) | 2.934*<br>(1.503) | 4.716**<br>(1.949) | 5.509**<br>(2.153) | 7.630***<br>(2.544) | 8.027**<br>(3.121) | 11.741***<br>(2.957) | 13.292***<br>(3.930) | 14.306***<br>(3.751) | 14.199***<br>(2.888) |
| N                      | 33               | 33                | 33                 | 33                 | 33                  | 33                 | 33                   | 31                   | 31                   | 31                   |
| Pseudo p-value         | 0.852            | 0.214             | 0.088              | 0.110              | 0.064               | 0.090              | 0.034                | 0.028                | 0.036                | 0.034                |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the regression methodology described in the main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ 

## D. The Contributions of Donor States to the Synthetic Control Estimates: Evaluating Robustness

One of the key elements of the synthetic control approach is its selection among plausible control states. For each state adopting an RTC law in year X, the approach selects among states that do not have RTC laws through at least ten years after X, including never-adopting states. Appendix Figure D8 lists all the states that are eligible under this criterion to serve as synthetic controls for one or more of the 33 adopting states, and shows how often they are selected. The horizontal length of each bar tells us how much that state contributes to our synthetic control violent crime estimates.<sup>62</sup> As the Figure indicates, Hawaii appears most frequently—contributing to a synthetic control 18 of the 33 times it is eligible and averaging a 15.2 percent contribution—but California, a substantial contributor to multiple large states, edges it out for the largest average contribution (18.1 percent).

Hawaii's relatively large contribution as a donor state in the synthetic control estimates has some advantages but also raises concern that this small state might be unrepresentative of the states for which it is used as a control. For example, note that the largest share of Virginia's synthetic control comes from Hawaii (27.9 percent) with Rhode Island, Kansas, and Nebraska making up the lion's share of the remaining synthetic control. We had already mentioned one problem with the panel data analysis caused by the tendency of lax gun control states to serve as a source for guns that contribute to crime in the non-RTC states, and Virginia has always been a major source of that interstate flow. Since Virginia's guns are not likely to end up in Hawaii, the bias that the treatment infects the control is reduced for that particular match. Nonetheless, one may be concerned that

<sup>62</sup>In particular, it reflects the portion of each synthetic state it becomes part of, weighted by the treated state's population. For example, Texas' population is 13.6 percent of the total treated states' population. As a result, a state that makes up 50 percent of synthetic Texas (but is not a donor for any other treatment state) would have a bar of size 6.8 percent.

Hawaii might be unduly skewing the estimates of the impact of RTC laws on violent crime.

To address this, as well as the analogous concern for other potentially idiosyncratic control states, we generated 18 additional TEP estimates, with each one generated by dropping a single one of the 18 states that appears as an element of our synthetic control analysis (as identified in Appendix Figure D8). The results of this exercise are presented in Appendix Figure D10, which shows that our estimated increase in violent crime resulting from the adoption of an RTC law is extremely robust: All 18 estimates remain statistically significant at the .01 percent level, and the smallest TEP, which comes from dropping Illinois as a control state, is 12.0 percent. Note in particular that dropping Hawaii from the list of potential donor states slightly *increases* the estimate of the increase in violent crime caused by RTC laws. In fact, when we dropped Hawaii completely as a potential control and repeated the previous protocol of dropping one state at a time, the estimated increase in violent crime from RTC never fell below 12 percent (which was the value when New York was dropped as well as Hawaii). Indeed, the synthetic control finding that RTC laws increase violent crime is so robust that, even if we drop California, New York, and Hawaii from the pool of potential donor states, RTC laws still increase violence crime by 8.9 percent after 10 years ( $p = 0.018$ ).

## **E. Does Gun Prevalence Influence the Impact of RTC Laws?**

The wide variation in the state-specific synthetic control estimates that was seen in Figures 5 and D9 suggests that there is considerable noise in some of the outlier estimates of a few individual states. For example, it is highly improbable that RTC laws led to a 16.5 percent decrease in violent crime in Maine and an 80.2 percent increase in violent crime in Montana, the two most extreme estimates seen in Figure 5. Since averaging across a substantial number of states will tend to eliminate the noise in the estimates, one should repose much greater confidence in the aggregated estimates than in any individual state estimate. Indeed, the fact that we can average across 33 separate RTC-adopting states is what generates such convincing and robust estimates of the impact of RTC laws on violent crime.

Another way to distill the signal from the noise in the state-specific estimates is to consider whether there is a plausible factor that could explain underlying differences in how RTC adoption influences violent crime. For example, RTC laws might influence crime differently depending on the level of gun prevalence in the state.

Figure 6 shows the scatter diagram for 33 RTC-adopting states, and relates the estimated impact on violent crime to a measure of gun prevalence in each RTC-adopting state. The last line of the note below the Figure provides the regression equation, which shows that gun prevalence is

positively related to the estimated increase in crime ( $t = 2.39$ ).<sup>63</sup>

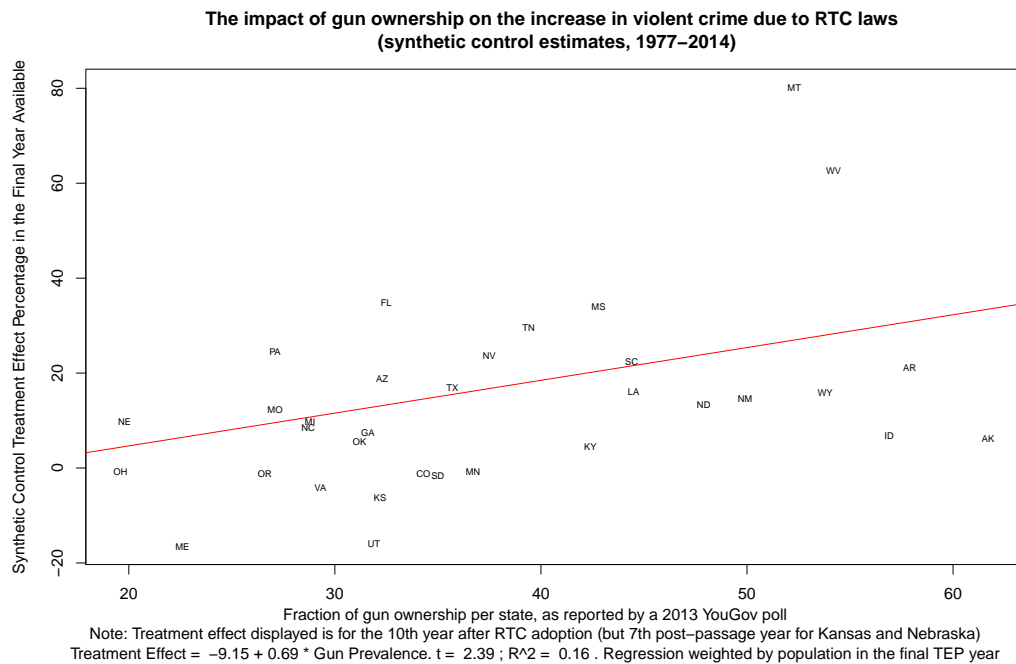


Figure 6

## F. The Murder and Property Crime Assessments with Synthetic Controls

The synthetic control estimates of the impact of RTC laws on violent crime uniformly generate statistically significant estimates, and our phantom RTC law synthetic control estimates for the five pre-treatment years (described in footnote 55) give us confidence that the synthetic control approach is working well for our violent crime estimates. Using this phantom law approach for murder and property crime, however, yields less encouraging estimates. While our estimated “effect” in the year prior to adoption would ideally be close to zero in this test, for murder it is 7.8 percent and for property crime it is 6.9 percent, with the latter significant at the .01 level. Without normalization, these estimates jump to 9.9 percent (significant at the .10 level) for murder and 16.7 percent (significant at the .01 level) for property crime. (The full results of this test for all the crime categories are shown in Appendix K). In other words, our synthetic control estimates for violent

<sup>63</sup>The gun prevalence data was collected by the data analytics firm YouGov in a 2013 online survey (Kalesan et al. 2016). 4,486 people were initially surveyed, although only 4,000 people’s results are used in the final dataset. YouGov used a proximity matching method to select the survey results for inclusion, matching respondents by race, age, gender, and education to the demographic breakdown of the 2010 American Community Survey.



crime are far more validated by our phantom adoption test than the murder and property crime estimates. For that reason and the uniform and highly robust results whether dropping selected donor states or states with poor fit, or using either the DAW or LM models, we have greater confidence in and therefore highlight our violent crime estimates. Accordingly, we consign our discussion of the synthetic control estimates of murder and property crime to Appendix E.<sup>64</sup>

## VI. Conclusion

The extensive array of panel data and synthetic control estimates of the impact of RTC laws that we present uniformly undermine the “More Guns, Less Crime” hypothesis. There is not even the slightest hint in the data that RTC laws reduce violent crime. Indeed, the weight of the evidence from the panel data estimates as well as the synthetic control analysis best supports the view that the adoption of RTC laws substantially raises overall violent crime in the ten years after adoption.

In our initial panel data analysis, our preferred DAW specification predicted that RTC laws have led to statistically significant and substantial increases in violent crime. When the LM model was appropriately adjusted, it generated the same findings, but even without adjustment, the LM spline model that Lott and Mustard once championed showed RTC laws increased murder significantly. Moreover, to the extent the massive theft of guns from carrying guns outside the home generates crime spillovers to non-RTC states, our estimated increases in violent crime are downward-biased.

We then supplemented our panel data results using our synthetic control methodology, again using the DAW and LM specifications. Now the results were uniform: for both specifications, states that passed RTC laws experienced 13-15 percent *higher* aggregate violent crime rates than their synthetic controls after ten years (results that were significant at either the .05 or .01 level after five years).

The synthetic control effects that we measure represent meaningful increases in violent crime rates following the adoption of RTC laws, and this conclusion remained unchanged after restricting the set of states considered based on model fit and after considering a large number of robustness checks. The consistency across different specifications and methodologies of the finding that RTC elevates violent crime enables far stronger conclusions than were possible over a decade ago when the NRC Report was limited to analyzing data only through 2000 with the single tool of panel data

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<sup>64</sup>Nevertheless, the synthetic control estimates for the impact of RTC laws on murder range from 4.3 (Appendix Table E1) to 6.4 percent (when states with poorer fit are dropped) higher after ten years (but are not statistically significant). If one adjusts the synthetic control estimates to control for the increased rates of police and incarceration that follow RTC adoption, the RTC-induced increases in murder are almost nine percent with a p-value of 0.089. (See Appendix E.) In addition, the murder effects rise to 11-14 percent for the DAW model and become statistically significant at the .05 level if we do not subtract off the initial year differential between the actual and synthetic control murder rates (see Appendix F).

evaluation.

The best available evidence using different statistical approaches—panel data regression and synthetic control—with varying strengths and shortcomings and with different model specifications all suggest that the net effect of state adoption of RTC laws is a substantial increase in violent crime.

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## Online Appendix

### Appendix A: RTC Adoption Dates

Table A1 of Appendix A lists each state's original RTC effective date and adjusted effective date (for our synthetic control analysis). For our panel data analyses, we use the same effective RTC dates used in Aneja, Donohue, and Zhang (2014), while specifying in column 2 the precise date on which an RTC law takes effect. Owing to the fact that the mechanics of the synthetic control methodology require us to specify a specific year for each state's RTC date, we alter the year used in the synthetic control analysis if the RTC law is in effect for less than half the year. Specifically, each state's effective year of passage in the synthetic control analysis is defined as the first year in which an RTC law was in effect for the majority of that year. This causes some of the values of our RTC variable to shift by one year (for instance, Wisconsin's RTC date shifts from 2011 to 2012 for our synthetic control analysis, since the state's RTC law took effect on November 1, 2011). The states in column 4 that show an RTC date of 0 are states that did not adopt an RTC law between 1977 and 2014.

While there have been numerous disagreements about the exact laws that should be used to determine when states made the transition to a "shall issue" state, we believe that the dates used in this paper accurately reflect relevant RTC effective dates.<sup>65</sup> We supplemented our analysis of the statutory history of RTC laws in different states with an extensive search of newspaper archives to ensure that our chosen dates represented concrete changes in concealed carry policy. We document the changes that were made to earlier selection of RTC dates and the rationales underlying these changes in Appendix G of Aneja, Donohue, and Zhang (2014). The coding of these dates may not reflect administrative or logistical delays that may have limited the full implementation of an RTC law after authorities were legally denied any discretion in rejecting the issuing of RTC permits. Ideally, we would be able to control for the actual level of RTC permits in existence each year for each state, instead of simply relying on a mere indicator variable for the presence of an RTC law, but unfortunately such comprehensive information is not available.<sup>66</sup>

We also note that there has been confusion over the proper date of Virginia's RTC law, which we place in 1995, while Lott and Mustard (1997) had used 1988. Although many studies that have

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<sup>65</sup>For instance, the Illinois shall issue law (430 ILCS 66/1) took effect on 7/9/13. It included the following provision: "The Department [of State Police] shall make applications for a license available no later than 180 days after the effective date of this Act." It did take the department the full 180 days until it opened the application process to citizens on 1/5/2014. Hence, January 5th 2014 is our effective RTC date for Illinois.

<sup>66</sup>RTC dates before the year 1977 may not be exact, since differences between these dates would neither affect our regression results nor our synthetic control tables. We follow earlier convention in the academic literature on the RTC issue in assigning pre-1977 RTC adoption dates for Alabama and Connecticut.

relied on the Lott and Mustard data have used the earlier adoption date for Virginia, the recent Rand report on gun science concluded that 1995 was the appropriate date that RTC (shall-issue) was established in Virginia (RAND 2018, p.173).

Appendix Figure A1 presents data on concealed carry permit applications from 1984-2008 from the relevant Virginia State of the Judiciary Reports.<sup>67</sup> The fact that permit applications were small in number and flat until 1995 when they jumped sharply confirms that Virginia’s shift from a may-issue to a shall-issue (RTC) regime occurred in 1995.



Figure A1

Prior to 1995, the number of concealed carry permits remained low because of the requirement to establish “a need to carry” such weapons. So, for example, in February 1993, the Circuit Court of Virginia (Kulp 1993) stated:

“The Court found Mr. Mack to be of good character but found that he had failed to demonstrate a need for a concealed weapon. An order was entered denying the application on January 8, 1993. [...]

“The Court further finds that the other reasons outlined by Mr. Mack do not in themselves warrant the issuance of a concealed weapon permit. From time to time, most citizens carry valuables, including cash, in their vehicles. If this were sufficient criteria for the issuance of a concealed weapon permit, then all citizens are entitled to a concealed weapon permit. If the legislature had intended such a result, it surely would have said so.”

<sup>67</sup>See for example, “The Virginia 1999 State of the Judiciary Report” (1999). The 1985 and 2008-2015 reports do not contain permit application data.

In 1995, Virginia Code Section 18.2-308 was modified to eliminate the requirement to demonstrate a *need to carry*. Thus, legally and practically, May 5, 1995 is the correct shall-issue law adoption date for Virginia.

**Table A1: RTC Adoption Dates**

| <i>State</i>         | <i>Effective Date of RTC Law</i> | <i>Fraction of Year In Effect Year of Passage</i> | <i>RTC Date (Synthetic Controls Analysis)</i> |
|----------------------|----------------------------------|---------------------------------------------------|-----------------------------------------------|
| Alabama              | 1975                             |                                                   | 1975                                          |
| Alaska               | 10/1/1994                        | 0.252                                             | 1995                                          |
| Arizona              | 7/17/1994                        | 0.460                                             | 1995                                          |
| Arkansas             | 7/27/1995                        | 0.433                                             | 1996                                          |
| California           | N/A                              |                                                   | 0                                             |
| Colorado             | 5/17/2003                        | 0.627                                             | 2003                                          |
| Connecticut          | 1970                             |                                                   | 1970                                          |
| Delaware             | N/A                              |                                                   | 0                                             |
| District of Columbia | N/A                              |                                                   | 0                                             |
| Florida              | 10/1/1987                        | 0.252                                             | 1988                                          |
| Georgia              | 8/25/1989                        | 0.353                                             | 1990                                          |
| Hawaii               | N/A                              |                                                   | 0                                             |
| Idaho                | 7/1/1990                         | 0.504                                             | 1990                                          |
| Illinois             | 1/5/2014                         |                                                   | 2014                                          |
| Indiana              | 1/15/1980                        | 0.962                                             | 1980                                          |
| Iowa                 | 1/1/2011                         | 1.000                                             | 2011                                          |
| Kansas               | 1/1/2007                         | 1.000                                             | 2007                                          |
| Kentucky             | 10/1/1996                        | 0.251                                             | 1997                                          |
| Louisiana            | 4/19/1996                        | 0.702                                             | 1996                                          |
| Maine                | 9/19/1985                        | 0.285                                             | 1986                                          |
| Maryland             | N/A                              |                                                   | 0                                             |
| Massachusetts        | N/A                              |                                                   | 0                                             |
| Michigan             | 7/1/2001                         | 0.504                                             | 2001                                          |
| Minnesota            | 5/28/2003                        | 0.597                                             | 2003                                          |
| Mississippi          | 7/1/1990                         | 0.504                                             | 1990                                          |
| Missouri             | 2/26/2004                        | 0.847                                             | 2004                                          |
| Montana              | 10/1/1991                        | 0.252                                             | 1992                                          |
| Nebraska             | 1/1/2007                         | 1.000                                             | 2007                                          |
| Nevada               | 10/1/1995                        | 0.252                                             | 1996                                          |
| New Hampshire        | 1959                             |                                                   | 1959                                          |
| New Jersey           | N/A                              |                                                   | 0                                             |
| New Mexico           | 1/1/2004                         | 1.000                                             | 2004                                          |
| New York             | N/A                              |                                                   | 0                                             |
| North Carolina       | 12/1/1995                        | 0.085                                             | 1996                                          |
| North Dakota         | 8/1/1985                         | 0.419                                             | 1986                                          |
| Ohio                 | 4/8/2004                         | 0.732                                             | 2004                                          |
| Oklahoma             | 1/1/1996                         | 1.000                                             | 1996                                          |
| Oregon               | 1/1/1990                         | 1.000                                             | 1990                                          |
| Pennsylvania         | 6/17/1989                        | 0.542                                             | 1989                                          |
| Philadelphia         | 10/11/1995                       | 0.225                                             | 1996                                          |
| Rhode Island         | N/A                              |                                                   | 0                                             |
| South Carolina       | 8/23/1996                        | 0.358                                             | 1997                                          |
| South Dakota         | 7/1/1985                         | 0.504                                             | 1985                                          |
| Tennessee            | 10/1/1996                        | 0.251                                             | 1997                                          |
| Texas                | 1/1/1996                         | 1.000                                             | 1996                                          |
| Utah                 | 5/1/1995                         | 0.671                                             | 1995                                          |
| Vermont              | 1970                             |                                                   | 1970                                          |
| Virginia             | 5/5/1995                         | 0.660                                             | 1995                                          |
| Washington           | 1961                             |                                                   | 1961                                          |
| West Virginia        | 7/7/1989                         | 0.488                                             | 1990                                          |
| Wisconsin            | 11/1/2011                        | 0.167                                             | 2012                                          |
| Wyoming              | 10/1/1994                        | 0.252                                             | 1995                                          |

## **Appendix B: Complete Regression Output**

**Table B1: Panel Data Violent Crime Coefficients using DAW and LM models, State and Year Fixed Effects**

| <i>Panel A: Dummy Variable Model Results</i>                        |                               |                                |
|---------------------------------------------------------------------|-------------------------------|--------------------------------|
|                                                                     | (Table 3)<br><i>DAW Model</i> | (Table 4.A)<br><i>LM Model</i> |
|                                                                     | (1)                           | (2)                            |
| Right-to-carry law                                                  | 9.02*** (2.90)                | −1.38 (3.16)                   |
| Lagged incarceration rate                                           | 0.04* (0.02)                  |                                |
| Lagged police employee rate                                         | −0.05 (0.04)                  |                                |
| Lagged arrest rate for violent crimes                               |                               | −0.16** (0.08)                 |
| Real per capita personal income (×100)                              | 0.00 (0.00)                   | 0.00* (0.00)                   |
| Real per capita unemployment insurance (×100)                       |                               | 0.00 (0.01)                    |
| Real per capita income maintenance                                  |                               | 0.04 (0.03)                    |
| Real per capita retirement payments and other (Lott version) (×100) |                               | 0.00 (0.01)                    |
| Unemployment rate                                                   | −0.02 (0.78)                  |                                |
| Poverty rate                                                        | −0.32 (0.49)                  |                                |
| Beer                                                                | 60.82*** (17.55)              |                                |
| Population                                                          |                               | 0.00 (0.00)                    |
| Percent of the population living in MSAs                            | 1.10*** (0.32)                |                                |
| Population density                                                  |                               | −0.01 (0.02)                   |
| Observations                                                        | 1823                          | 1896                           |

| <i>Panel B: Spline Model Results</i>                                |                               |                                |
|---------------------------------------------------------------------|-------------------------------|--------------------------------|
|                                                                     | (Table 3)<br><i>DAW Model</i> | (Table 4.A)<br><i>LM Model</i> |
|                                                                     | (1)                           | (2)                            |
| Right-to-carry law (change in trend)                                | 0.01 (0.64)                   | 0.41 (0.47)                    |
| Pre-passage trend for changer states                                | 0.92* (0.49)                  | 0.12 (0.39)                    |
| Lagged incarceration rate                                           | 0.03* (0.02)                  |                                |
| Lagged police employee rate                                         | −0.05 (0.04)                  |                                |
| Lagged arrest rate for violent crimes                               |                               | −0.17** (0.08)                 |
| Real per capita personal income (×100)                              | 0.00 (0.00)                   | 0.00** (0.00)                  |
| Real per capita unemployment insurance (×100)                       |                               | −0.00 (0.02)                   |
| Real per capita income maintenance                                  |                               | 0.03 (0.03)                    |
| Real per capita retirement payments and other (Lott version) (×100) |                               | 0.00 (0.01)                    |
| Unemployment rate                                                   | 0.52 (0.87)                   |                                |
| Poverty rate                                                        | −0.42 (0.50)                  |                                |
| Beer                                                                | 62.09*** (16.18)              |                                |
| Population                                                          |                               | 0.00 (0.00)                    |
| Percent of the population living in MSAs                            | 0.92*** (0.29)                |                                |
| Population density                                                  |                               | 0.00 (0.02)                    |
| Observations                                                        | 1823                          | 1896                           |

Estimations include year and state fixed effects and are weighted by state population. Coefficients on demographic variables and the constant omitted. Robust standard errors (clustered at the state level) are provided next to point estimates in parentheses. The crime data is from the Uniform Crime Reports (UCR). \* p < .1, \*\* p < .05, \*\*\* p < .01. All figures reported in percentage terms. The DAW model is run on data from 1979-2014, the BC model from 1978-2014, the LM model from 1977-2014, and the MM model (without the crack cocaine index) from 1979-2014.



## Appendix C: Panel Data Models Estimated for the Post-Crack Period

Our previous discussion has focused on panel data estimates of the impact of RTC laws on crime over the full period from the late 1970s through 2014. Zimmerman (2014) examines the impact of various crime prevention measures on crime using a state panel data set from 1999-2010. He finds that RTC laws *increased* murder by 15.5 percent for the eight states that adopted RTC laws over the period he analyzed. The advantage of using this data period to explore the impact of RTC laws is that it largely avoids the problem of omitted variable bias owing to the crack phenomenon, since the crack effect had largely subsided by 1999. The disadvantage is that one can only gain estimates based on the eight states that adopted RTC laws over that twelve-year spell.<sup>68</sup> Zimmerman describes his finding as follows: “The shall-issue coefficient takes a positive sign in all regressions save for the rape model and is statistically significant in the murder, robbery, assault, burglary, and larceny models. These latter findings may imply that the passage of shall-issue laws increases the propensity for crime, as some recent research (e.g., Aneja, Donohue, & Zhang, 2012) has suggested” (71).<sup>69</sup>

In Appendix Table C1, we show the results of running the DAW model for four crime measures over the period 2000-2014 for eleven RTC-adopting states.<sup>70</sup> The DAW model mimics the Zimmerman finding of a large jump in murder, rising at a rate of over one percent each year the RTC law is in effect. But if one compares Appendix Figures C1 and C2, one sees that only the violent crime set of year-by-year estimates confirms the parallel trends assumption by displaying a generally flat series of pre-treatment dummies followed by a change in crime right at the time of the adoption of the RTC law.<sup>71</sup> Indeed, even though the Appendix Table C1 DAW violent crime RTC dummy is not statistically significant (p-value = 0.165), Appendix Figure C1 further buttresses our earlier conclusion that RTC laws are associated with increases in violent crime. Again, as we saw in Figure 2, this increase becomes statistically significant after the RTC law has been in effect for at least a full year and does so for the next four years, after which the diminishing number of

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<sup>68</sup>The relatively short time span of the Zimmerman analysis makes the assumption of state fixed effects more plausible but it also limits the amount of pre-adoption data for an early adopter such as Michigan (2001) and the amount of post-adoption data for the late adopters Nebraska and Kansas (both in 2007).

<sup>69</sup>Aneja, Donohue and Zhang (2014) also ran the ADZ model over the same 1999-2010 period that Zimmerman employs, which generated an estimate that murder rates rose about 1.5 percentage points each year that an RTC law was in effect.

<sup>70</sup>We started this time period in 2000 because the sharp crime decreases of the 1990s ended by then, and starting in 2000, crime was more stable for the remainder of our data period than it had previously been.

<sup>71</sup>Appendix Figure C2 shows a strong upward trend in murder prior to RTC adoption. In passing, we note that the serious violation of the parallel trends assumption that marred the LM model panel data regressions of Table 4 is equally profound for LM regressions run on the post-crack period, so we do not present any additional LM estimates for this time frame (although we note none are statistically significant).

RTC-adopting states with more than 4 years of data and the widening confidence intervals render the unvaryingly positive subsequent year estimates statistically insignificant.

**Table C1: Panel Data Estimates of the Impact of RTC Laws, DAW specification, 2000 - 2014.**

| <i>Panel A: Panel Data Estimates, State and Year Fixed Effects, DAW Regressors, 2000-2014</i> |                    |                     |                           |                            |
|-----------------------------------------------------------------------------------------------|--------------------|---------------------|---------------------------|----------------------------|
|                                                                                               | <i>Murder Rate</i> | <i>Murder Count</i> | <i>Violent Crime Rate</i> | <i>Property Crime Rate</i> |
|                                                                                               | (1)                | (2)                 | (3)                       | (4)                        |
| Dummy variable model                                                                          | 5.58 (3.58)        | 1.02 (0.04)         | 5.00 (3.55)               | -1.50 (2.29)               |
| Spline model                                                                                  | 1.08* (0.58)       | 1.01** (0.01)       | 0.54 (1.12)               | 0.41 (0.43)                |

All models include year and state fixed effects, and the OLS estimates are weighted by state population. Robust standard errors (clustered at the state level) are provided next to point estimates in parentheses. In Column 2 we present IRRs estimated using negative binomial regression, where population is included as a control variable. The following 11 states adopted RTC Laws during the period of consideration: CO (2003), IA (2011), IL (2014), KS (2007), MI (2001), MN (2003), MO (2004), NE (2007), NM (2004), OH (2004), and WI (2011).

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . All figures reported in percentage terms.

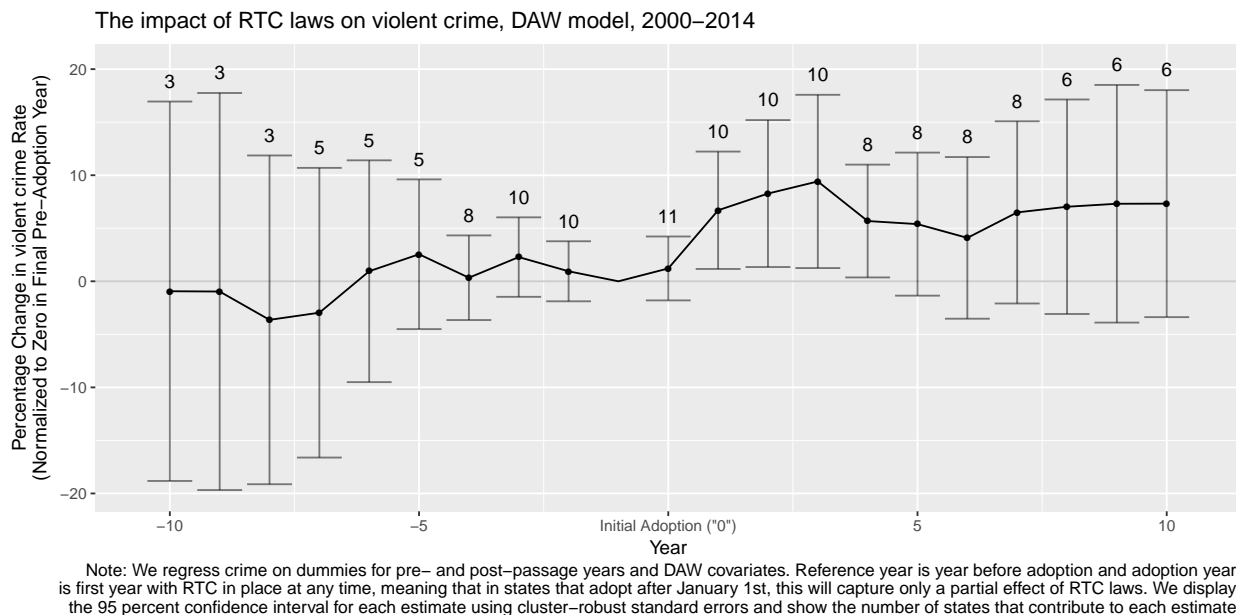


Figure C1

A recent paper by Siegel et al. (2017) uses a negative binomial model for data from 1991 to 2015 to estimate the impact of RTC laws on five homicide measures based on Centers for Disease Control and Supplemental Homicide Report data, rather than the UCR crime data used throughout this paper. Controlling for year and state fixed effects and an array of time-varying,

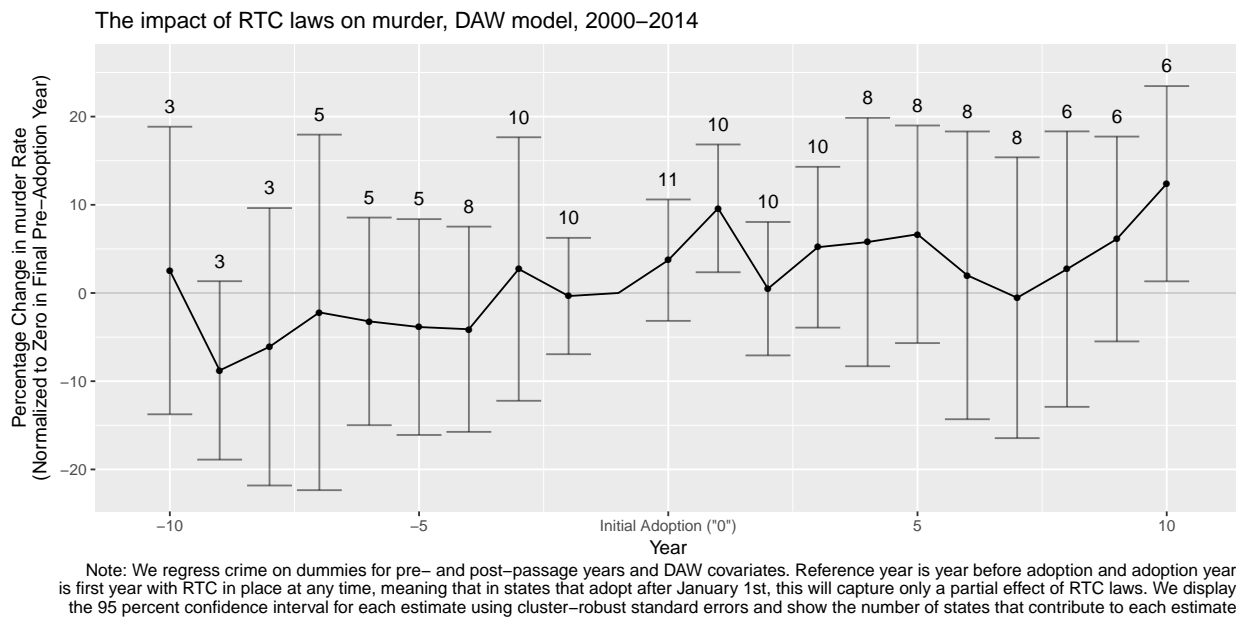


Figure C2

state-level factors, Siegel et al. conclude that RTC laws increase murders, particularly firearm and handgun murders, but seem to have virtually no effect on non-gun murders or long gun murders. Donohue (2017b) uses the same data used by Siegel et al., but limits the analysis to the 2000-2014 post-crack period. While Siegel et al. using their own model on the 1991-2015 CDC data found that overall homicides rose by 6.5 percent, firearm homicides rose by 8.6 percent, and handgun homicides rose by 10.6 percent, Donohue (2017b) running the DAW model on the 2000-2014 period generated comparable estimates of 6.0 percent, 9.5 percent, and 15.8 percent for overall, firearm, and handgun homicides, respectively (although the 6.0 estimate for overall homicides lost statistical significance at the .05 level).

## Appendix D: Figures

### A. Year-by-year Panel Data Estimates

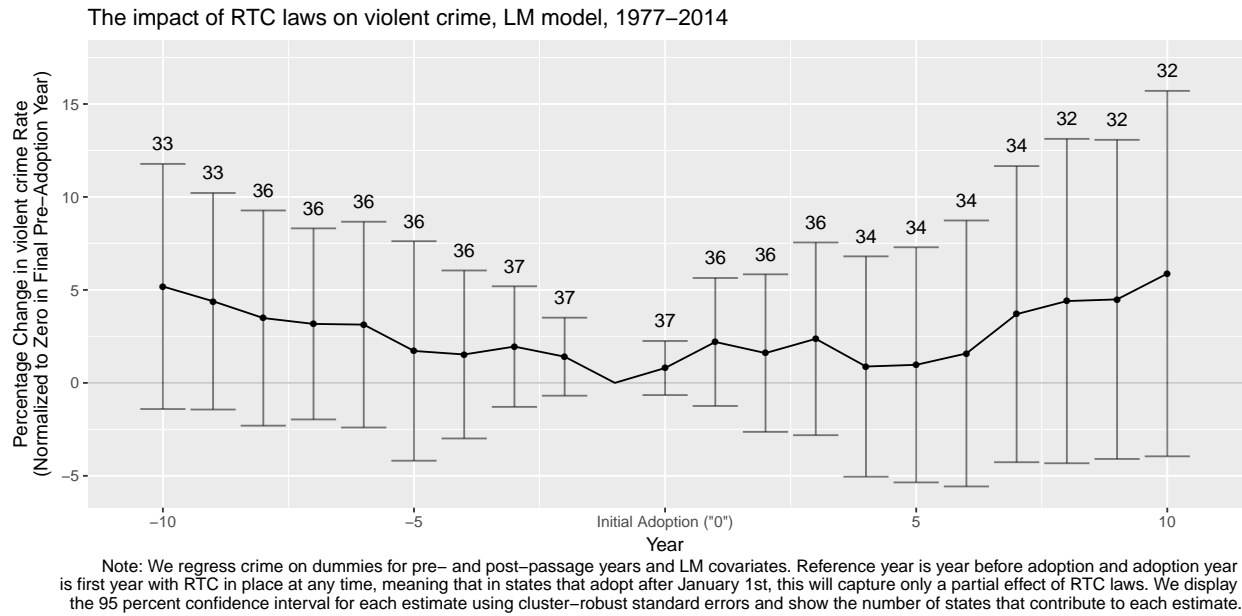


Figure D1

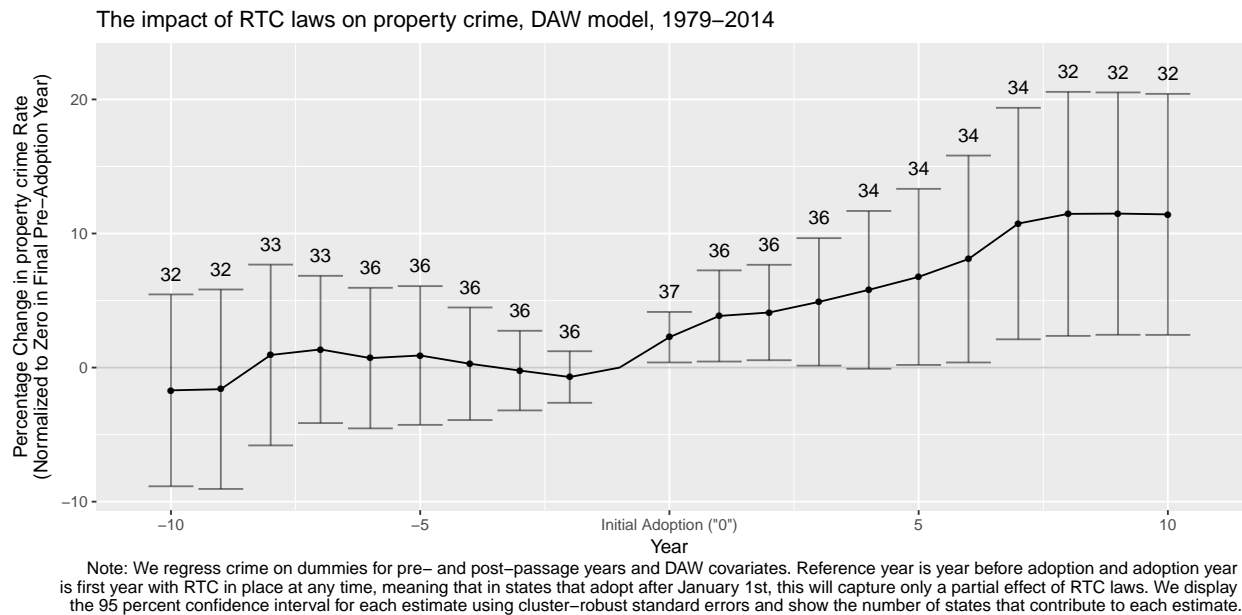


Figure D2

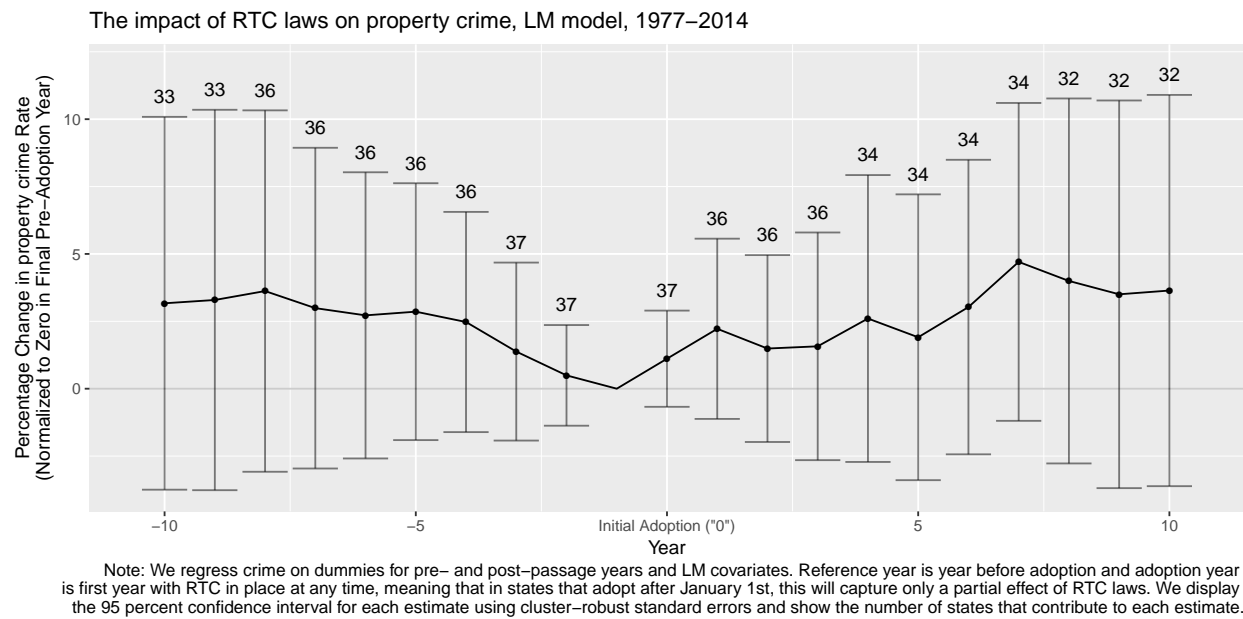


Figure D3

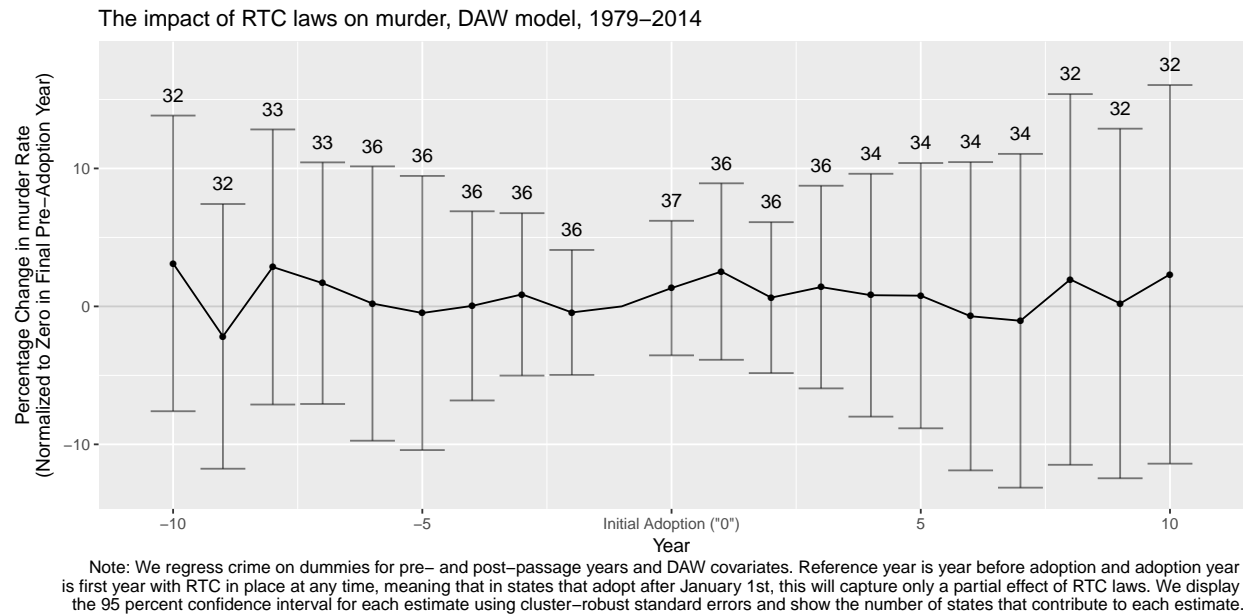


Figure D4

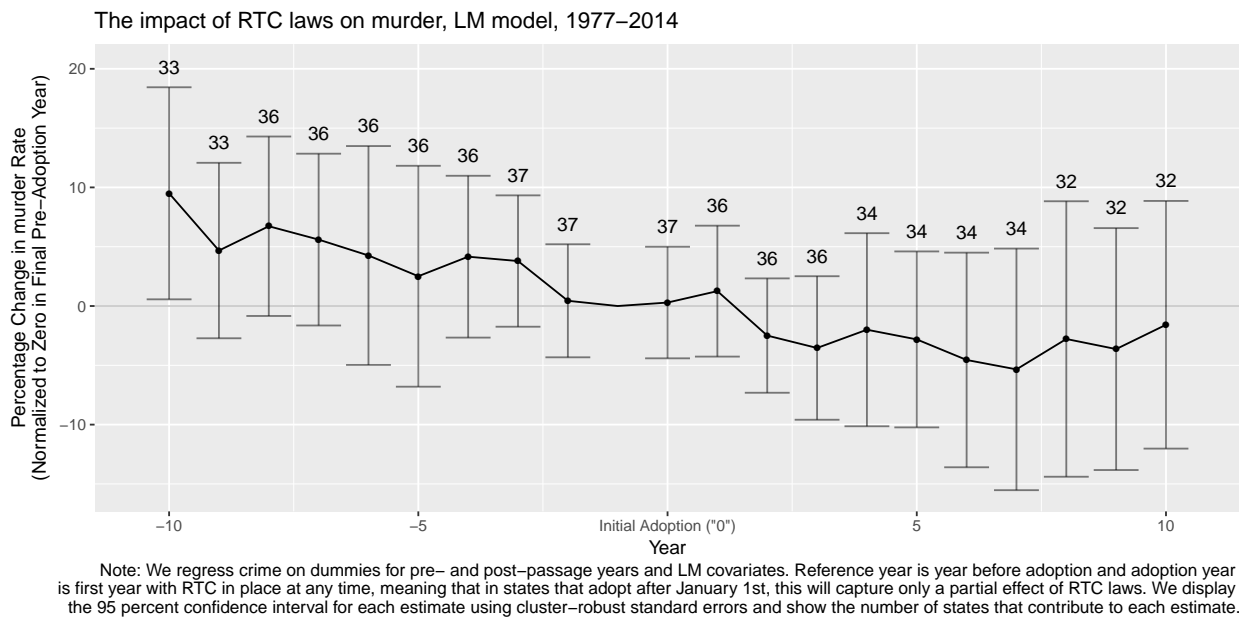


Figure D5

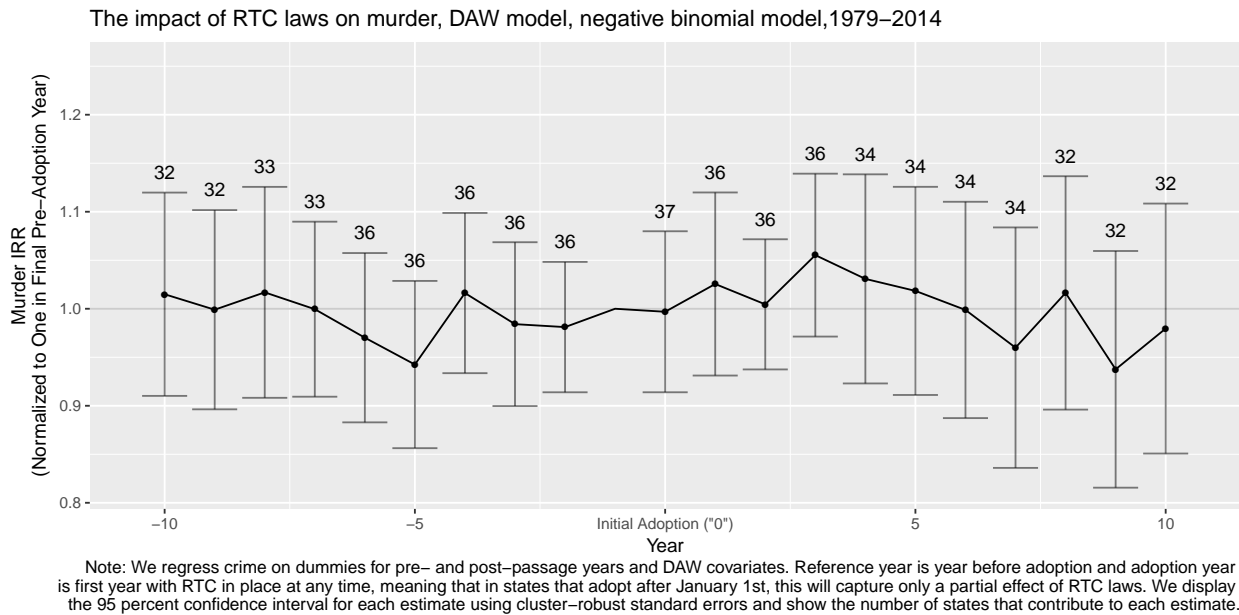


Figure D6



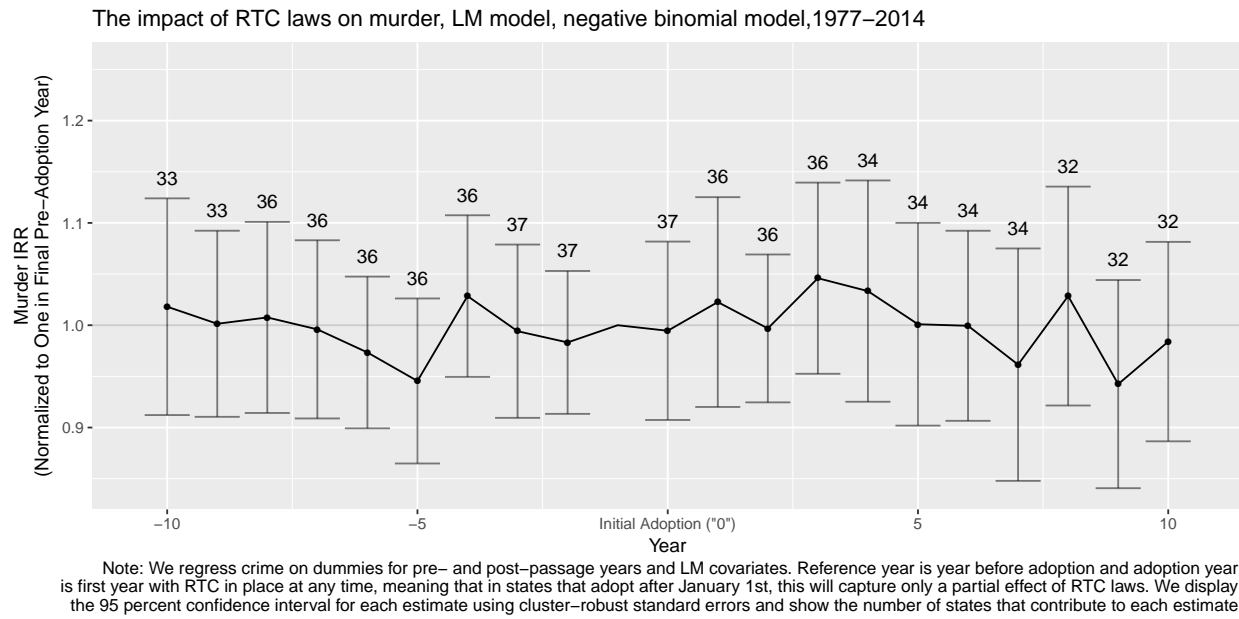


Figure D7

## B. State Contributions to Synthetic Control Estimates

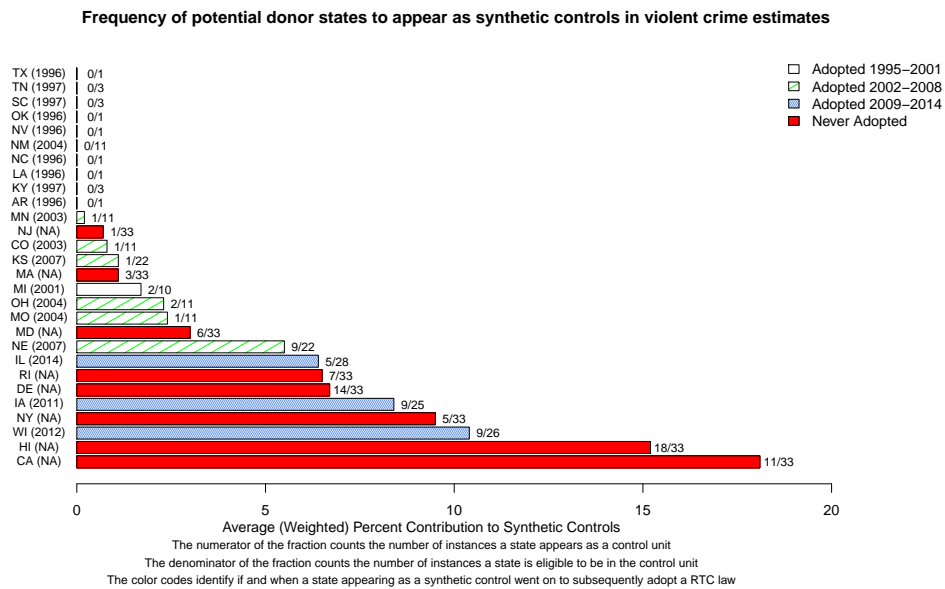


Figure D8

## C. Synthetic Control Estimates for Impact on Violent Crime

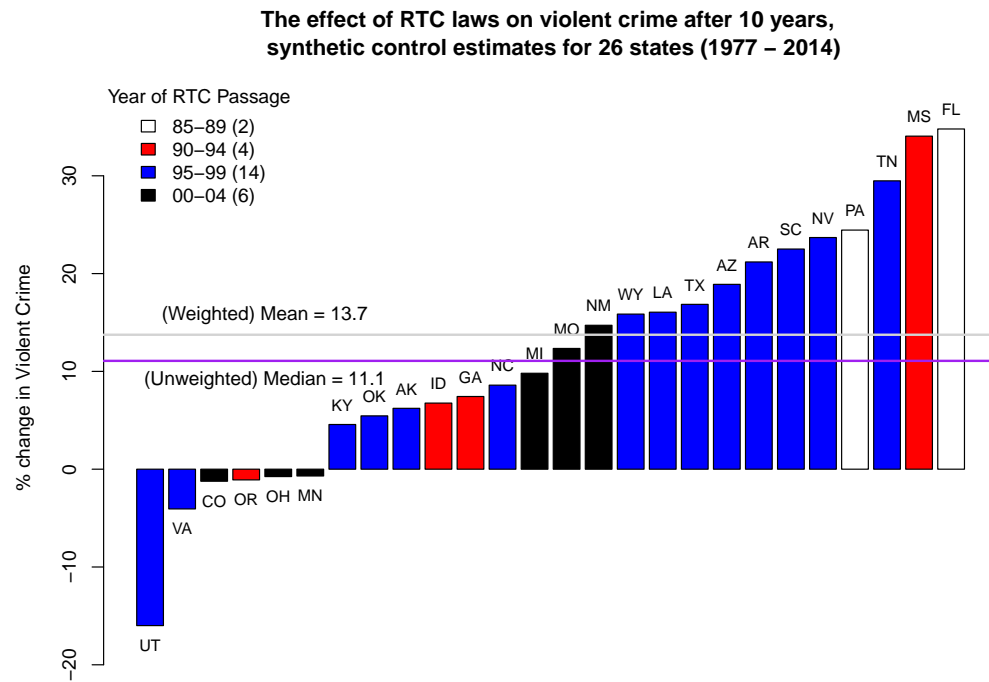
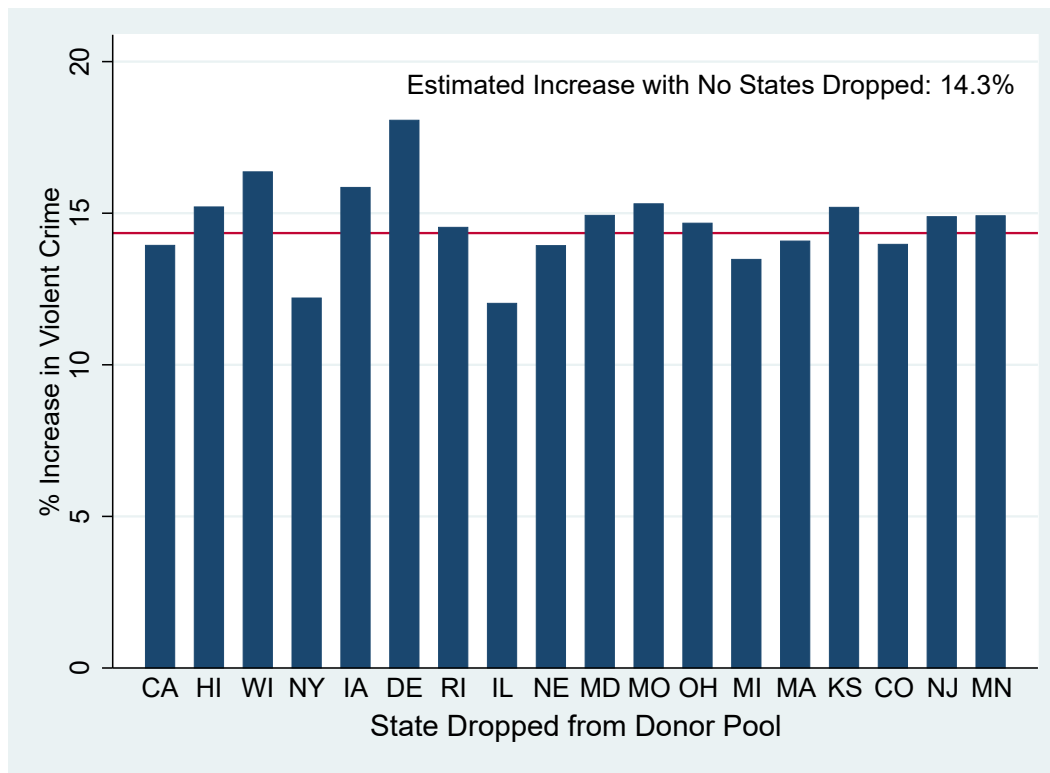


Figure D9



The graph shows the overall synthetic control estimate of the impact of RTC laws on violent crime ten years after adoption when barring individual states from inclusion in the synthetic control. (The horizontal line shows the estimate when no states are barred.) The states are arranged in declining order of population-weighted average contribution to synthetic controls (see Appendix Figure D8), from a high of 18.1 percent for California to a low of 0.2 percent for Minnesota.

Figure D10: Estimated increase in violent crime ten years after RTC adoption, dropping one donor state at a time

## Appendix E: Synthetic Control Estimates of the Impact of RTC Laws on Murder and Property Crime for the DAW and LM Models

Our synthetic control estimates of the impact of RTC laws on murder and property crime appear in Appendix Tables E1-E4 of the appendix. In all cases the tenth-year effect for these crimes is positive, although not statistically significant. For murder, the point estimates suggest an increase of 4-5 percent, and for property crime, the point estimates range from 1-3.5 percent increases.

The relatively smaller impact of RTC laws on property crime is not surprising. Much property crime occurs when no one is around to notice, so gun use is much less potentially relevant in

property crime scenarios than in the case of violent crime, where victims are necessarily present. Most of the pernicious effects of RTC laws—with the exception of gun thefts—are likely to operate to increase violent crime more powerfully than property crime. The fact that the synthetic control approach confirms the DAW panel data estimates showing that RTC laws increase violent crime while simultaneously showing far more modest effects on property crime (thereby conflicting with the DAW panel data estimate showing substantial increases in property crime) may be thought to enhance the plausibility of the synthetic control estimates.

But then what are we to make of the relatively small estimated impact of RTC laws on murder? This might seem to be at odds with our theoretical expectations, and in conflict with the estimated increases in overall violent crime since one might expect violent crime and murder to move together. A number of points should be noted. First, it is possible that we simply cannot rely on the murder estimates because of the relatively poor performance of the synthetic controls for this crime, compared to the violent crime estimates (see Appendix K). This is not conclusive because it is possible that our actual murder estimates become sufficiently accurate with the five more years of data that we actually use that we can rely on the resulting estimates. In that event, a 4.3 to 6.4 percent increase in murder over a ten-year period is not a small effect. Part of the explanation for the lower level of statistical significance for murder is that we are able to get more precise estimates of the impact of RTC laws on violent crime than for the far less numerous, and hence much more volatile, crime of murder. Indeed, the standard errors for the synthetic control estimate of increased murder in the tenth year is 26 percent higher than the comparable standard error for violent crime (compare Table 5 with Appendix Table E1).

But a second and possibly more important fact is also at work that likely causes the synthetic control approach to understate the increase in crime caused by RTC laws, particularly for murder. We know from Table 1 that RTC states increased police employment by 8.4 percent more and increased incarceration by almost seven percent more in the wake of RTC adoption than did non-RTC states. This suggests that our synthetic control estimates of the crime-increasing impact of RTC laws could be biased downward, and since police and incarceration are more effective in stopping murder than either overall violent or property crime, the extent of any bias would be greatest for the crime of murder. In other words, the greater ability of police and prison to stop murders than overall violent (or property) crime may explain why the synthetic control estimates for murder are weaker than those for violent crime. An increase in police employment of 8.4 percent alone would be expected to suppress murders in RTC states (relative to non-RTC states) by about 5.6 percent.<sup>72</sup> Since the synthetic control approach does not control for the higher police

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<sup>72</sup>The important recent paper by Professors Aaron Chalfin and Justin McCrary concludes that higher police employment has a dampening effect on crime, and, most strikingly, on murder. Specifically, Chalfin and McCrary (2013) find elasticities of -0.67 for murder but only -0.34 for violent crimes and -0.17 for property crimes.

employment and incarceration in the post-adoption phase for RTC states, it may be appropriate to elevate the synthetic control estimates on murder to reflect the murder-dampening effect of the two factors.

To adjust our synthetic control estimates of the impact of RTC laws on murder to reflect the post-adoption changes in the rates of police employment and incarceration, we can compare how these crime-reducing elements change in the wake of adoption for each RTC-adopting state and for its particular synthetic control. Consistent with the panel data finding of Table 1 that police and incarceration grew more post-RTC-adoption, we found that the population-weighted average percent change in the incarceration rate from the year of adoption to the 10th year after adoption (the 7th year after adoption for Kansas and Nebraska) is 28 percent for the treated unit and only 20 percent for the synthetic control unit. For the police employee rate, the analogous numbers are 9.1 percent for the treated unit and 7.6 percent for the synthetic control unit.<sup>73</sup>

We correct for this underestimation by restricting the synthetic control unit to have the same growth rate in incarceration and police as the treated unit.<sup>74</sup> Once we have computed an adjusted murder rate for the 31 synthetic control units in the 10th year after adoption, we then use the formula described in part IV to construct an adjusted aggregate treatment effect.<sup>75</sup> The impact of controlling for police and incarceration is substantial: the 10th year impact of RTC laws rises from 4.30 percent ( $t = 1.17$ ) to 8.99 percent ( $t = 1.76$ ).<sup>76</sup> In other words, the ostensible puzzle that RTC laws generated a large and statistically significant increase in overall violent crime but led to a smaller and less statistically significant increase in murder may be explained by the fact that RTC-adopting states constrained the RTC-induced increase in murder by elevating their rates of police and incarceration.

Finally, we have chosen to present synthetic control estimates that subtract off the initial year discrepancy between the actual and synthetic control crime figures, which we think is validated by our Appendix K analysis. While these would be our preferred estimates, Appendix Tables

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<sup>73</sup>22 of the 33 states experienced growth in the incarceration rate (17/33 for police employee rates) that was greater than their respective synthetic control growth rate (obtained using DAW covariates and the murder rate). The population-weighted fraction of states experiencing this greater increase was 67.3% for incarceration and 49.2% for police.

<sup>74</sup>By comparing the synthetic control unit's adjusted police/incarceration figures with its actual police/incarceration figures, and by applying standard estimates of the elasticity of murder with respect to police (-0.67) and incarceration (-0.15), we can create an adjusted version of the control unit's murder rate for each year after RTC adoption. For example, if the police and incarceration rates for the synthetic control unit were both ten percent greater than the actual rates in the 10th year after adoption for an RTC-adopting state, we would adjust the murder rate for the synthetic control unit downwards by  $0.67 \cdot 10 + 0.15 \cdot 10 = 8.2$  percent (thereby elevating the predicted impact of RTC laws on murder).

<sup>75</sup>Kansas and Nebraska, both 2007 adopters, have no comparable data for ten years after adoption and are thus not included in this calculation.

<sup>76</sup>If one only corrects for the larger jump in police experienced by the treatment states, the 10th year effect jumps from 4.30 percent ( $t = 1.17$ ) to 7.08 percent ( $t = 1.49$ ).

F4-F6 show that without subtraction the DAW tenth year synthetic control estimates of the increase in the murder rate from RTC adoption range from 11-14 percent, and are statistically significant at or above the .05 level.<sup>77</sup>

**Table E1: The Impact of RTC Laws on the Murder Rate, DAW covariates, Full Sample, 1977-2014**

|                                                                        | (1)              | (2)               | (3)               | (4)               | (5)               | (6)               | (7)               | (8)              | (9)               | (10)             |
|------------------------------------------------------------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------------|
| Average normalized TEP                                                 | 0.784<br>(1.931) | -2.195<br>(4.189) | -1.584<br>(4.573) | -2.635<br>(4.722) | -6.032<br>(5.034) | -6.412<br>(4.504) | -6.413<br>(5.272) | 1.438<br>(4.927) | -0.498<br>(4.355) | 4.302<br>(3.683) |
| N                                                                      | 33               | 33                | 33                | 33                | 33                | 33                | 33                | 31               | 31                | 31               |
| Pseudo p-value                                                         | 0.788            | 0.566             | 0.710             | 0.638             | 0.298             | 0.318             | 0.358             | 0.840            | 0.942             | 0.578            |
| Proportion of corresponding placebo estimates significant at .10 level | 0.130            | 0.156             | 0.190             | 0.156             | 0.176             | 0.192             | 0.192             | 0.188            | 0.190             | 0.216            |
| Proportion of corresponding placebo estimates significant at .05 level | 0.072            | 0.082             | 0.114             | 0.102             | 0.118             | 0.126             | 0.122             | 0.122            | 0.124             | 0.142            |
| Proportion of corresponding placebo estimates significant at .01 level | 0.024            | 0.024             | 0.024             | 0.028             | 0.044             | 0.044             | 0.040             | 0.046            | 0.056             | 0.046            |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table E2: The Impact of RTC Laws on the Property Crime Rate, DAW covariates, Full Sample, 1977-2014**

|                                                                        | (1)               | (2)              | (3)              | (4)              | (5)              | (6)              | (7)              | (8)              | (9)              | (10)             |
|------------------------------------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Average normalized TEP                                                 | -0.224<br>(0.998) | 1.336<br>(1.306) | 2.354<br>(2.535) | 0.679<br>(2.709) | 0.600<br>(2.734) | 1.557<br>(2.580) | 0.677<br>(2.465) | 1.554<br>(2.319) | 1.070<br>(2.406) | 1.334<br>(2.325) |
| N                                                                      | 33                | 33               | 33               | 33               | 33               | 33               | 33               | 31               | 31               | 31               |
| Pseudo p-value                                                         | 0.852             | 0.456            | 0.348            | 0.822            | 0.864            | 0.650            | 0.864            | 0.708            | 0.800            | 0.784            |
| Proportion of corresponding placebo estimates significant at .10 level | 0.144             | 0.176            | 0.166            | 0.196            | 0.192            | 0.206            | 0.182            | 0.200            | 0.198            | 0.204            |
| Proportion of corresponding placebo estimates significant at .05 level | 0.070             | 0.088            | 0.084            | 0.090            | 0.114            | 0.120            | 0.106            | 0.120            | 0.130            | 0.132            |
| Proportion of corresponding placebo estimates significant at .01 level | 0.024             | 0.020            | 0.030            | 0.034            | 0.024            | 0.030            | 0.044            | 0.048            | 0.040            | 0.040            |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

<sup>77</sup>The Appendix Table E1 DAW estimate for murder in the tenth year after the RTC adoption is 4.3 percent and not statistically significant (with subtraction) but rises to a statistically significant value of 11.2 percent without subtraction (Appendix Table F4). Similarly, when not subtracting the adoption year percentage difference, the tenth year TEP for property crime is over ten percentage points larger and becomes significant at the five percent level (Appendix Table F7).



**Table E3: The Impact of RTC Laws on the Murder Rate, LM covariates, Full Sample, 1977-2014**

|                                                                        | (1)               | (2)               | (3)               | (4)               | (5)               | (6)               | (7)               | (8)              | (9)              | (10)             |
|------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|
| Average normalized TEP                                                 | -0.107<br>(1.713) | -4.355<br>(4.166) | -2.770<br>(4.501) | -3.382<br>(4.661) | -5.337<br>(5.323) | -3.972<br>(5.155) | -4.913<br>(5.484) | 2.498<br>(5.562) | 1.501<br>(5.019) | 4.542<br>(4.141) |
| N                                                                      | 33                | 33                | 33                | 33                | 33                | 33                | 33                | 31               | 31               | 31               |
| Pseudo p-value                                                         | 0.962             | 0.236             | 0.556             | 0.510             | 0.350             | 0.514             | 0.462             | 0.750            | 0.824            | 0.598            |
| Proportion of corresponding placebo estimates significant at .10 level | 0.132             | 0.148             | 0.154             | 0.164             | 0.182             | 0.182             | 0.170             | 0.172            | 0.218            | 0.220            |
| Proportion of corresponding placebo estimates significant at .05 level | 0.078             | 0.088             | 0.074             | 0.088             | 0.090             | 0.106             | 0.102             | 0.114            | 0.132            | 0.142            |
| Proportion of corresponding placebo estimates significant at .01 level | 0.022             | 0.018             | 0.024             | 0.036             | 0.038             | 0.026             | 0.036             | 0.034            | 0.040            | 0.044            |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the regression methodology described in the main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table E4: The Impact of RTC Laws on the Property Crime Rate, LM covariates, Full Sample, 1977-2014**

|                                                                        | (1)               | (2)              | (3)              | (4)              | (5)              | (6)              | (7)              | (8)              | (9)              | (10)             |
|------------------------------------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Average normalized TEP                                                 | -0.208<br>(1.005) | 1.262<br>(1.163) | 2.211<br>(2.616) | 1.039<br>(2.688) | 0.077<br>(2.719) | 1.099<br>(2.575) | 1.525<br>(2.387) | 3.218<br>(2.380) | 2.544<br>(2.719) | 3.420<br>(3.050) |
| N                                                                      | 33                | 33               | 33               | 33               | 33               | 33               | 33               | 31               | 31               | 31               |
| Pseudo p-value                                                         | 0.836             | 0.446            | 0.346            | 0.714            | 0.992            | 0.758            | 0.692            | 0.414            | 0.510            | 0.430            |
| Proportion of corresponding placebo estimates significant at .10 level | 0.138             | 0.162            | 0.178            | 0.188            | 0.200            | 0.214            | 0.184            | 0.208            | 0.204            | 0.198            |
| Proportion of corresponding placebo estimates significant at .05 level | 0.066             | 0.102            | 0.100            | 0.120            | 0.116            | 0.134            | 0.122            | 0.128            | 0.112            | 0.122            |
| Proportion of corresponding placebo estimates significant at .01 level | 0.022             | 0.014            | 0.026            | 0.030            | 0.038            | 0.034            | 0.048            | 0.054            | 0.044            | 0.046            |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the regression methodology described in the main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## Appendix F: Synthetic Control Estimates of RTC Law Impact on Three Crimes Without Adoption Year Normalization (DAW)

**Table F1: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, Full Sample, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)              | (2)                | (3)                | (4)                | (5)                 | (6)                | (7)                  | (8)                  | (9)                  | (10)                 |
|------------------------------------------------------------------------|------------------|--------------------|--------------------|--------------------|---------------------|--------------------|----------------------|----------------------|----------------------|----------------------|
| Average normalized TEP                                                 | 2.467<br>(1.689) | 5.228**<br>(2.066) | 6.241**<br>(2.576) | 7.301**<br>(2.927) | 9.503***<br>(3.241) | 9.995**<br>(3.798) | 12.715***<br>(3.507) | 15.047***<br>(4.605) | 16.613***<br>(4.278) | 16.941***<br>(3.724) |
| N                                                                      | 33               | 33                 | 33                 | 33                 | 33                  | 33                 | 33                   | 31                   | 31                   | 31                   |
| Pseudo p-value                                                         | 0.618            | 0.314              | 0.248              | 0.192              | 0.100               | 0.104              | 0.050                | 0.030                | 0.020                | 0.018                |
| Proportion of corresponding placebo estimates significant at .10 level | 0.270            | 0.278              | 0.258              | 0.266              | 0.240               | 0.280              | 0.278                | 0.284                | 0.288                | 0.274                |
| Proportion of corresponding placebo estimates significant at .05 level | 0.178            | 0.180              | 0.182              | 0.182              | 0.160               | 0.184              | 0.204                | 0.188                | 0.186                | 0.188                |
| Proportion of corresponding placebo estimates significant at .01 level | 0.068            | 0.072              | 0.080              | 0.086              | 0.066               | 0.080              | 0.066                | 0.074                | 0.070                | 0.062                |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table F2: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, < 2x Average Coefficient of Variation of the RMSPE, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)                | (2)                 | (3)                 | (4)                 | (5)                  | (6)                  | (7)                  | (8)                  | (9)                  | (10)                 |
|------------------------------------------------------------------------|--------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Average normalized TEP                                                 | 3.722**<br>(1.552) | 6.377***<br>(1.980) | 7.588***<br>(2.455) | 8.573***<br>(2.851) | 10.996***<br>(3.111) | 11.050***<br>(3.771) | 13.773***<br>(3.451) | 15.911***<br>(4.621) | 16.873***<br>(4.355) | 17.337***<br>(3.777) |
| N                                                                      | 29                 | 29                  | 29                  | 29                  | 29                   | 29                   | 29                   | 27                   | 27                   | 27                   |
| Pseudo p-value                                                         | 0.420              | 0.212               | 0.152               | 0.122               | 0.052                | 0.066                | 0.032                | 0.020                | 0.020                | 0.020                |
| Proportion of corresponding placebo estimates significant at .10 level | 0.284              | 0.278               | 0.270               | 0.274               | 0.266                | 0.266                | 0.282                | 0.286                | 0.274                | 0.274                |
| Proportion of corresponding placebo estimates significant at .05 level | 0.194              | 0.178               | 0.182               | 0.180               | 0.178                | 0.182                | 0.192                | 0.188                | 0.180                | 0.186                |
| Proportion of corresponding placebo estimates significant at .01 level | 0.074              | 0.072               | 0.064               | 0.082               | 0.064                | 0.078                | 0.074                | 0.068                | 0.068                | 0.054                |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS NC NE NM NV OH OK OR PA SC TN TX UT VA WY

States excluded for poor pre-treatment fit: MT ND SD WV

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table F3: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, < 1x Average Coefficient of Variation of the RMSPE, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)                | (2)                 | (3)                 | (4)                 | (5)                  | (6)                  | (7)                  | (8)                  | (9)                  | (10)                 |
|------------------------------------------------------------------------|--------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Average normalized TEP                                                 | 4.209**<br>(1.537) | 6.994***<br>(1.953) | 8.311***<br>(2.410) | 9.367***<br>(2.814) | 11.806***<br>(3.065) | 11.812***<br>(3.748) | 14.533***<br>(3.404) | 16.492***<br>(4.574) | 17.487***<br>(4.299) | 17.893***<br>(3.736) |
| N                                                                      | 27                 | 27                  | 27                  | 27                  | 27                   | 27                   | 27                   | 26                   | 26                   | 26                   |
| Pseudo p-value                                                         | 0.292              | 0.116               | 0.078               | 0.070               | 0.030                | 0.050                | 0.028                | 0.016                | 0.020                | 0.018                |
| Proportion of corresponding placebo estimates significant at .10 level | 0.216              | 0.234               | 0.252               | 0.252               | 0.250                | 0.258                | 0.262                | 0.260                | 0.262                | 0.262                |
| Proportion of corresponding placebo estimates significant at .05 level | 0.160              | 0.142               | 0.146               | 0.152               | 0.158                | 0.164                | 0.174                | 0.180                | 0.166                | 0.170                |
| Proportion of corresponding placebo estimates significant at .01 level | 0.066              | 0.046               | 0.054               | 0.060               | 0.056                | 0.062                | 0.062                | 0.048                | 0.058                | 0.050                |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS NC NM NV OH OK OR PA SC TN TX UT VA WY

States excluded for poor pre-treatment fit: ME MT ND NE SD WV

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table F4: The Impact of RTC Laws on the Murder Rate, DAW covariates, Full Sample, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)     | (2)     | (3)     | (4)     | (5)     | (6)     | (7)     | (8)     | (9)     | (10)     |
|------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Average normalized TEP                                                 | 8.565*  | 5.573   | 6.173   | 5.105   | 1.691   | 1.298   | 1.294   | 8.489   | 6.554   | 11.184** |
|                                                                        | (4.365) | (3.816) | (4.639) | (5.316) | (4.723) | (5.315) | (5.226) | (5.738) | (4.571) | (5.298)  |
| N                                                                      | 33      | 33      | 33      | 33      | 33      | 33      | 33      | 31      | 31      | 31       |
| Pseudo p-value                                                         | 0.204   | 0.444   | 0.400   | 0.532   | 0.832   | 0.888   | 0.896   | 0.360   | 0.496   | 0.264    |
| Proportion of corresponding placebo estimates significant at .10 level | 0.252   | 0.282   | 0.282   | 0.272   | 0.264   | 0.280   | 0.256   | 0.250   | 0.280   | 0.244    |
| Proportion of corresponding placebo estimates significant at .05 level | 0.182   | 0.196   | 0.200   | 0.182   | 0.196   | 0.200   | 0.196   | 0.190   | 0.192   | 0.166    |
| Proportion of corresponding placebo estimates significant at .01 level | 0.086   | 0.096   | 0.082   | 0.088   | 0.098   | 0.092   | 0.090   | 0.084   | 0.090   | 0.076    |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ **Table F5: The Impact of RTC Laws on the Murder Rate, DAW covariates, < 2x Average Coefficient of Variation of the RMSPE, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)     | (2)     | (3)     | (4)     | (5)     | (6)     | (7)     | (8)     | (9)     | (10)     |
|------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| Average normalized TEP                                                 | 9.575** | 6.497   | 7.204   | 6.173   | 2.607   | 2.928   | 2.906   | 10.800* | 7.395   | 11.729** |
|                                                                        | (4.533) | (3.903) | (4.825) | (5.529) | (4.885) | (5.358) | (5.292) | (5.764) | (4.750) | (5.516)  |
| N                                                                      | 31      | 31      | 31      | 31      | 31      | 31      | 31      | 29      | 29      | 29       |
| Pseudo p-value                                                         | 0.152   | 0.376   | 0.344   | 0.454   | 0.776   | 0.760   | 0.752   | 0.262   | 0.454   | 0.242    |
| Proportion of corresponding placebo estimates significant at .10 level | 0.272   | 0.282   | 0.280   | 0.274   | 0.274   | 0.286   | 0.262   | 0.260   | 0.276   | 0.238    |
| Proportion of corresponding placebo estimates significant at .05 level | 0.184   | 0.200   | 0.190   | 0.196   | 0.216   | 0.196   | 0.194   | 0.192   | 0.194   | 0.160    |
| Proportion of corresponding placebo estimates significant at .01 level | 0.084   | 0.096   | 0.082   | 0.090   | 0.104   | 0.090   | 0.096   | 0.084   | 0.092   | 0.082    |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MO MS MT NC NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

States excluded for poor pre-treatment fit: MN ND

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ **Table F6: The Impact of RTC Laws on the Murder Rate, DAW covariates, < 1x Average Coefficient of Variation of the RMSPE, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)      | (2)     | (3)     | (4)     | (5)     | (6)     | (7)     | (8)     | (9)     | (10)      |
|------------------------------------------------------------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| Average normalized TEP                                                 | 9.660*** | 2.942   | 4.538   | 2.263   | -0.348  | 1.171   | -0.088  | 10.838* | 8.871*  | 14.020*** |
|                                                                        | (2.559)  | (3.372) | (5.319) | (5.590) | (5.513) | (5.550) | (5.758) | (5.909) | (5.088) | (4.789)   |
| N                                                                      | 21       | 21      | 21      | 21      | 21      | 21      | 21      | 21      | 21      | 21        |
| Pseudo p-value                                                         | 0.120    | 0.720   | 0.586   | 0.804   | 0.972   | 0.920   | 0.992   | 0.290   | 0.390   | 0.184     |
| Proportion of corresponding placebo estimates significant at .10 level | 0.260    | 0.276   | 0.312   | 0.286   | 0.290   | 0.290   | 0.282   | 0.254   | 0.268   | 0.238     |
| Proportion of corresponding placebo estimates significant at .05 level | 0.184    | 0.190   | 0.200   | 0.196   | 0.206   | 0.210   | 0.212   | 0.174   | 0.190   | 0.162     |
| Proportion of corresponding placebo estimates significant at .01 level | 0.068    | 0.092   | 0.082   | 0.088   | 0.094   | 0.094   | 0.090   | 0.088   | 0.088   | 0.088     |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AR AZ CO FL GA KY ME MI MO MS NC NM OH OK OR PA SC TN UT VA WV

States excluded for poor pre-treatment fit: AK ID KS LA MN MT ND NE NV SD TX WY

The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table F7: The Impact of RTC Laws on the Property Crime Rate, DAW covariates, Full Sample, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)                | (2)                 | (3)                 | (4)                 | (5)                | (6)                 | (7)                 | (8)                 | (9)                 | (10)                |
|------------------------------------------------------------------------|--------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Average normalized TEP                                                 | 9.654**<br>(3.980) | 11.289**<br>(4.197) | 12.368**<br>(4.886) | 10.740**<br>(4.863) | 10.709*<br>(5.484) | 11.725**<br>(5.593) | 10.903**<br>(4.680) | 11.698**<br>(4.781) | 11.288**<br>(5.271) | 11.606**<br>(5.183) |
| N                                                                      | 33                 | 33                  | 33                  | 33                  | 33                 | 33                  | 33                  | 31                  | 31                  | 31                  |
| Pseudo p-value                                                         | 0.016              | 0.004               | 0.004               | 0.010               | 0.014              | 0.006               | 0.022               | 0.008               | 0.032               | 0.020               |
| Proportion of corresponding placebo estimates significant at .10 level | 0.206              | 0.198               | 0.224               | 0.232               | 0.230              | 0.206               | 0.198               | 0.202               | 0.182               | 0.182               |
| Proportion of corresponding placebo estimates significant at .05 level | 0.138              | 0.130               | 0.134               | 0.152               | 0.156              | 0.146               | 0.128               | 0.116               | 0.108               | 0.118               |
| Proportion of corresponding placebo estimates significant at .01 level | 0.038              | 0.034               | 0.042               | 0.054               | 0.052              | 0.044               | 0.050               | 0.046               | 0.038               | 0.040               |

Standard errors in parentheses  
Column numbers indicate post-passage year under consideration; N = number of states in sample  
Dependent variable is the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval  
Results reported for the constant term resulting from this regression  
States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY  
States excluded for poor pre-treatment fit:  
The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.  
\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table F8: The Impact of RTC Laws on the Property Crime Rate, DAW covariates, < 2x Average Coefficient of Variation of the RMSPE, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)                  | (2)                  | (3)                  | (4)                 | (5)                 | (6)                 | (7)                 | (8)                 | (9)                 | (10)                |
|------------------------------------------------------------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Average normalized TEP                                                 | 11.231***<br>(4.063) | 12.864***<br>(4.289) | 13.926***<br>(5.000) | 12.195**<br>(4.985) | 12.457**<br>(5.597) | 13.402**<br>(5.727) | 12.286**<br>(4.794) | 13.218**<br>(4.896) | 12.497**<br>(5.463) | 12.904**<br>(5.363) |
| N                                                                      | 30                   | 30                   | 30                   | 30                  | 30                  | 30                  | 30                  | 28                  | 28                  | 28                  |
| Pseudo p-value                                                         | 0.000                | 0.000                | 0.000                | 0.000               | 0.000               | 0.000               | 0.004               | 0.004               | 0.014               | 0.016               |
| Proportion of corresponding placebo estimates significant at .10 level | 0.186                | 0.156                | 0.194                | 0.192               | 0.206               | 0.212               | 0.188               | 0.182               | 0.170               | 0.168               |
| Proportion of corresponding placebo estimates significant at .05 level | 0.114                | 0.094                | 0.112                | 0.116               | 0.144               | 0.124               | 0.124               | 0.100               | 0.106               | 0.098               |
| Proportion of corresponding placebo estimates significant at .01 level | 0.026                | 0.026                | 0.032                | 0.036               | 0.040               | 0.040               | 0.038               | 0.044               | 0.036               | 0.036               |

Standard errors in parentheses  
Column numbers indicate post-passage year under consideration; N = number of states in sample  
Dependent variable is the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval  
Results reported for the constant term resulting from this regression  
States in group: AK AR AZ CO FL GA ID KS LA ME MI MN MO MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY  
States excluded for poor pre-treatment fit: KY MS WV  
The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.  
\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table F9: The Impact of RTC Laws on the Property Crime Rate, DAW covariates, < 1x Average Coefficient of Variation of the RMSPE, 1977-2014, No Subtraction of Adoption Year Crime Differential**

|                                                                        | (1)                  | (2)                  | (3)                  | (4)                  | (5)                 | (6)                 | (7)                  | (8)                  | (9)                 | (10)                |
|------------------------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|----------------------|----------------------|---------------------|---------------------|
| Average normalized TEP                                                 | 14.559***<br>(3.990) | 15.329***<br>(4.073) | 14.329***<br>(4.003) | 11.856***<br>(3.840) | 13.038**<br>(5.073) | 14.723**<br>(5.639) | 13.131***<br>(4.650) | 14.659***<br>(4.956) | 14.482**<br>(5.696) | 15.266**<br>(5.740) |
| N                                                                      | 23                   | 23                   | 23                   | 23                   | 23                  | 23                  | 23                   | 22                   | 22                  | 22                  |
| Pseudo p-value                                                         | 0.000                | 0.000                | 0.000                | 0.002                | 0.002               | 0.000               | 0.002                | 0.004                | 0.004               | 0.010               |
| Proportion of corresponding placebo estimates significant at .10 level | 0.184                | 0.162                | 0.164                | 0.168                | 0.172               | 0.182               | 0.178                | 0.192                | 0.158               | 0.154               |
| Proportion of corresponding placebo estimates significant at .05 level | 0.096                | 0.088                | 0.084                | 0.088                | 0.096               | 0.106               | 0.122                | 0.104                | 0.100               | 0.104               |
| Proportion of corresponding placebo estimates significant at .01 level | 0.024                | 0.028                | 0.014                | 0.016                | 0.024               | 0.024               | 0.030                | 0.024                | 0.024               | 0.028               |

Standard errors in parentheses  
Column numbers indicate post-passage year under consideration; N = number of states in sample  
Dependent variable is the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval  
Results reported for the constant term resulting from this regression  
States in group: AK AR CO FL GA ID KS LA ME MI MO MT NC NM NV OH OK OR SC TN UT VA WY  
States excluded for poor pre-treatment fit: AZ KY MN MS ND NE PA SD TX WV  
The synthetic controls used to generate the placebo estimates in the table above were generated using the optimization technique described in our main text.  
\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## Appendix G: Data Methodologies

The state-level data set used in this paper updated through 2014 earlier data sets used in Aneja, Donohue, and Zhang (2014) and Aneja, Donohue, and Zhang (2011). We further update this data set to incorporate changes to the various primary sources that have occurred since first released, and to include the additional predictor variables that are featured in the DAW model. All variables are collected for the years 1977-2014 unless otherwise noted.<sup>78</sup>

Annual state-level crime rates are taken from the FBI's Uniform Crime Reporting program.<sup>79</sup> Four state-level income variables (personal income, income maintenance payments, retirement payments, and unemployment insurance payments) are taken from the BEA's Regional Economic Accounts. The personal income, income maintenance, and unemployment insurance payment variables are estimated in real per capita terms (defined using the CPI). The LM specification uses alternative versions of the retirement variable that are described in footnote 78. State-level population and the proportional size of LM's 36 age-race-sex demographic groups are estimated using the Census Bureau's intercensal population estimates. (When the most recent form of these data were not accessible at the state level, state-level figures were generated by aggregating the Census Bureau's county-level population estimates by age, sex, and race.) Population density is estimated by dividing a state's population by the area of that state reported in the previous decennial census. State-level unemployment rate data is taken from the Bureau of Labor Statistics, while the poverty rate is taken from two Census series (the 1979 state-level poverty rate is derived from the Decennial Census and the 1980-2014 poverty rates are generated using the Current Population Survey). The percentage of population living in an MSA was constructed as a hybrid of two measures to account for shifts over time.<sup>80</sup> A measure of incarceration (incarcerated individuals per 100,000

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<sup>78</sup>Many of the data sources that we used in our earlier analysis are revised continuously, and we use a newer version of these data series in this paper than we did in the earlier ADZ analysis. We sometimes made data changes during the data cleaning process. For instance, a detailed review of the raw data underlying arrest statistics uncovered a small number of agencies that reported their police staffing levels twice, and we attempted to delete these duplicates whenever possible. Moreover, we sometimes use variables that are defined slightly differently from the corresponding variable used in Lott and Mustard (1997). For example, after examining the extension of Lott's county data set to the year 2000, we found that our estimates more closely approximated Lott's per capita retirement payment variable when we (a) used the total population as the denominator rather than population over 65 and (b) used as our numerator a measurement that includes retirement payments along with some other forms of government assistance. Our retirement variable in the LM specification uses the population over 65 as a denominator and uses a tighter definition of retirement payments.

<sup>79</sup>For our main analysis, we formulate our crime rates by dividing FBI reported crime counts by FBI reported state-level populations. As a robustness check we used the rounded state-level crime rates reported by the FBI while using the DAW regressors and aggregate violent crime as an outcome variable. We find that this alternative crime rate definition does not qualitatively affect our findings.

<sup>80</sup>We use Census delineation and NBER population files to find the fraction of individuals residing in a county which at least partially overlap with an MSA in 1980 (some New England counties were assigned by town). Since MSA definitions shift over time, we use the UCR implied fraction of population living in an MSA beginning in 1981. Observations for states incorrectly reported as 0 percent MSA by UCR in those early years were replaced according to

state residents) is calculated from tables published by the Bureau of Justice Statistics counting the number of prisoners under the jurisdiction of different state penal systems. Our primary estimates for crime-specific state-level arrest rates are generated by adding together estimates of arrests by age, sex, and race submitted by different police agencies. We then divided this variable by the estimated number of incidents occurring in the same state (according to the UCR) in the relevant crime category.<sup>81</sup>

Abadie, Diamond, and Hainmueller (2010) emphasize that researchers may want to “[restrict] the comparison group to units that are similar to the exposed units [in terms of the predictors which are included in the model]” (496). Given that the District of Columbia had the highest per capita personal income, murder rate, unemployment rate, poverty rate, and population density at various points in our sample, Abadie’s admonition would seem to support omitting the District as one of our potential control units.<sup>82</sup> Consequently, we decided to exclude the District of Columbia from the synthetic control analysis owing to its status as a clear outlier whose characteristics are less likely to be meaningfully predictive for other geographic areas. We should note, however, that including DC in the synthetic control analysis has little impact on our estimates showing that RTC laws increase violent crime.

We collected data on two separate police measures. Our reported results are based on the same police variable that we used in Aneja, Donohue, and Zhang (2014). To construct this variable, we take the most recent agency-level data provided by the FBI and use this information to estimate the number of full-time police employees present in each state per 100,000 residents. We fill in missing observations with staffing data from previous years in cases where the FBI chose to append this information to their agency entries, and we divide the resulting estimate of the total number of police employees by the population represented by these agencies. This variable, which was originally constructed for our regression analysis, has the advantage of not having any missing entries and is closely correlated ( $r = .96$ ) with an alternative measure of police staffing generated by extrapolating missing police agency data based on the average staffing levels reported by agencies in

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the 1980 definition with updated Census population estimates. These values jump due to MSA redefinition over time. When we checked the robustness of our panel results by replacing our percentage MSA definition with the predictions from state-specific second-order time trends to smooth out jumps (compare Appendix Table B1), DAW right-to-carry dummy variable estimates for violent crime increased by 1.5 to 10.56 and spline estimates increased by 0.17 to 0.20.

<sup>81</sup> We chose this variable as the primary one that we would use in this analysis after confirming that this variable was more closely correlated with Lott’s state-level arrest variables in the most recent data set published on his website (a data set which runs through the year 2005) than several alternatives that we constructed.

<sup>82</sup> Another advantage of excluding the District of Columbia from our sample is that the Bureau of Justice Statistics stops estimating the incarcerated population of the District of Columbia after the year 2001 owing to the transfer of the district’s incarcerated population to the federal prison system and the DC Jail. While we have tried to reconstruct incarceration data for DC for these years using other data sources, the estimates resulting from this analysis were not, in our view, plausible substitutes for the BJS estimates we use for all other states. The raw data set that we use to gather information about state-level arrest rates is also missing a large number of observations from the District of Columbia’s main police department, which further strengthens the case for excluding DC from our data set.



the same year and type of area served (represented by a variable incorporating nineteen categories separating different types of suburban, rural, and urban developments.)

As an alternative, we use data published by the Bureau of Justice Statistics on the number of full-time equivalent employees working for police agencies. These figures were also included in the data set featured in Lott and Mustard (1997).<sup>83</sup> We find that our estimated average treatment effects for aggregate violent crime and the conclusions that we draw from these averages are qualitatively unaffected by substituting one police employment measure for another, which suggests that measurement error associated with our estimates of police activity is not driving our results.

## Appendix H: Replicating Our Analysis

In implementing the synthetic control methodology, we discovered that our estimates could be affected by seemingly inconsequential details when using maximum likelihood to select the weights associated with different predictors in our analysis. Specifically, when using the excellent “synth” package for Stata created by Abadie, Hainmueller, and Diamond along with the *nested* option, the version of Stata (e.g., SE vs. MP), the specifications of the computer running the command, and the order in which predictors are listed can affect the composition of the synthetic control and by extension the size of the estimated treatment effect.

The root cause of the differences between Stata versions is explained by a 2008 StataCorp memo, which noted that:

“When more than one processor is used in Stata/MP, the computations for the likelihood are split into pieces (one piece for each processor) and then are added at the end of the calculation on each iteration. Because of round-off error, addition is not associative in computer science as it is in mathematics. This may cause a slight difference in results. For example,  $a1+a2+a3+a4$  can produce different results from  $(a1+a2)+(a3+a4)$  in numerical computation. When changing the number of processors used in Stata, the order in which the results from each processor are combined in calculations may not be the same depending on which processor completes its calculations first.”<sup>84</sup>

Moreover, this document goes on to note that the differences associated with using different versions of Stata can be minimized by setting a higher threshold for *nrtolerance()*. This optimization condition is actually relaxed by the synth routine in situations where setting this threshold at its

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<sup>83</sup>We do not rely on this variable in our main analysis owing to the large number of missing years present in this data set and owing to discrepancies in the raw data provided by the BJS, which sometimes needed to be corrected using published tables.

<sup>84</sup>This memo can be found at the following link: <http://www.webcitation.org/6YeLV03SN>.

default level causes the optimization routine to crash, and we would therefore expect the results of Stata SE and MP to diverge whenever this occurs. In our analysis, we use the UNIX version of Stata/MP owing to the well-documented performance gains associated with this version of the software package.

Another discrepancy that we encountered is that memory limitations sometimes caused our synthetic control analyses to crash when using the *nested* option. When this occurred, we would generate our synthetic control using the regression-based technique for determining the relative weights assigned to different predictors. We encountered this situation several times when running our Stata code on standard desktop computers, but this problem occurred less often when using more powerful computers with greater amounts of memory. For this reason, to replicate our results with the greatest amount of precision, we would recommend that other researchers run our code on the same machines that we ran our own analysis: a 24-core UNIX machine with 96GB of RAM or a 16-core UNIX machine with 64GB of RAM running Stata/MP.

# Appendix I: Synthetic Control Graphs Estimating Impact of RTC Laws On Violent Crime Using the DAW Model<sup>85</sup>

Figures I1-I33

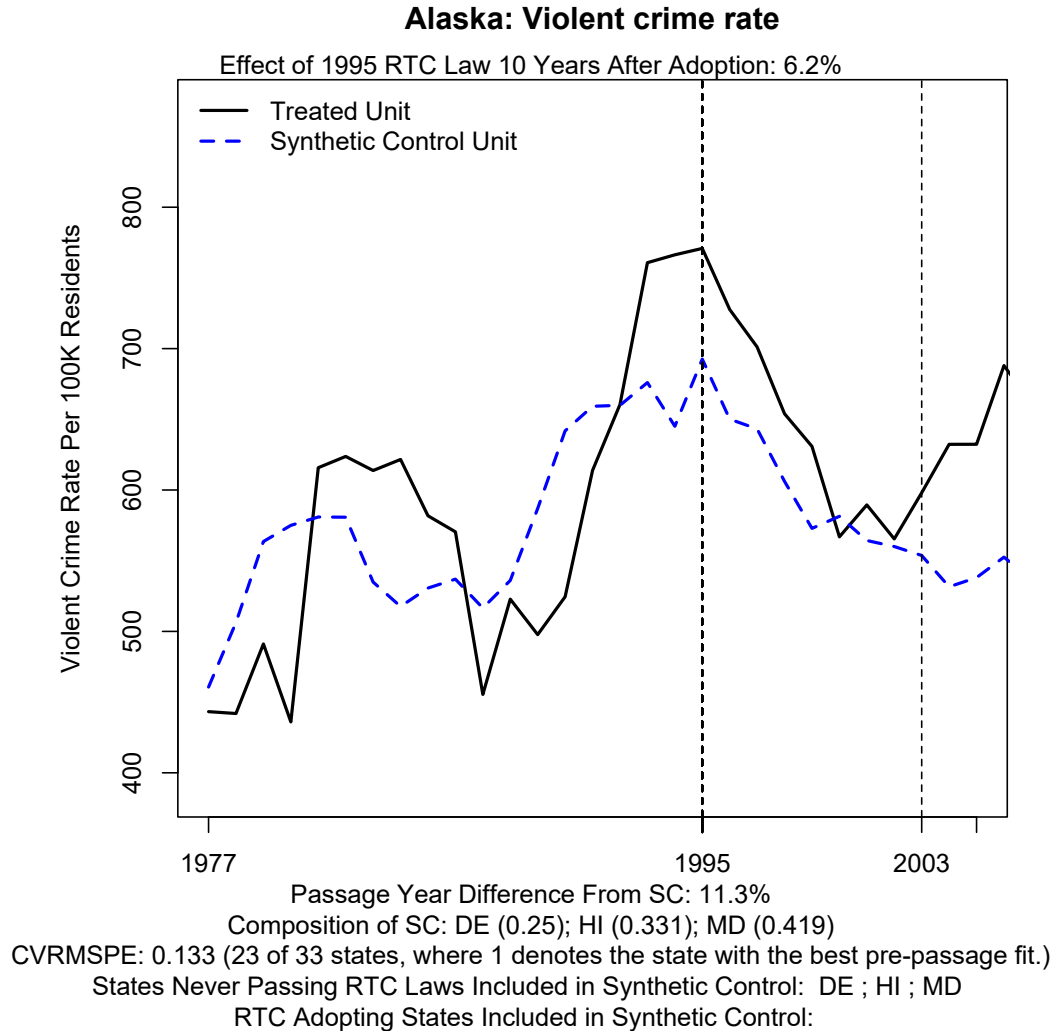


Figure I1

<sup>85</sup>Recall that each state's effective year of passage is defined as the first year in which an RTC law was in effect for the majority of that year.

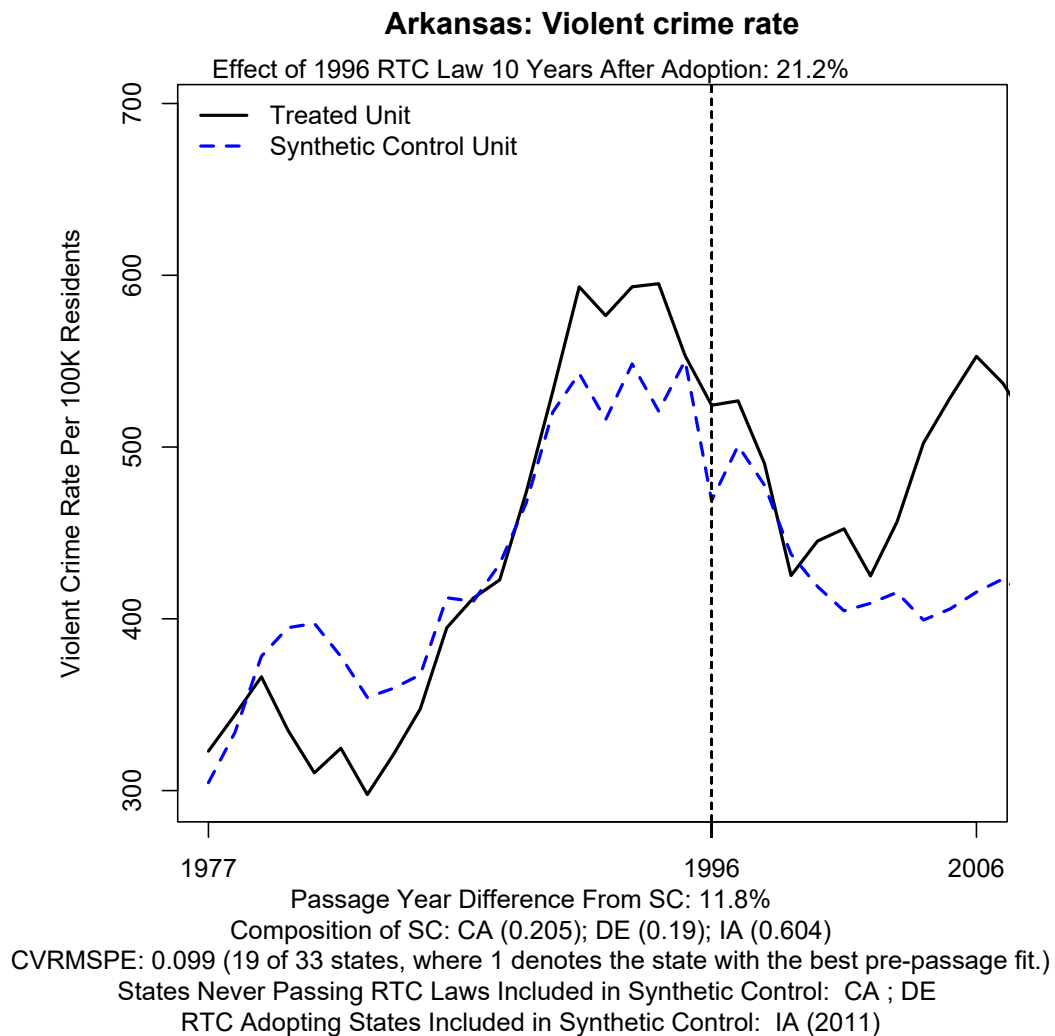


Figure I2

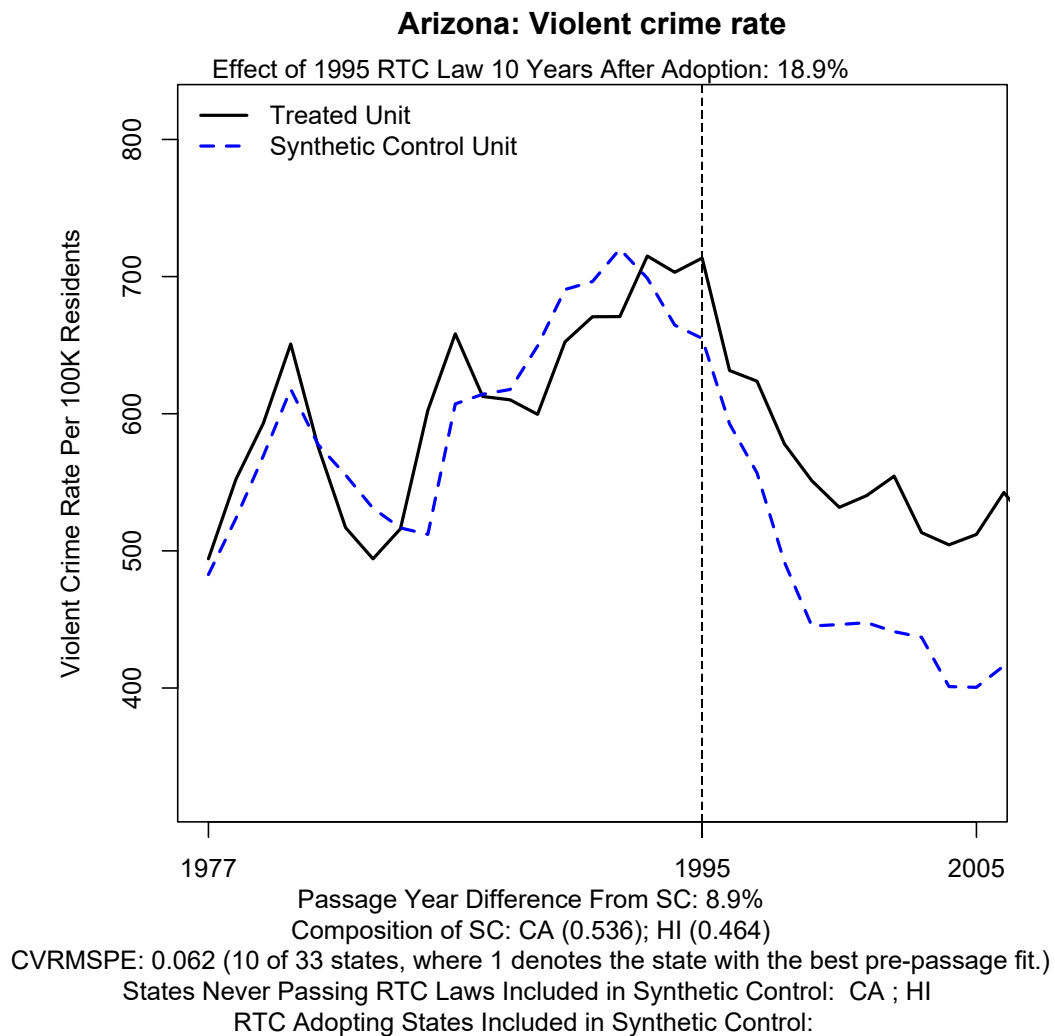


Figure I3

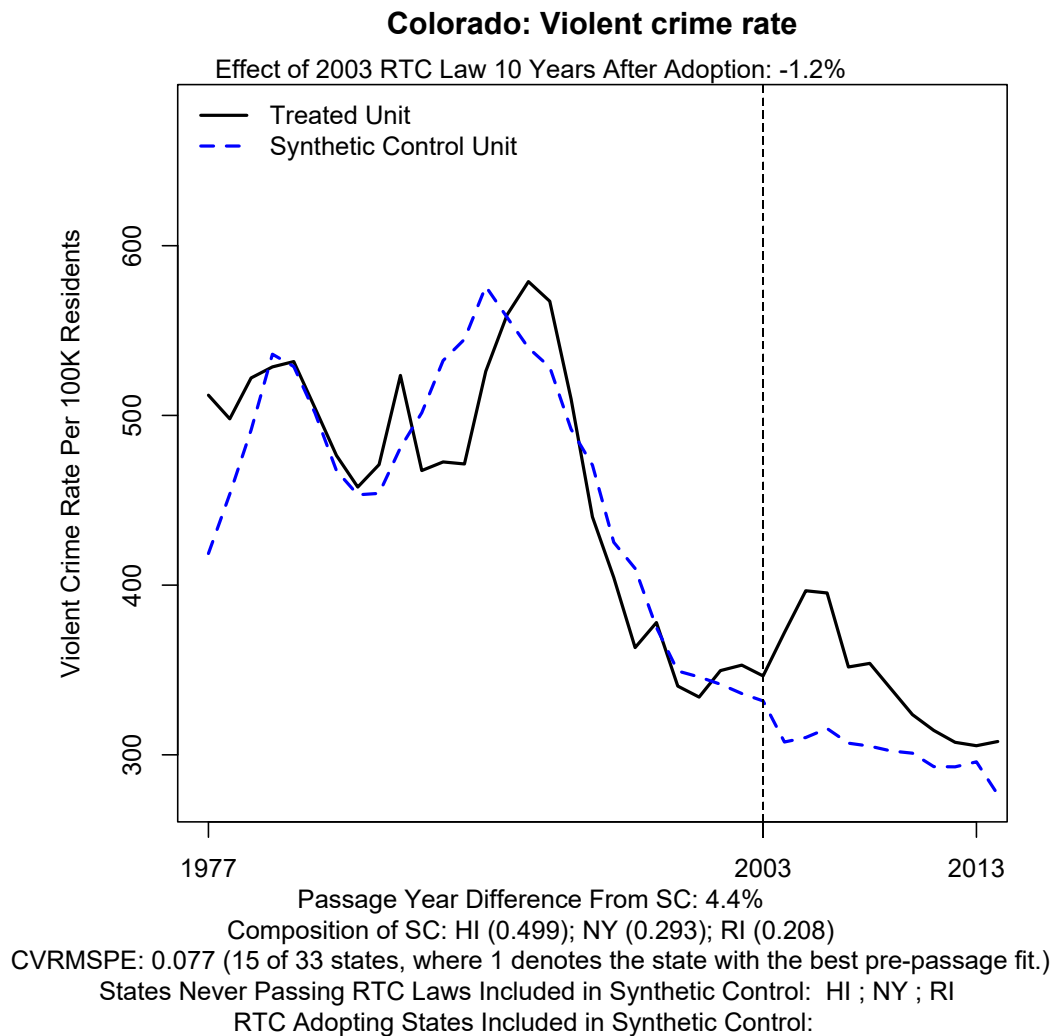


Figure I4



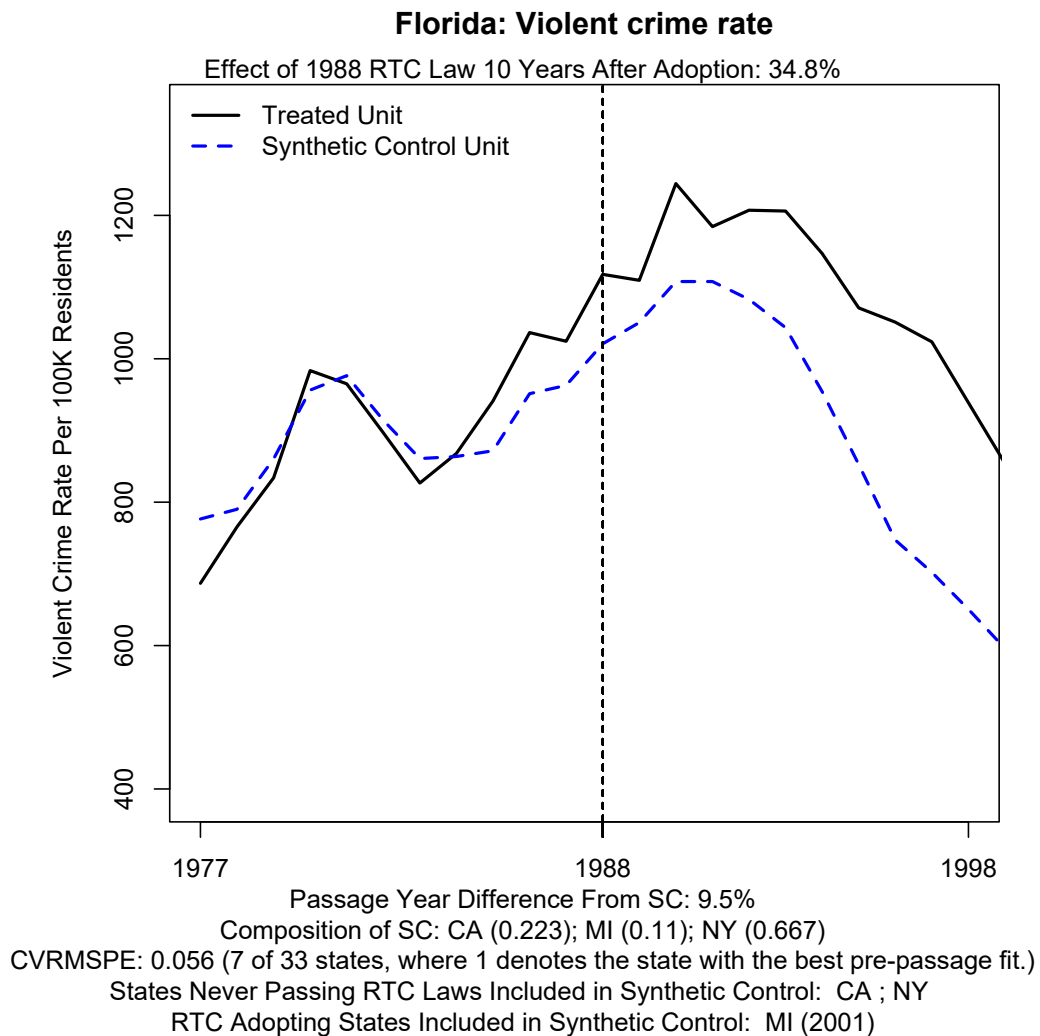


Figure I5

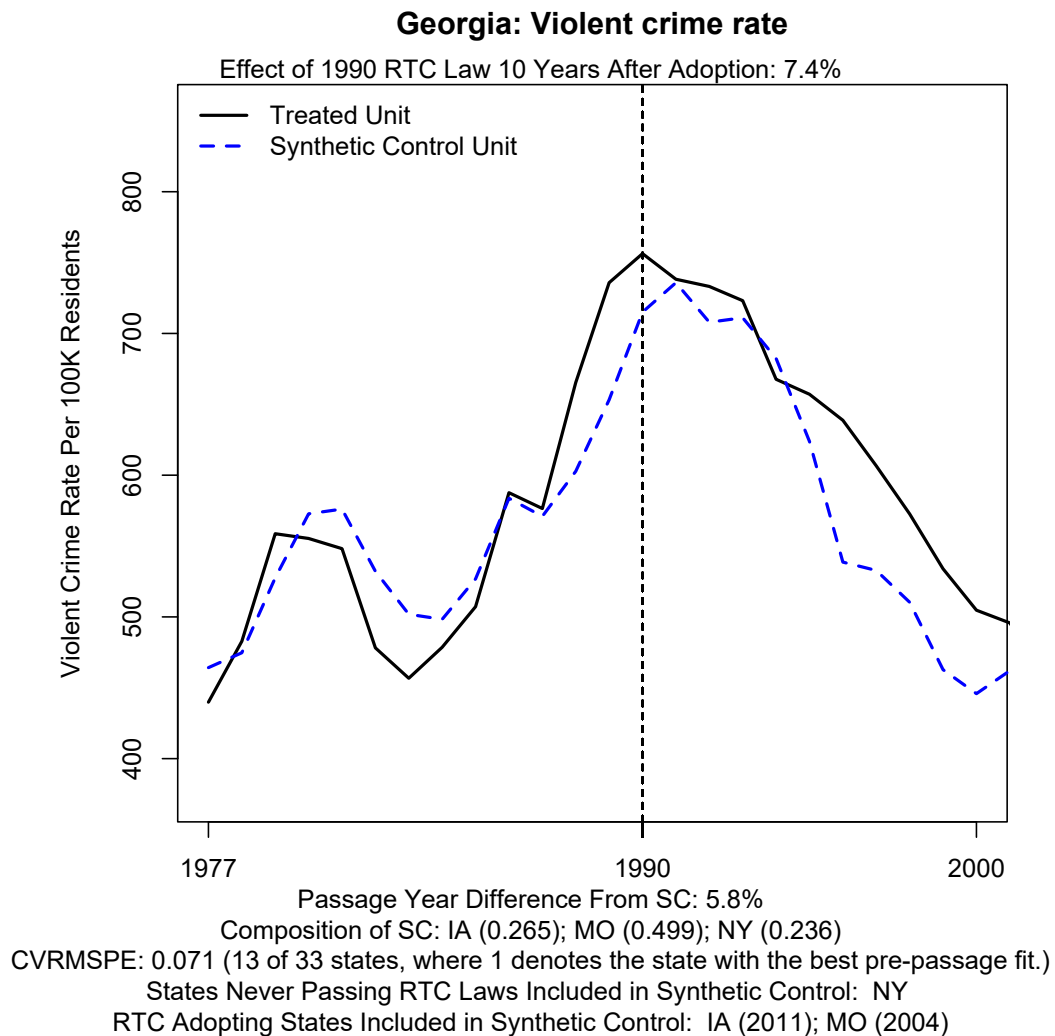


Figure I6

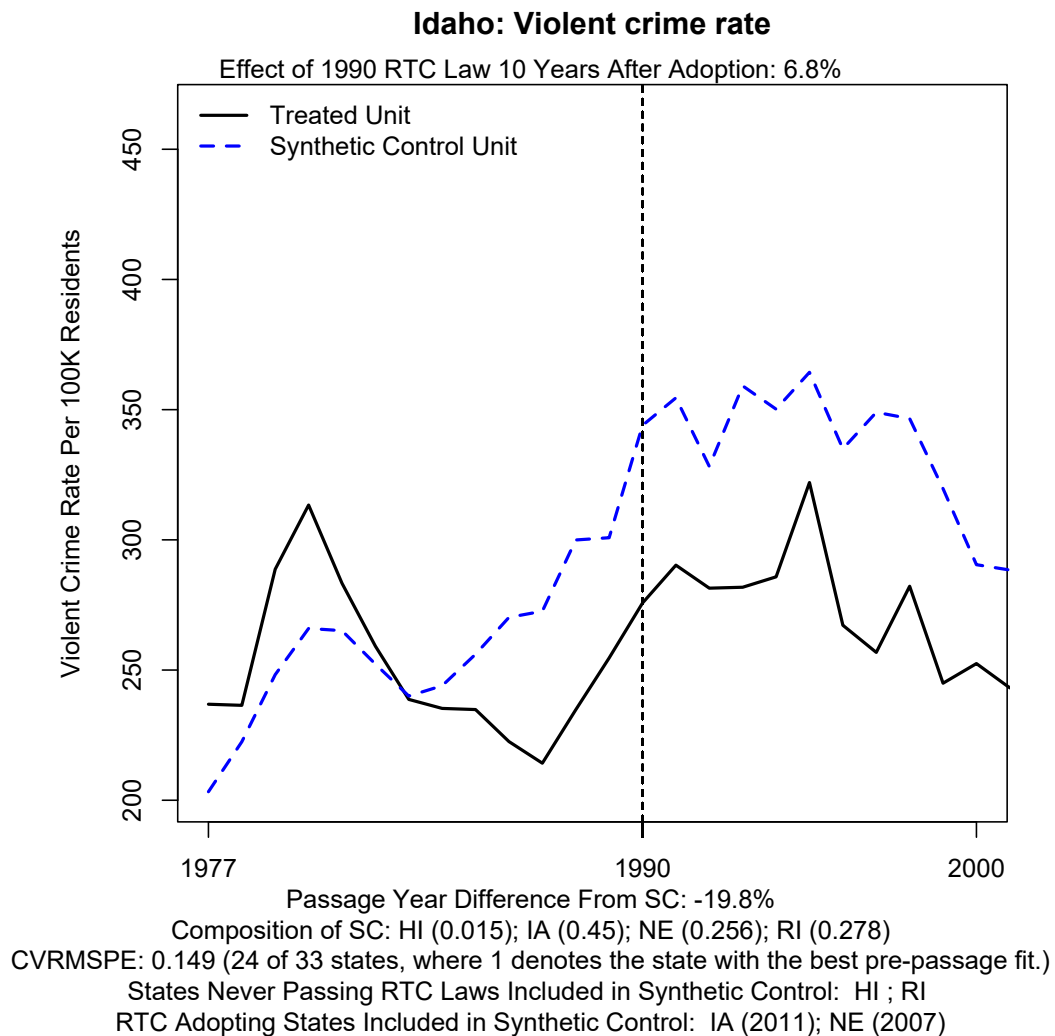


Figure I7

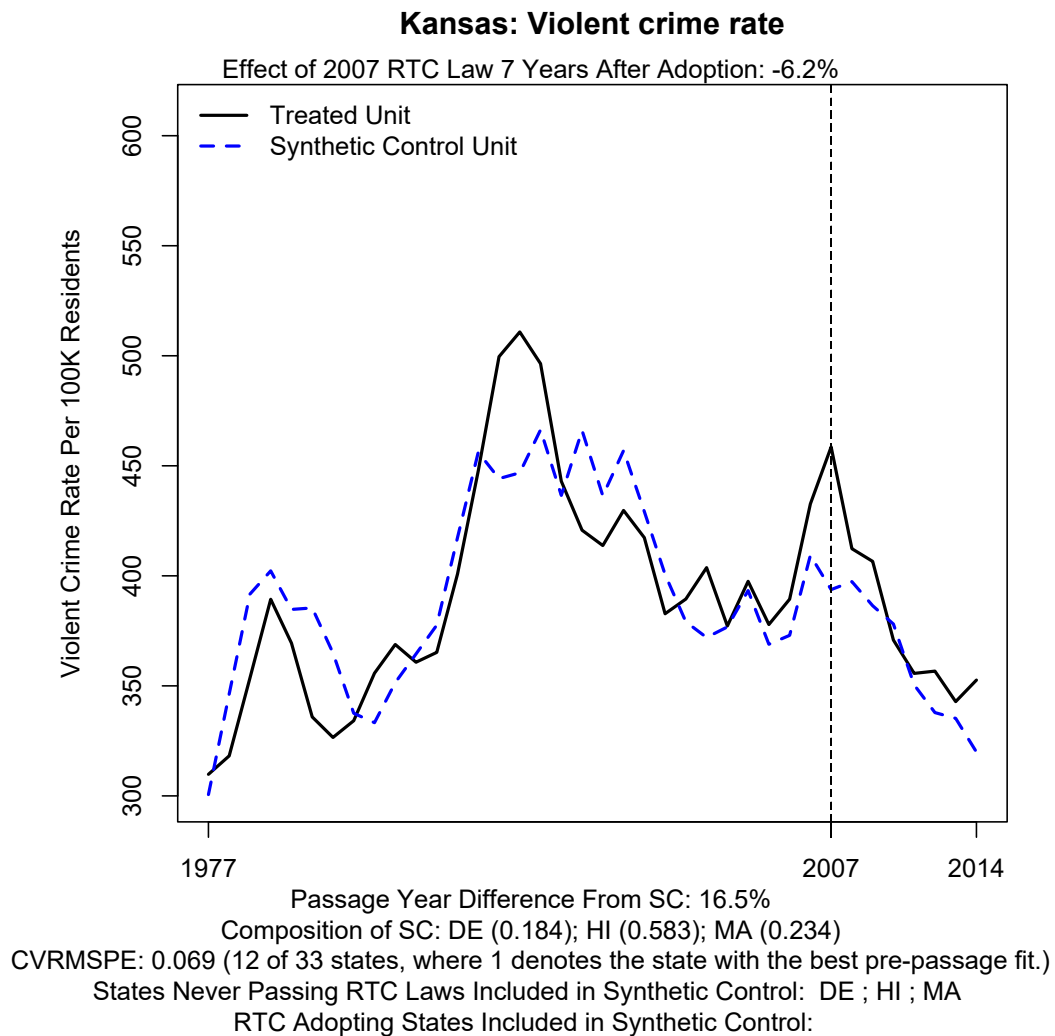


Figure I8

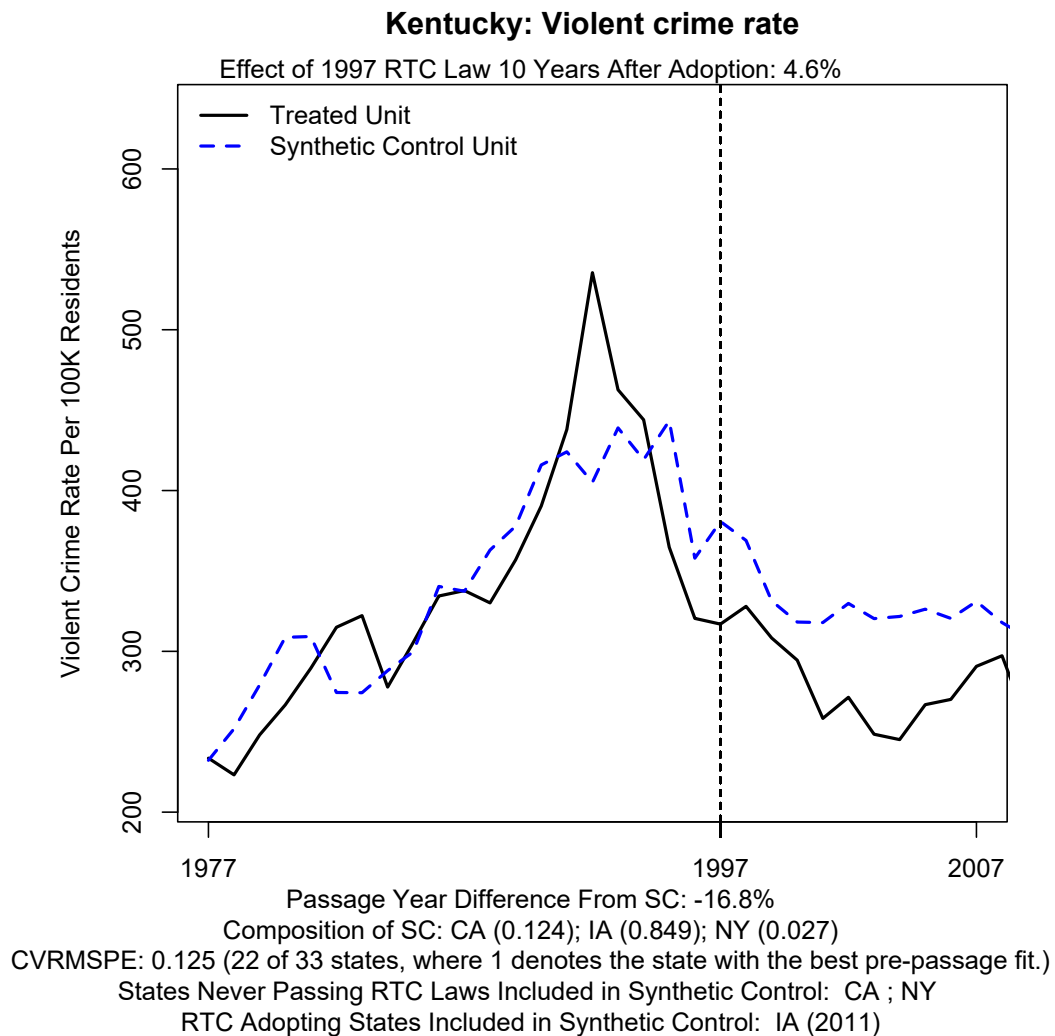


Figure I9

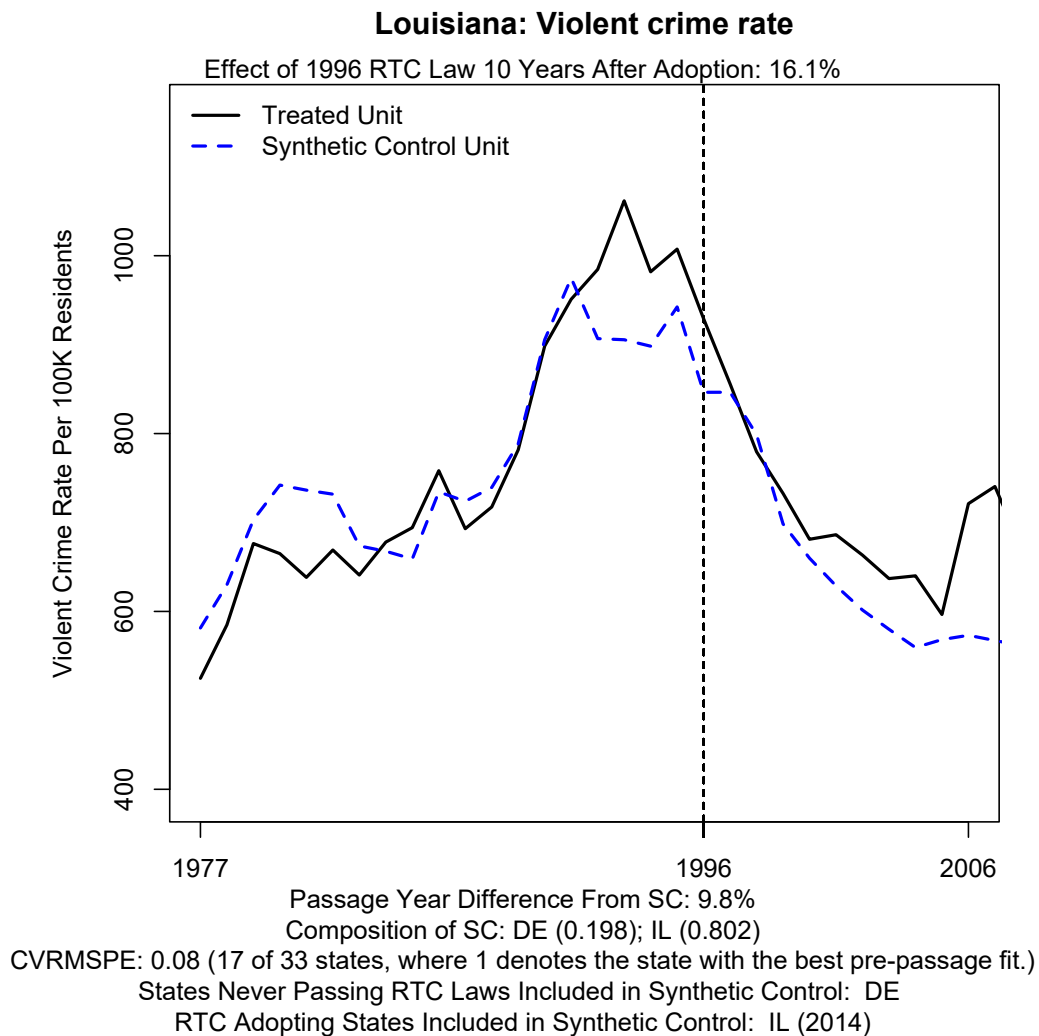


Figure I10



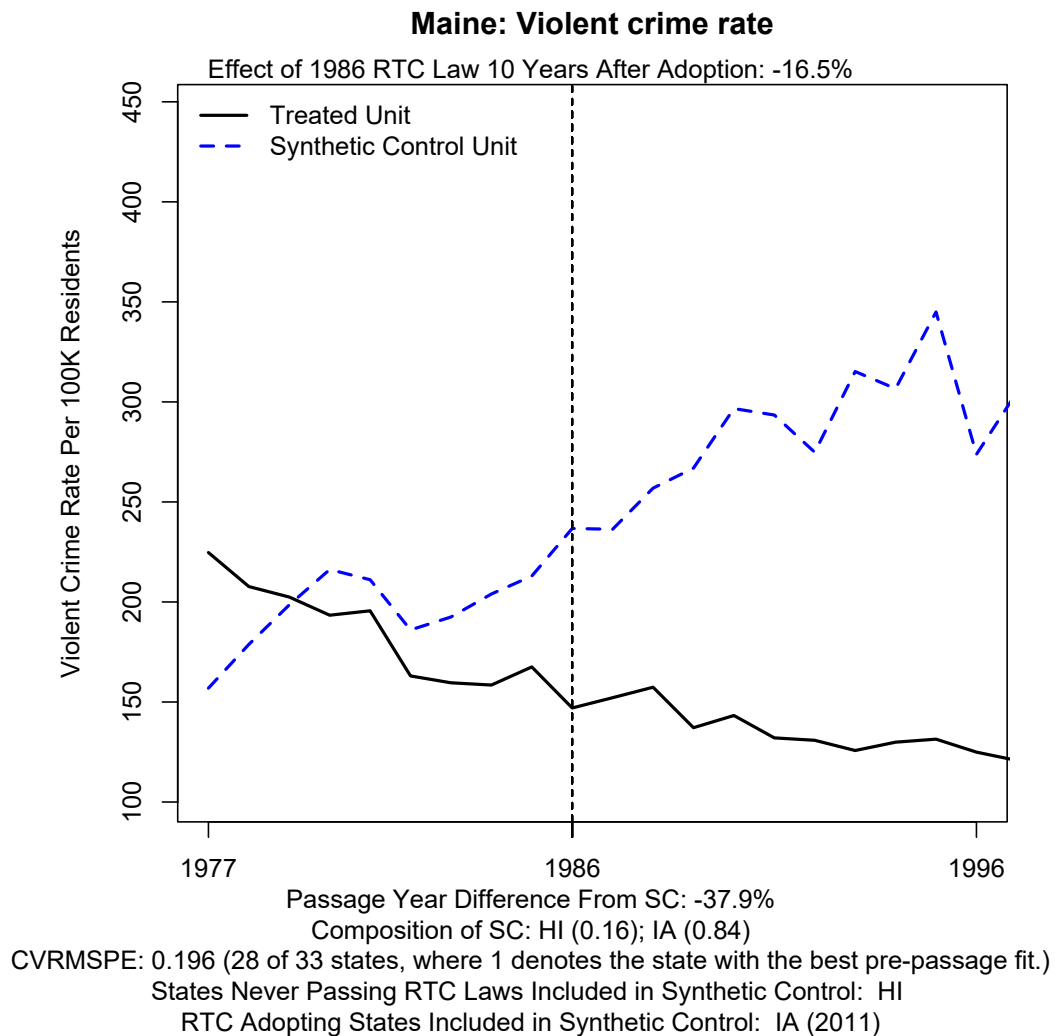


Figure I11

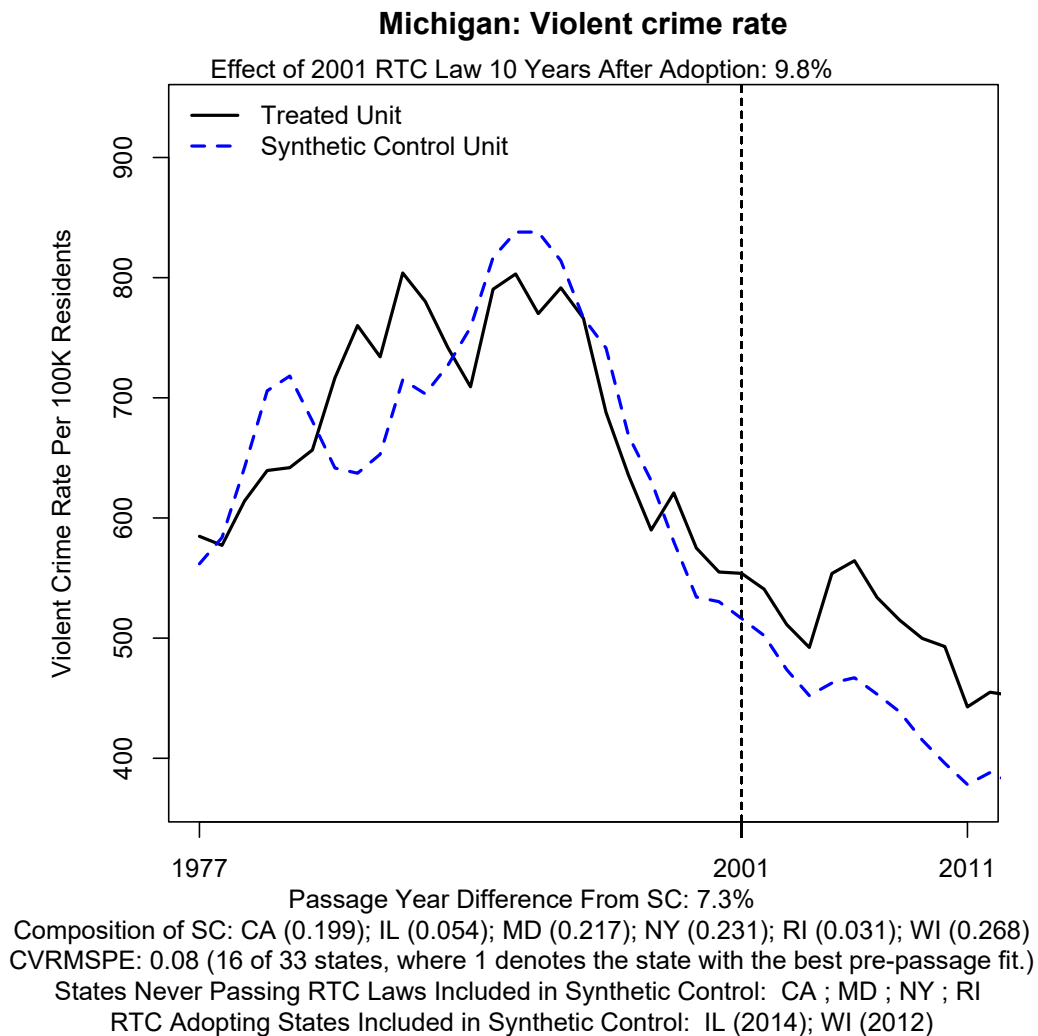


Figure I12

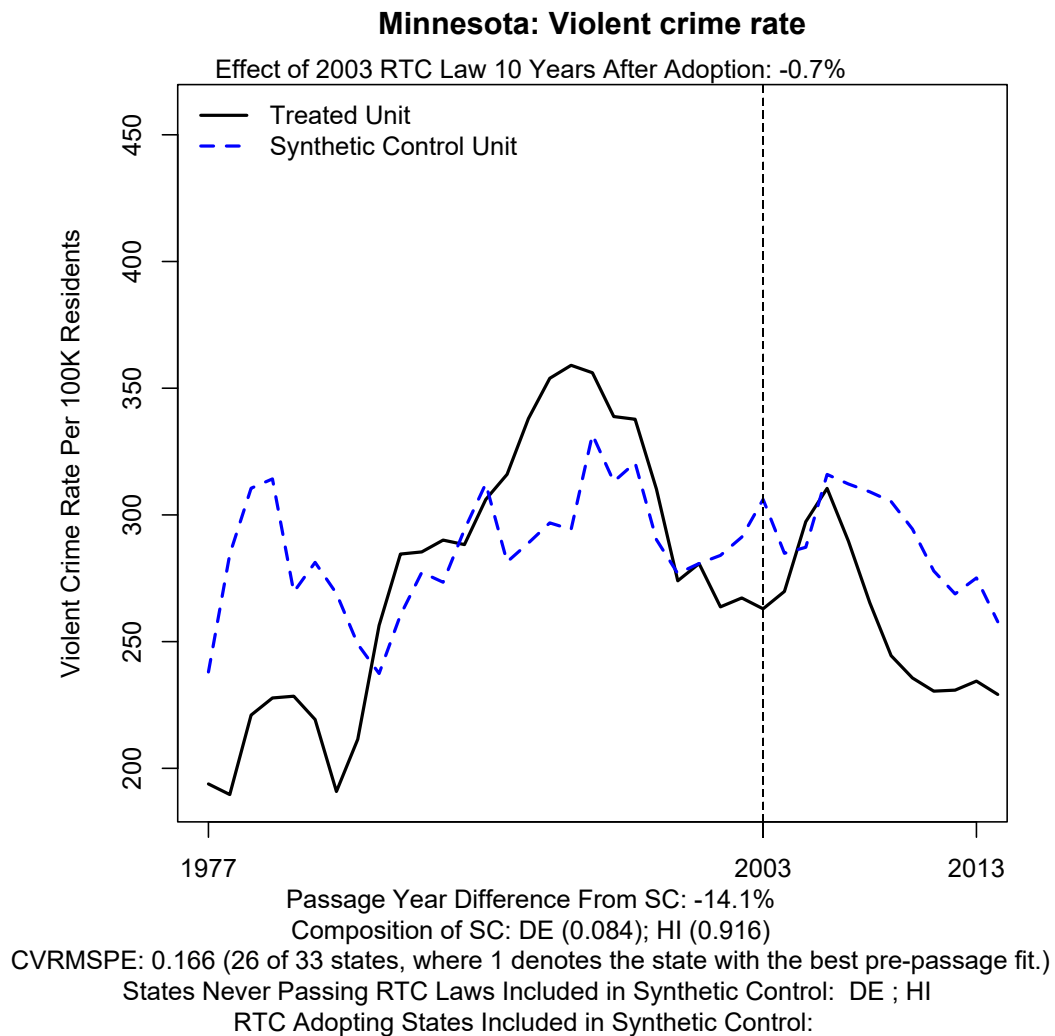


Figure I13

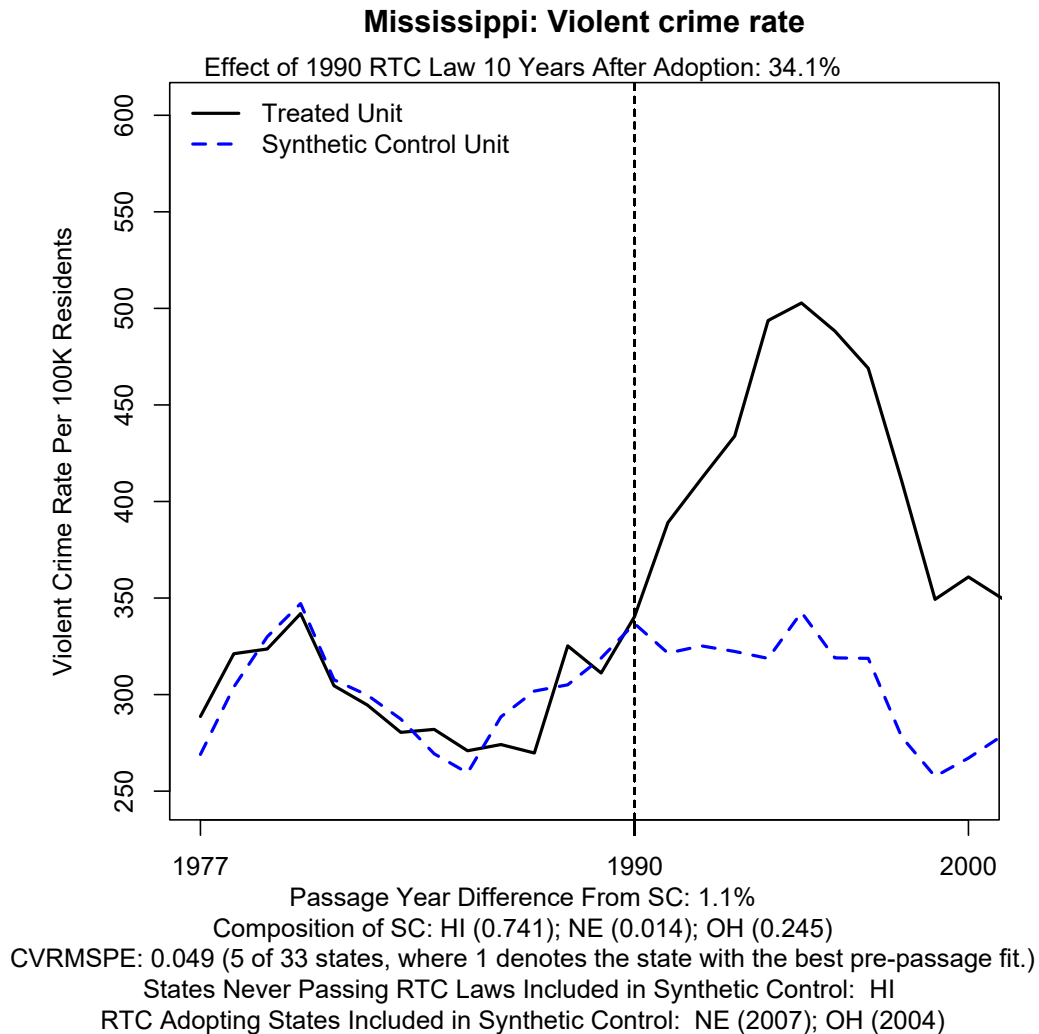


Figure I14

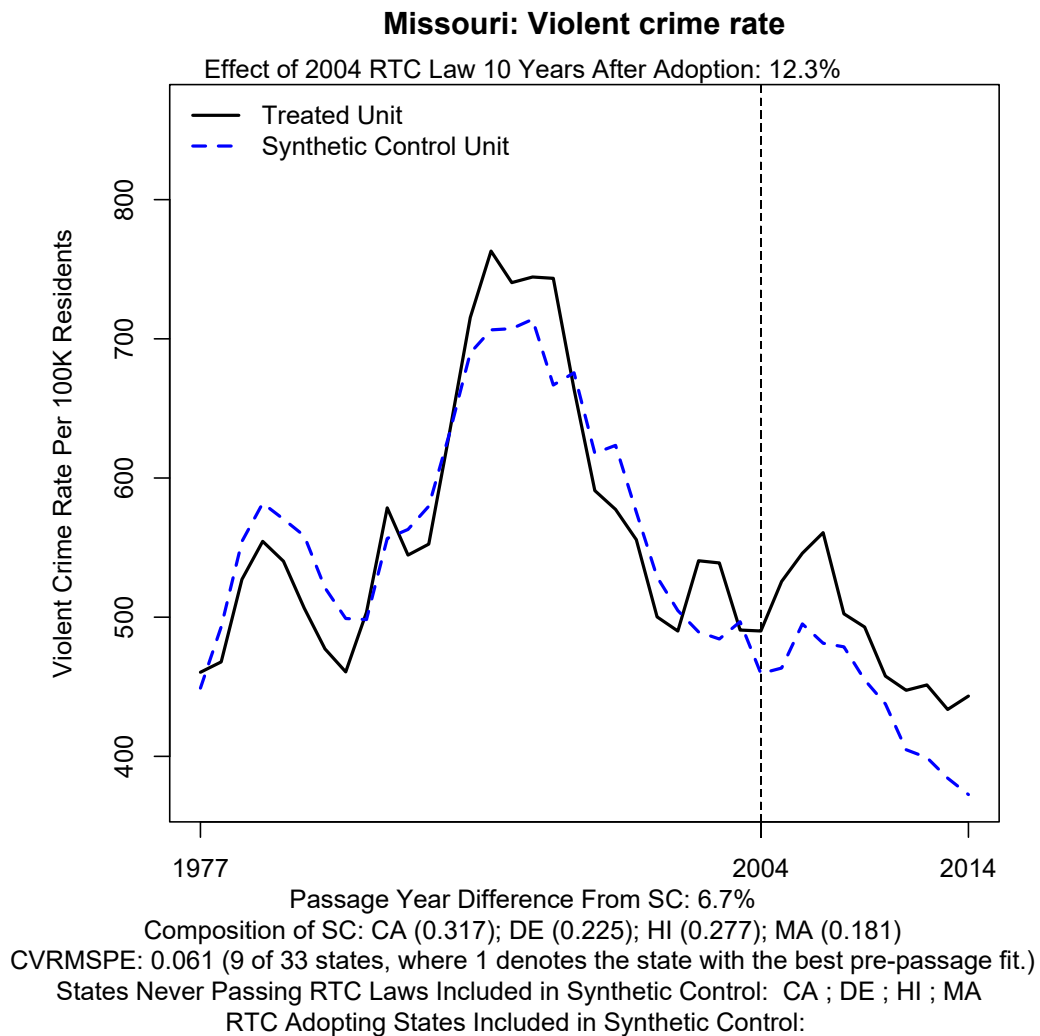


Figure I15

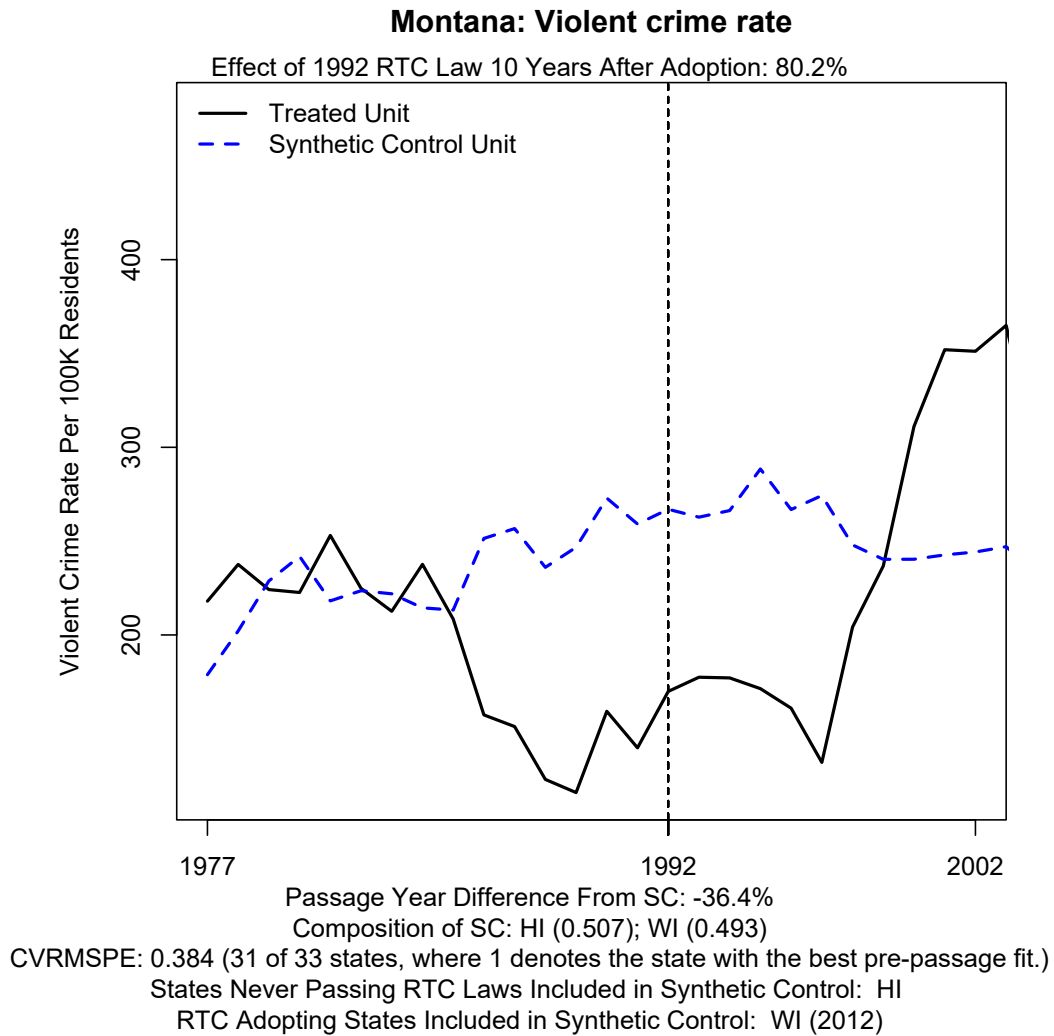


Figure I16



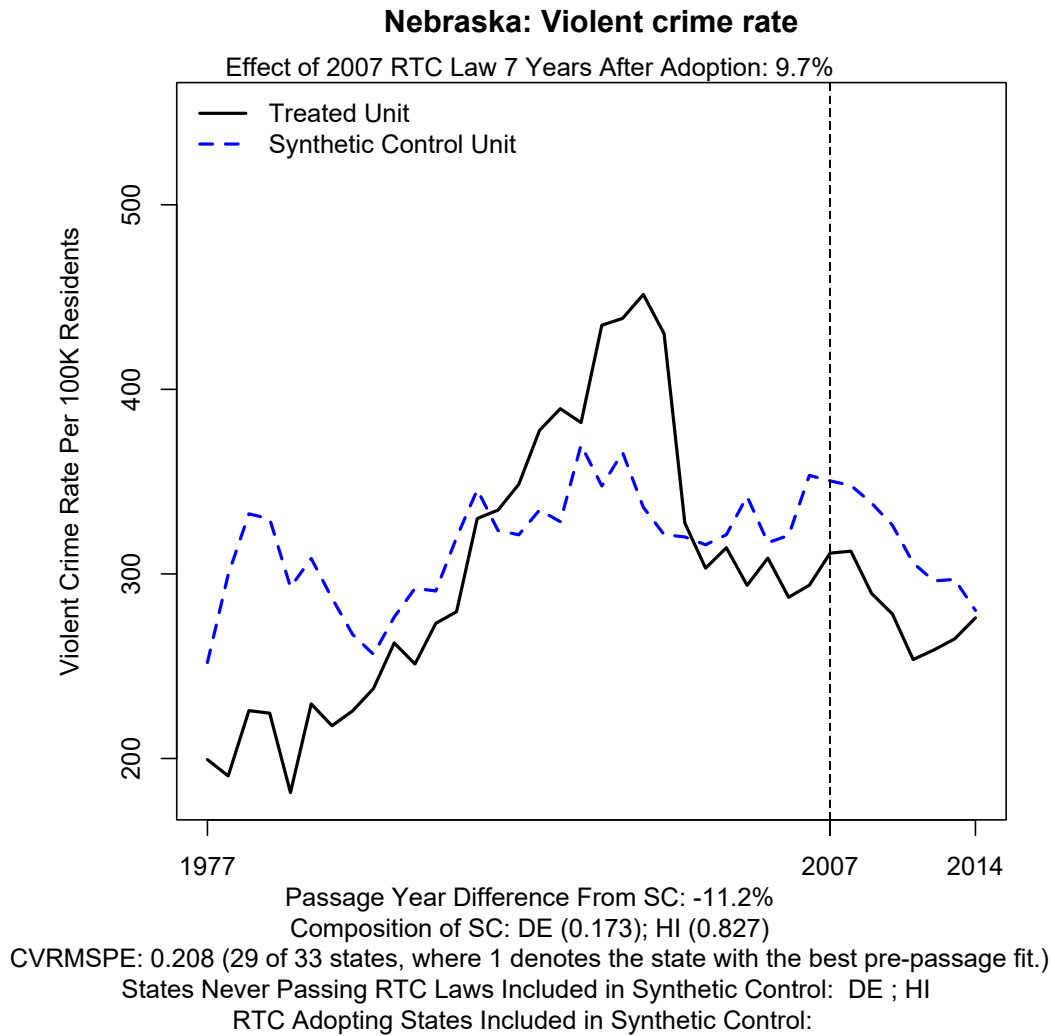


Figure I17

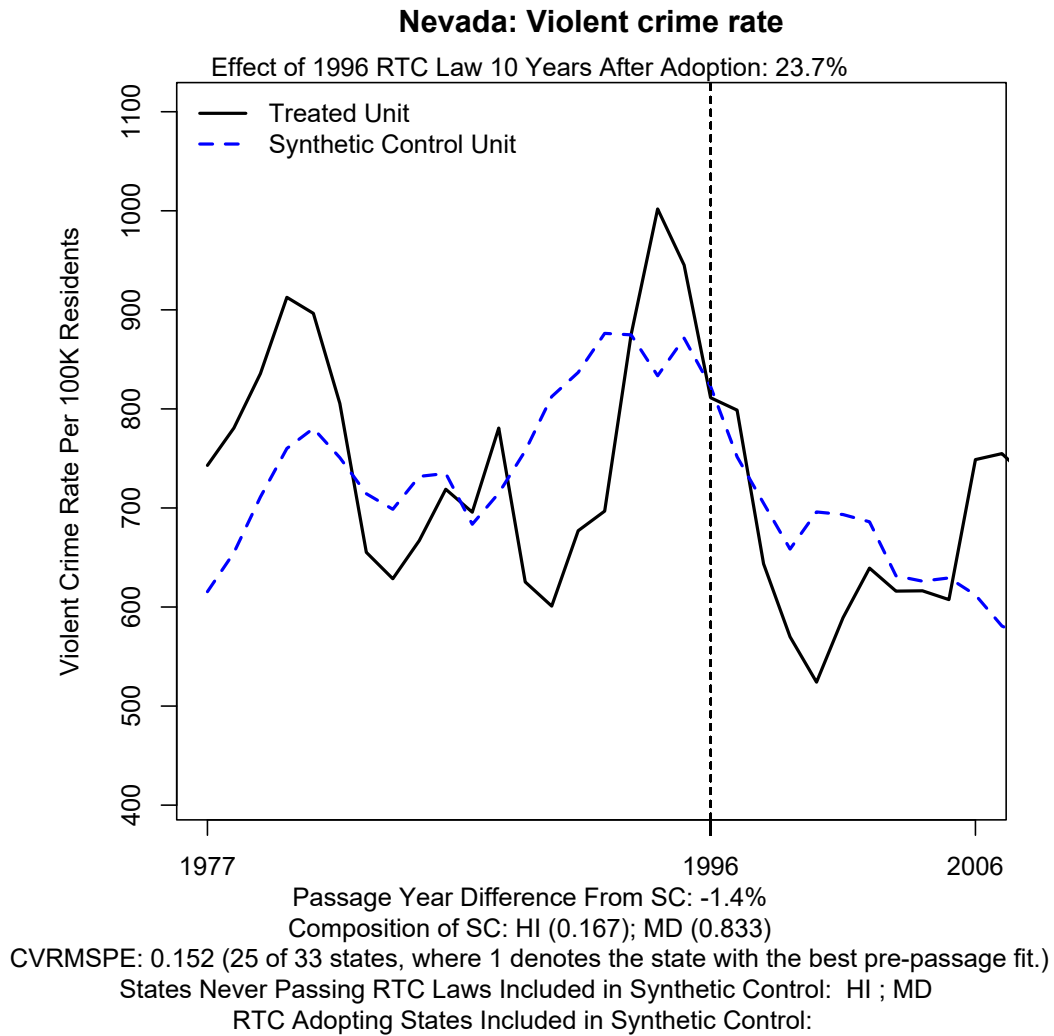


Figure I18

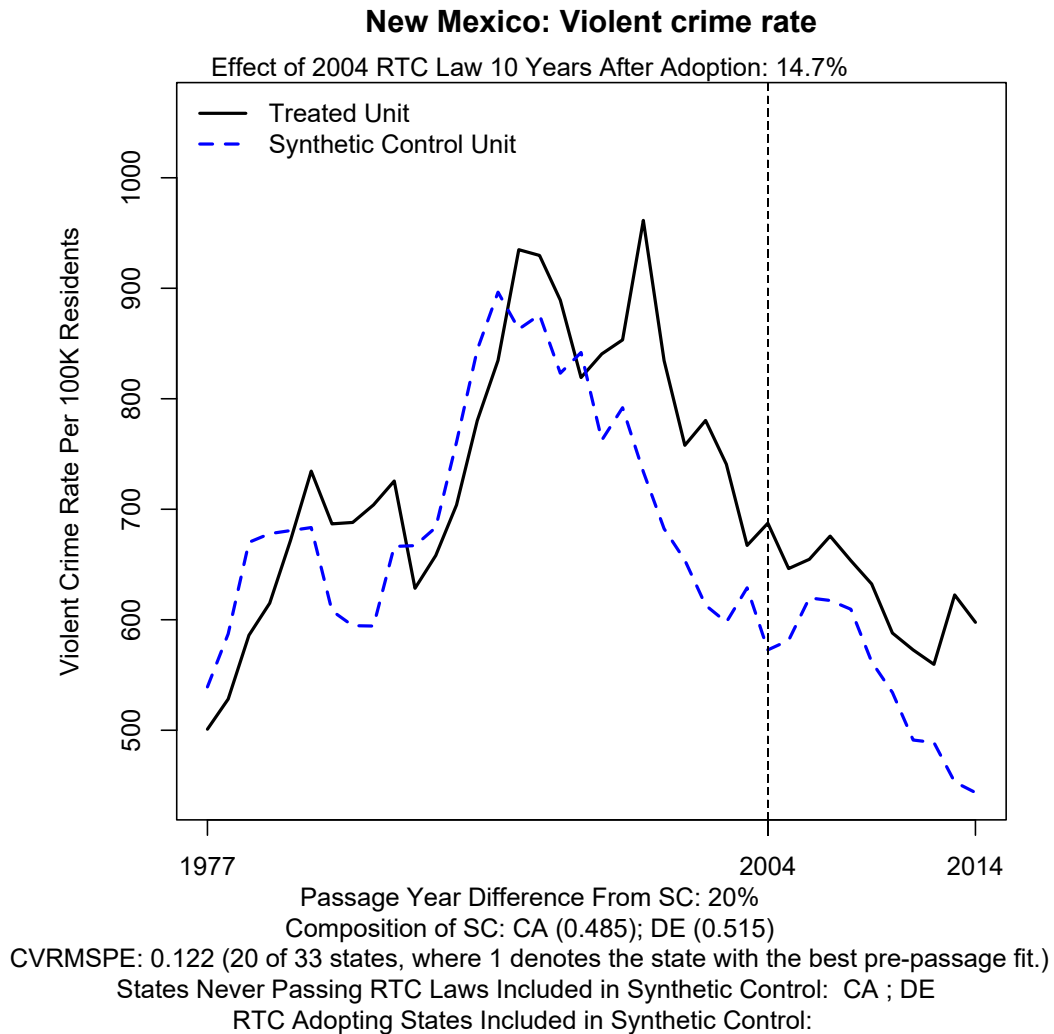


Figure I19

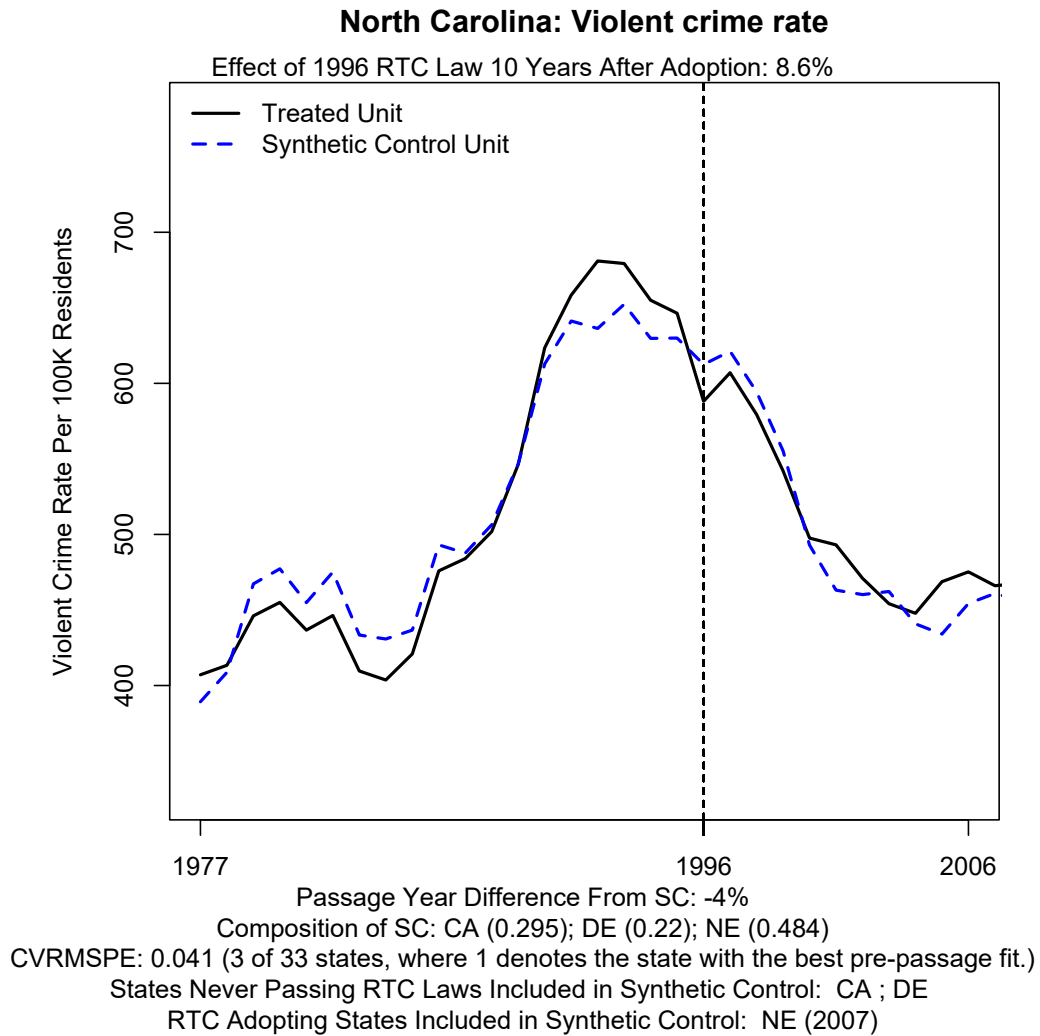


Figure I20

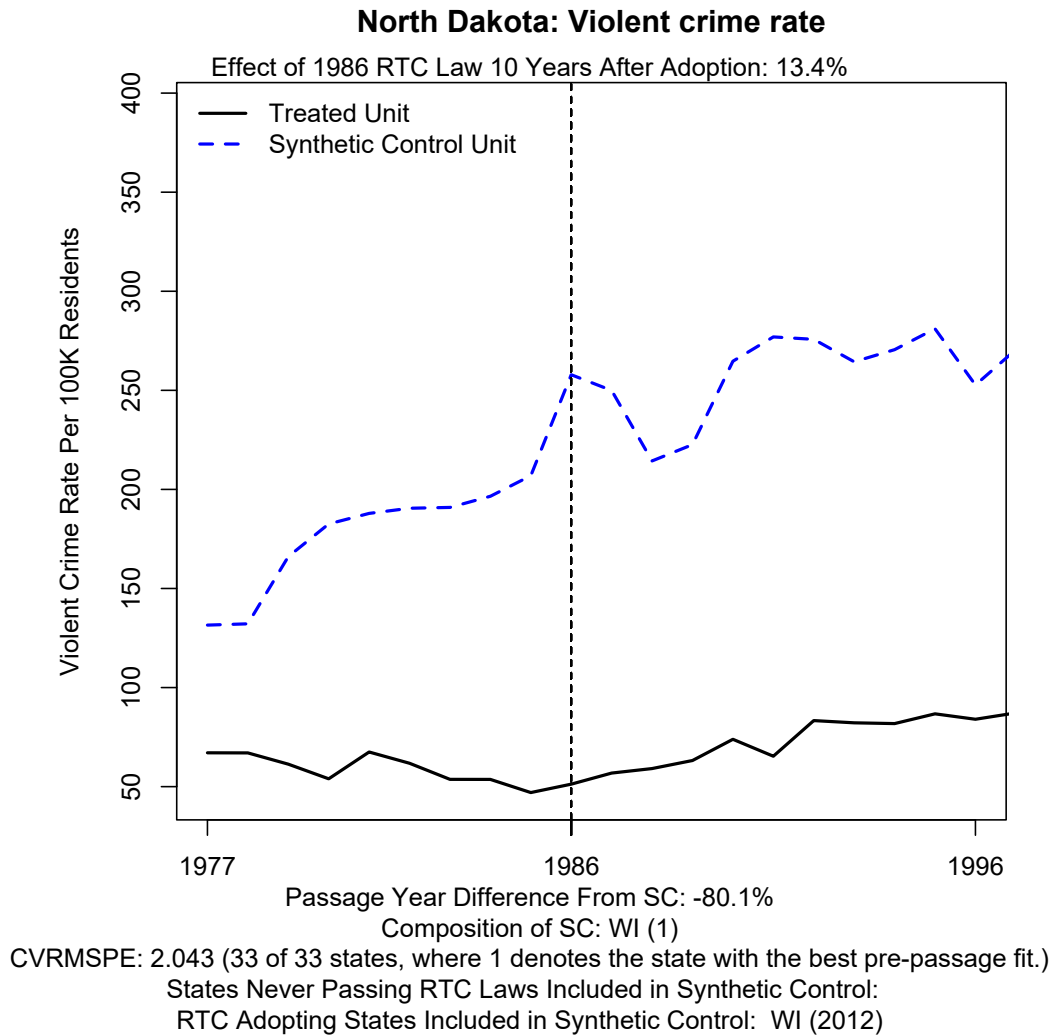


Figure I21

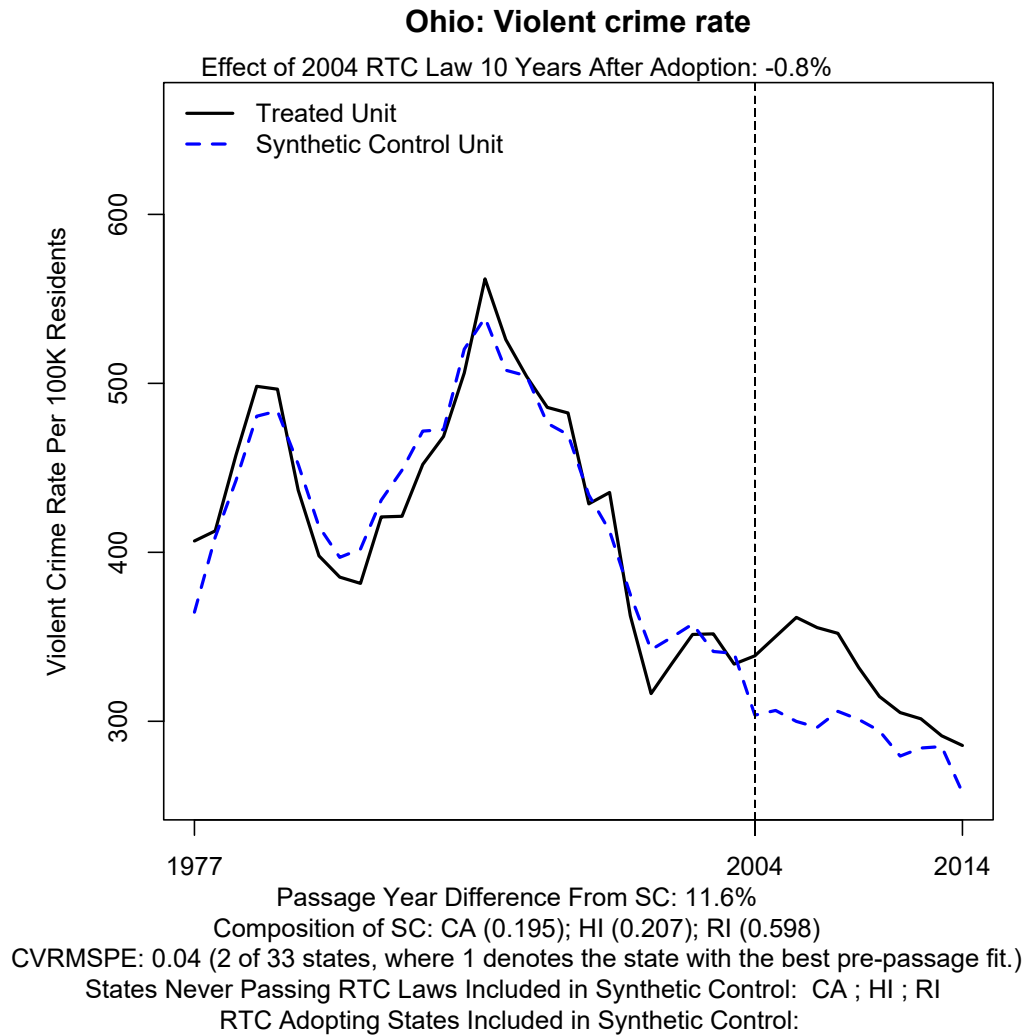


Figure I22



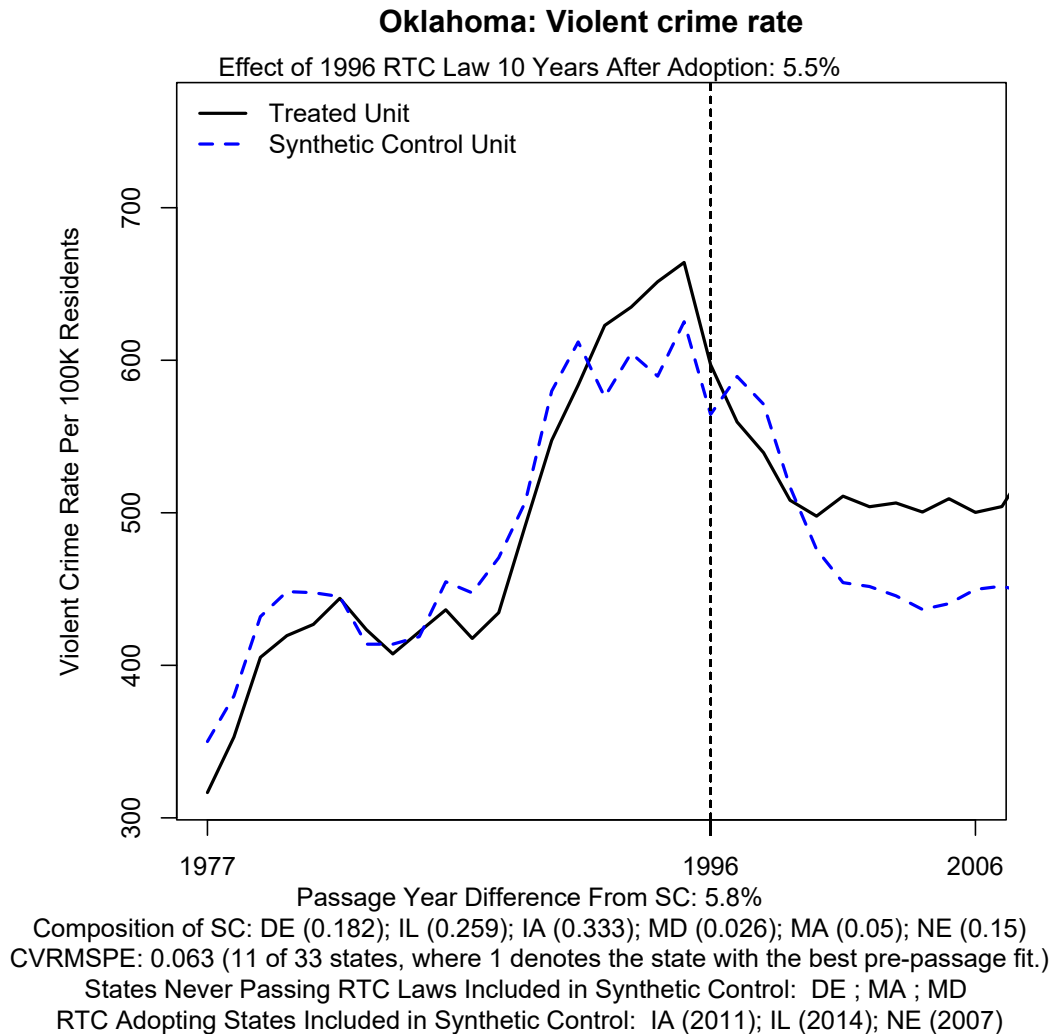


Figure I23

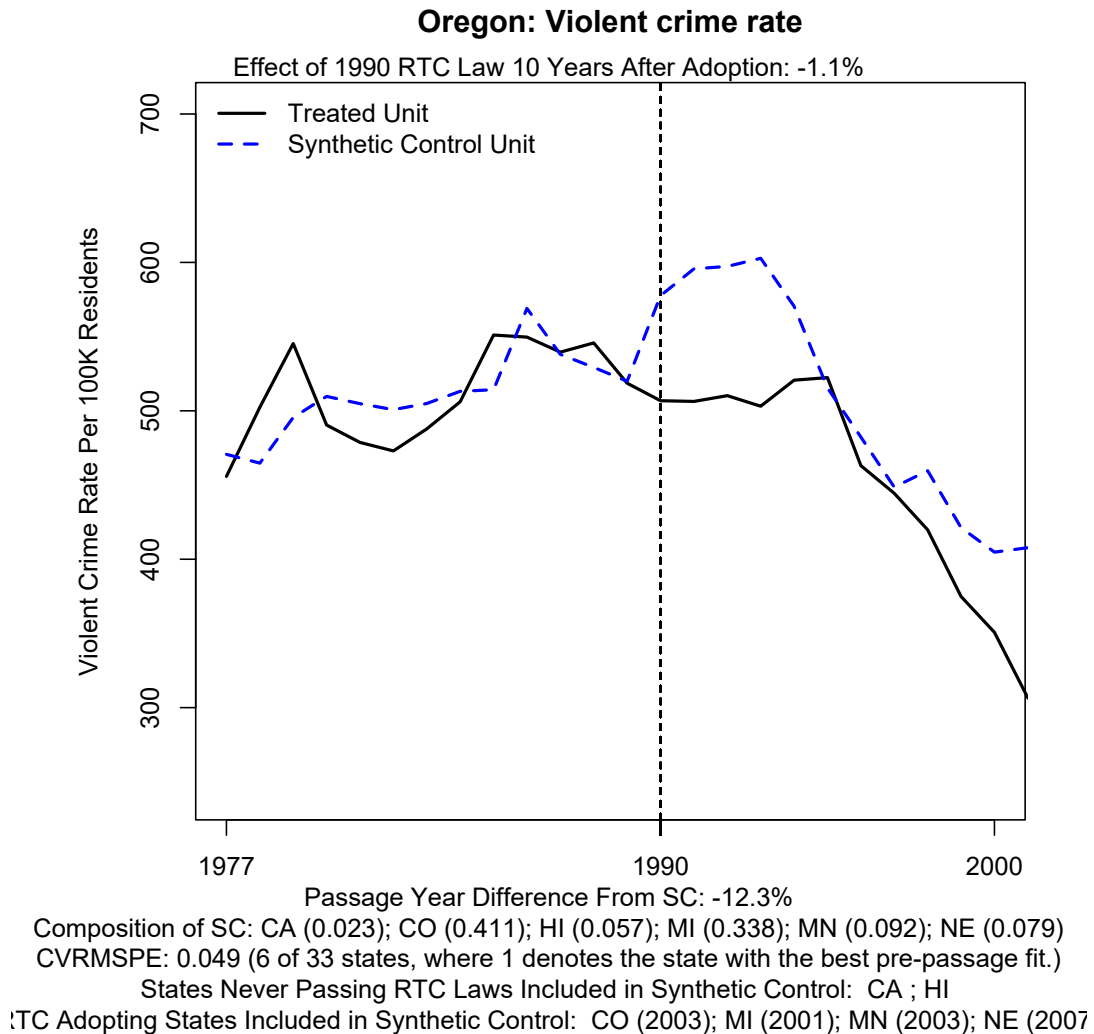


Figure I24

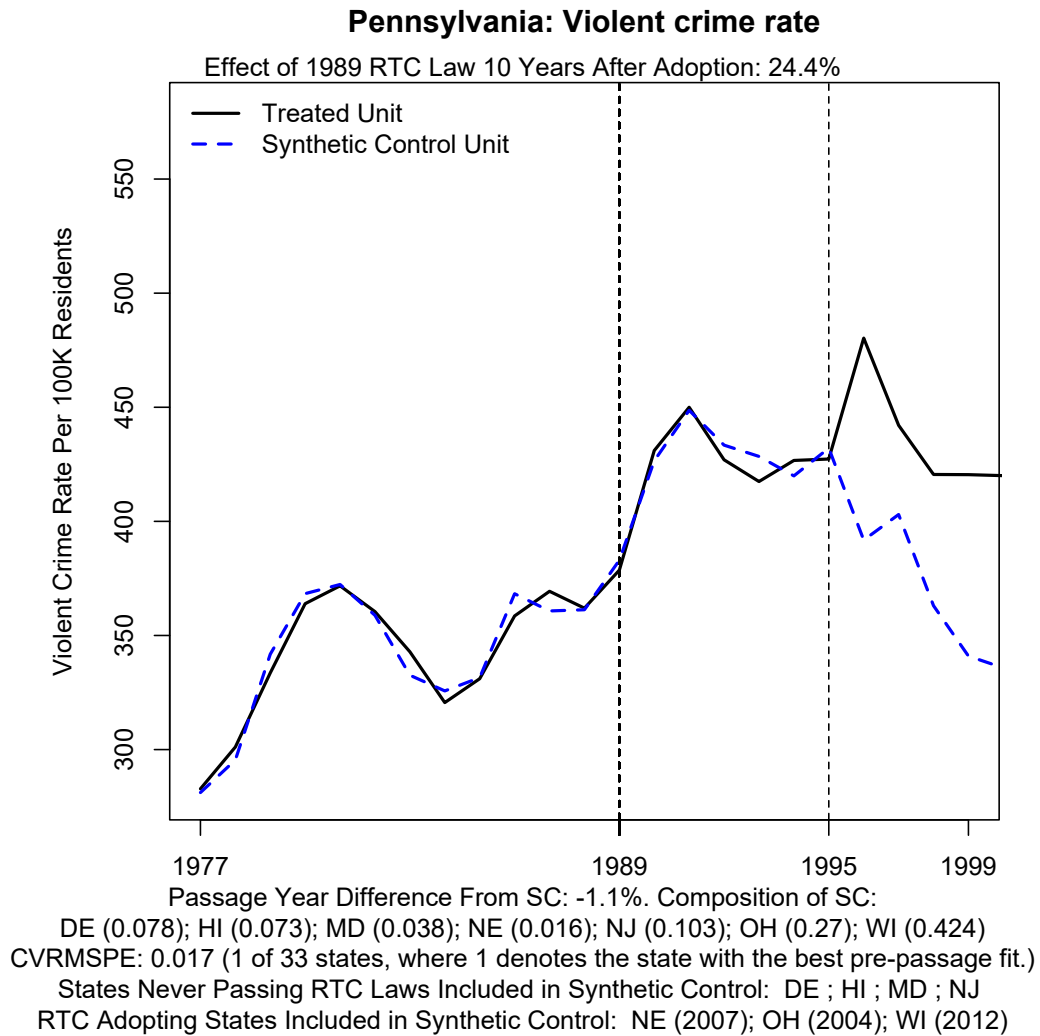


Figure I25

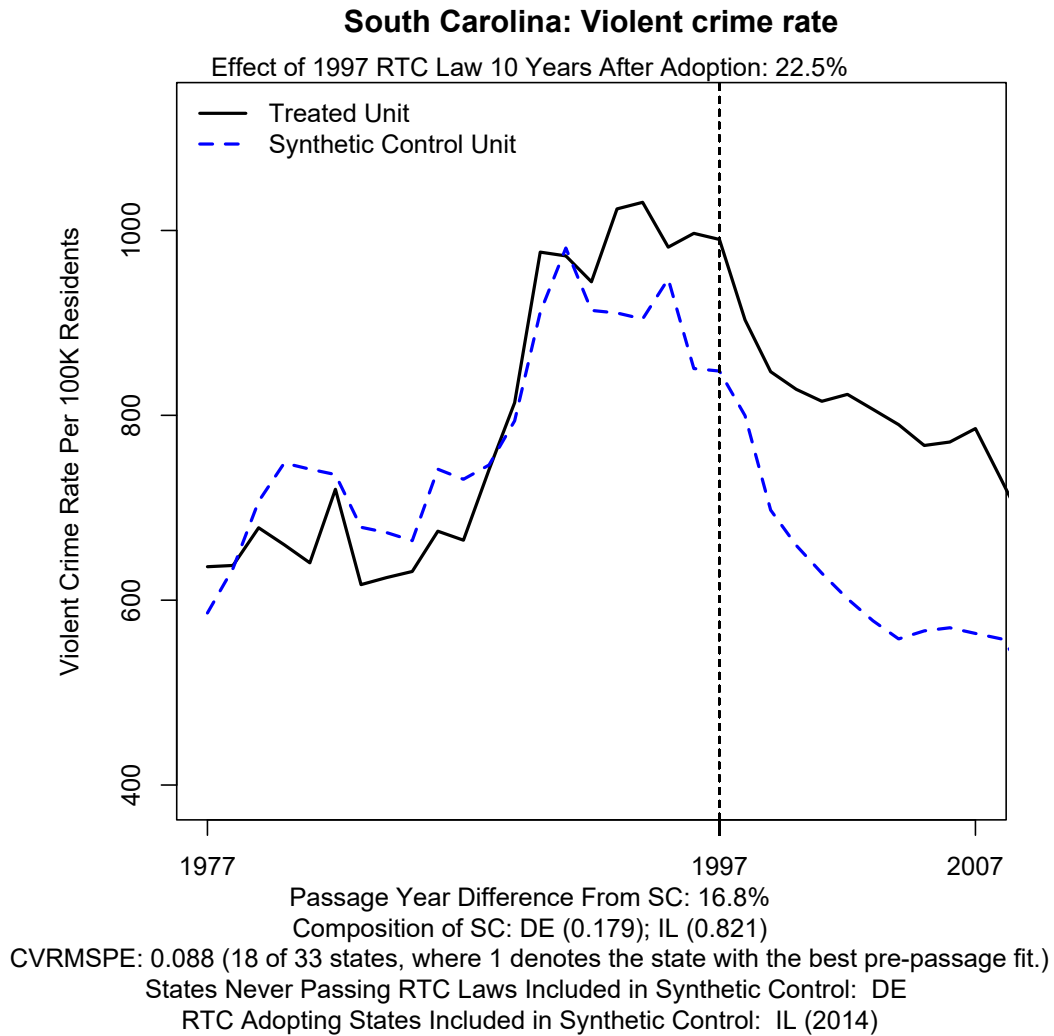


Figure I26

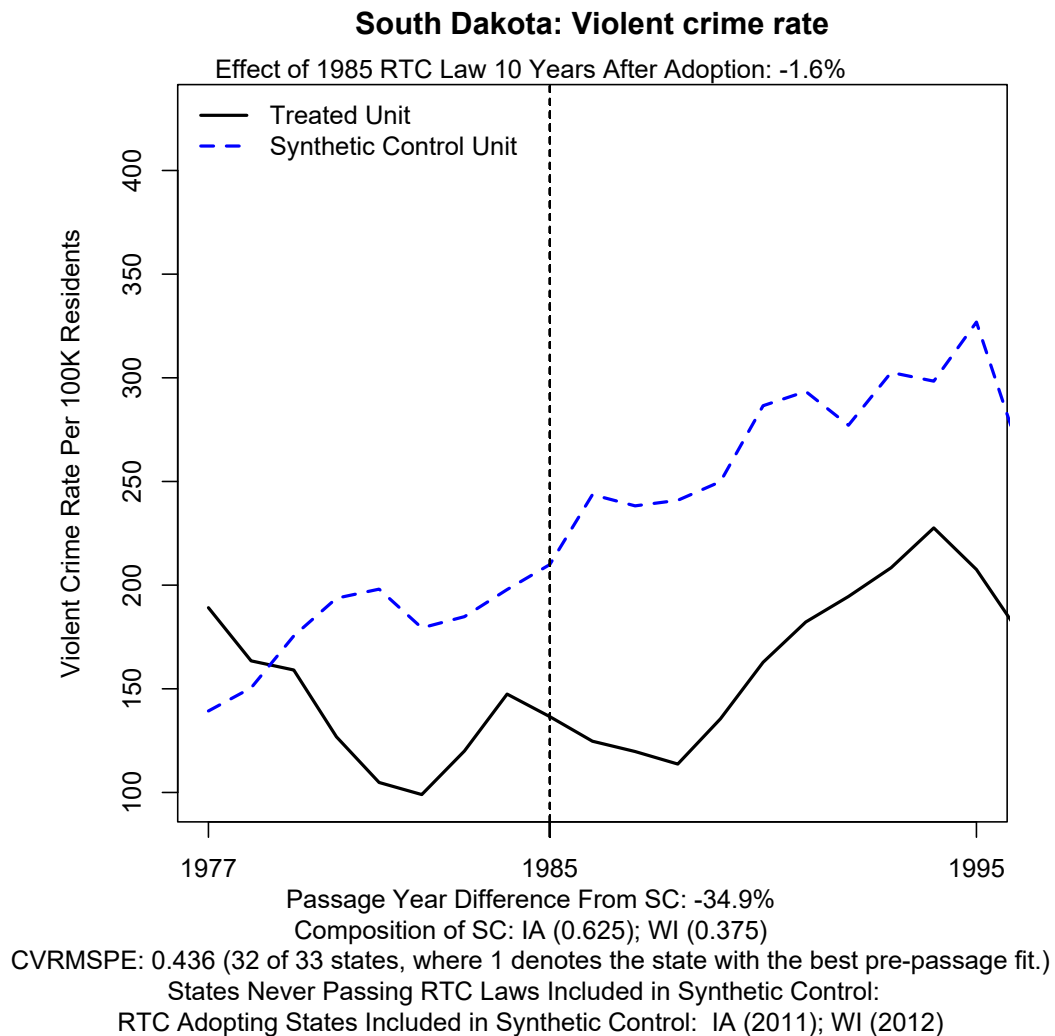


Figure I27

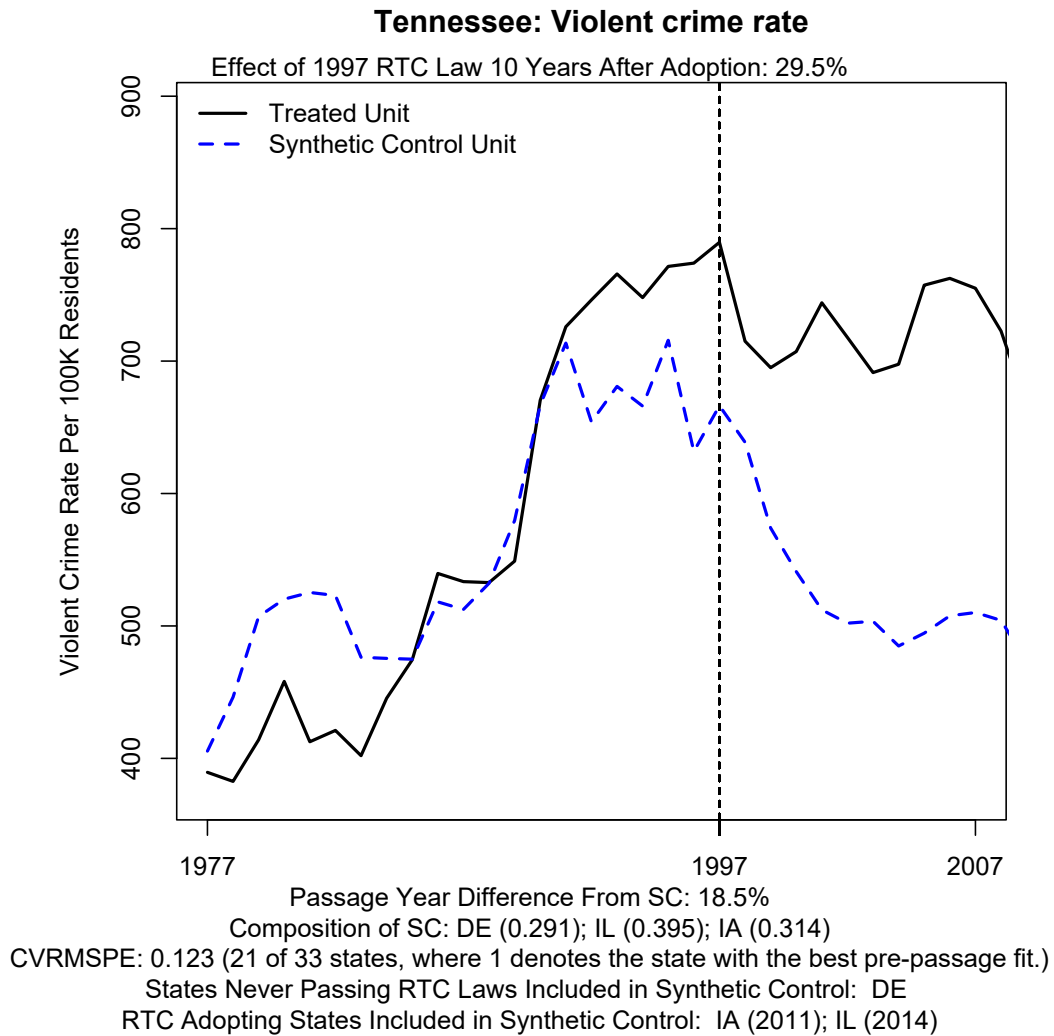


Figure I28



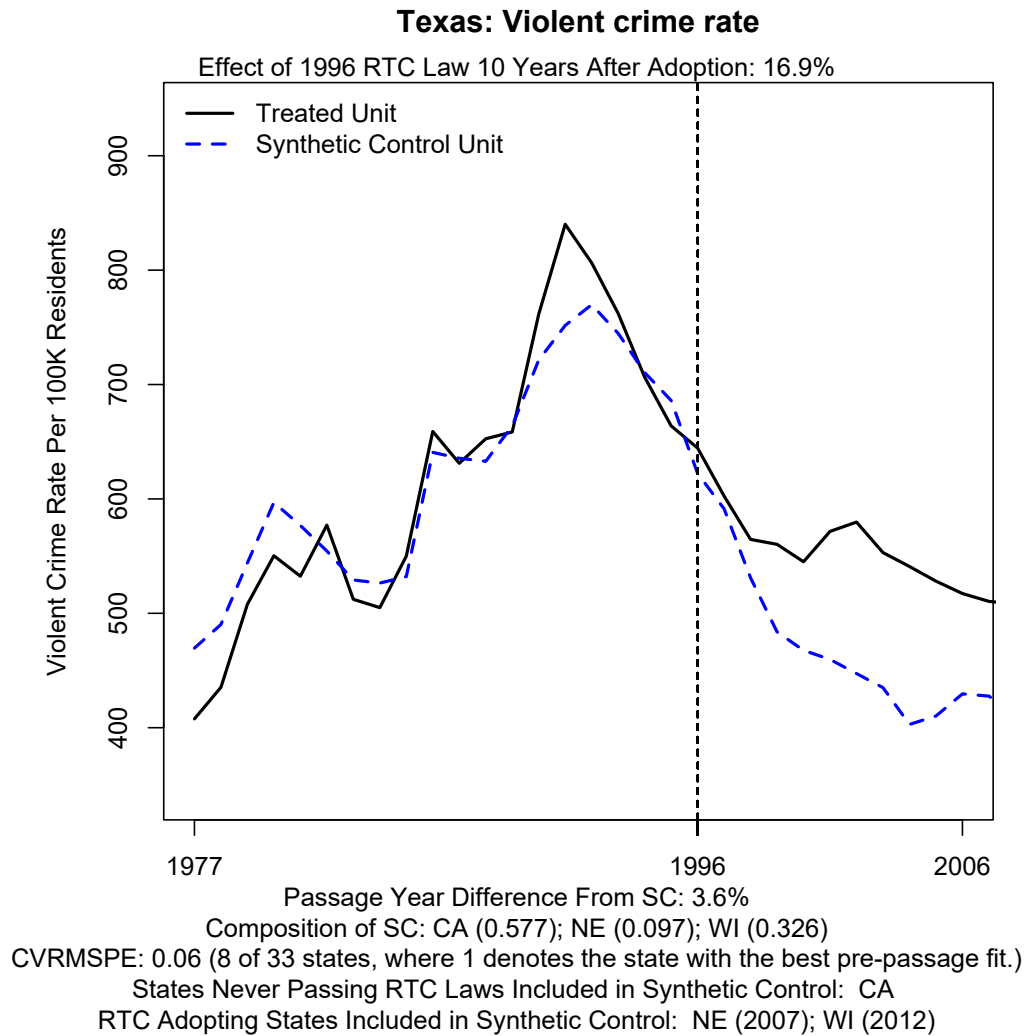


Figure I29

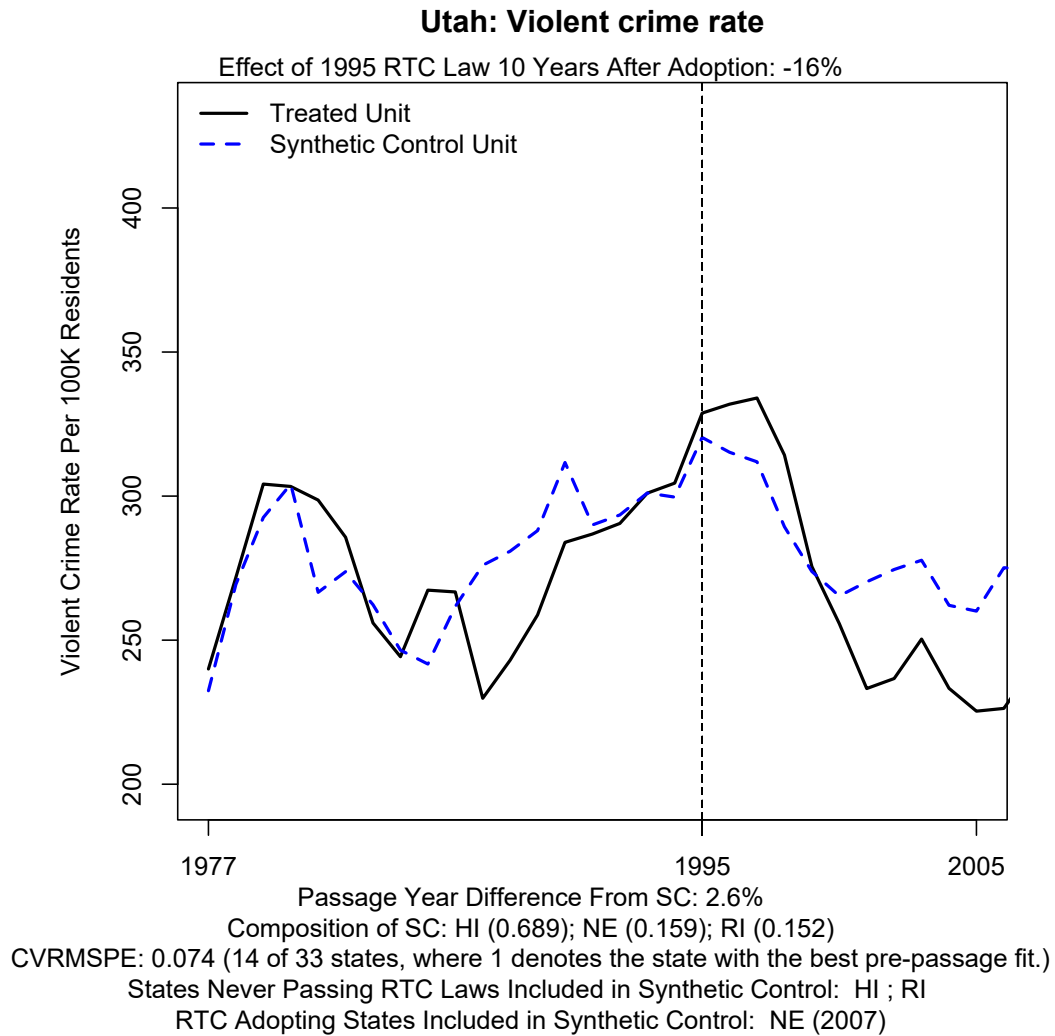


Figure I30

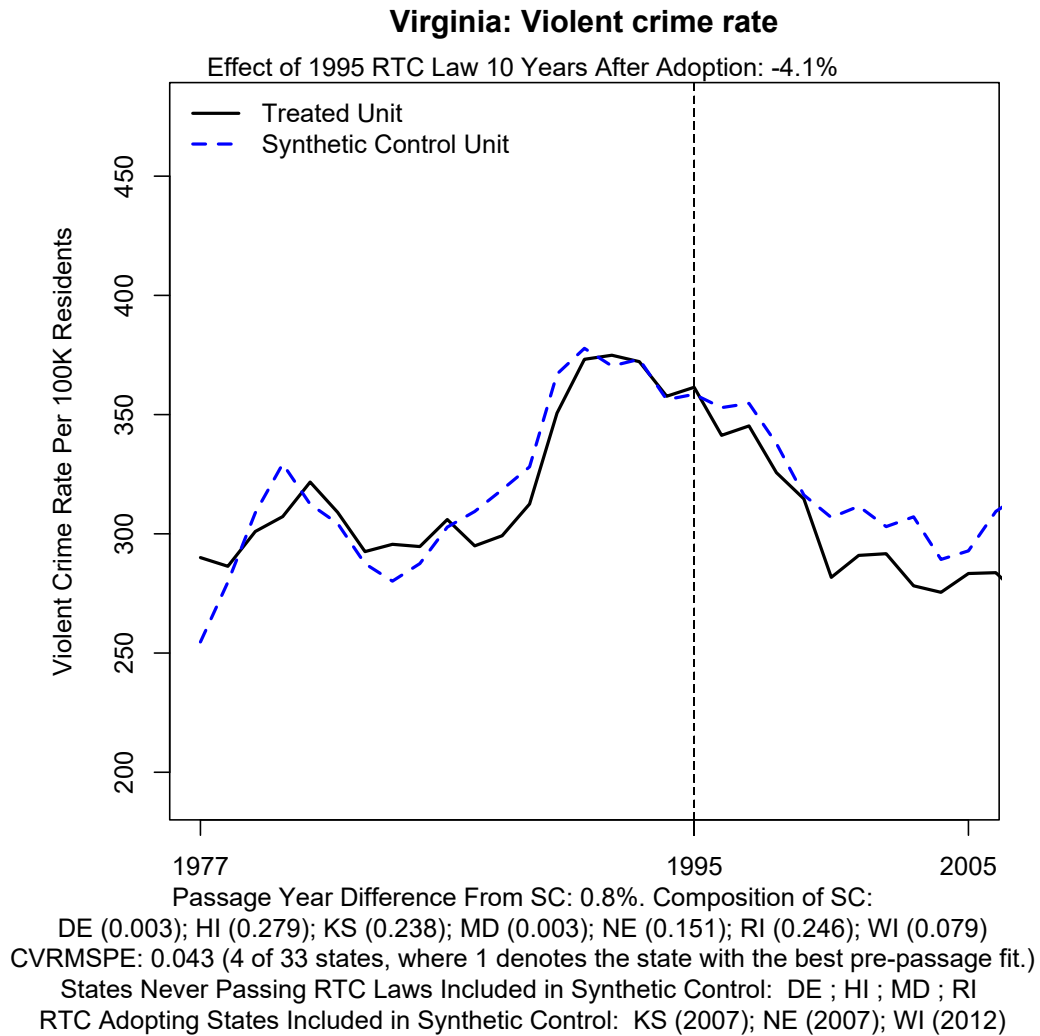


Figure I31

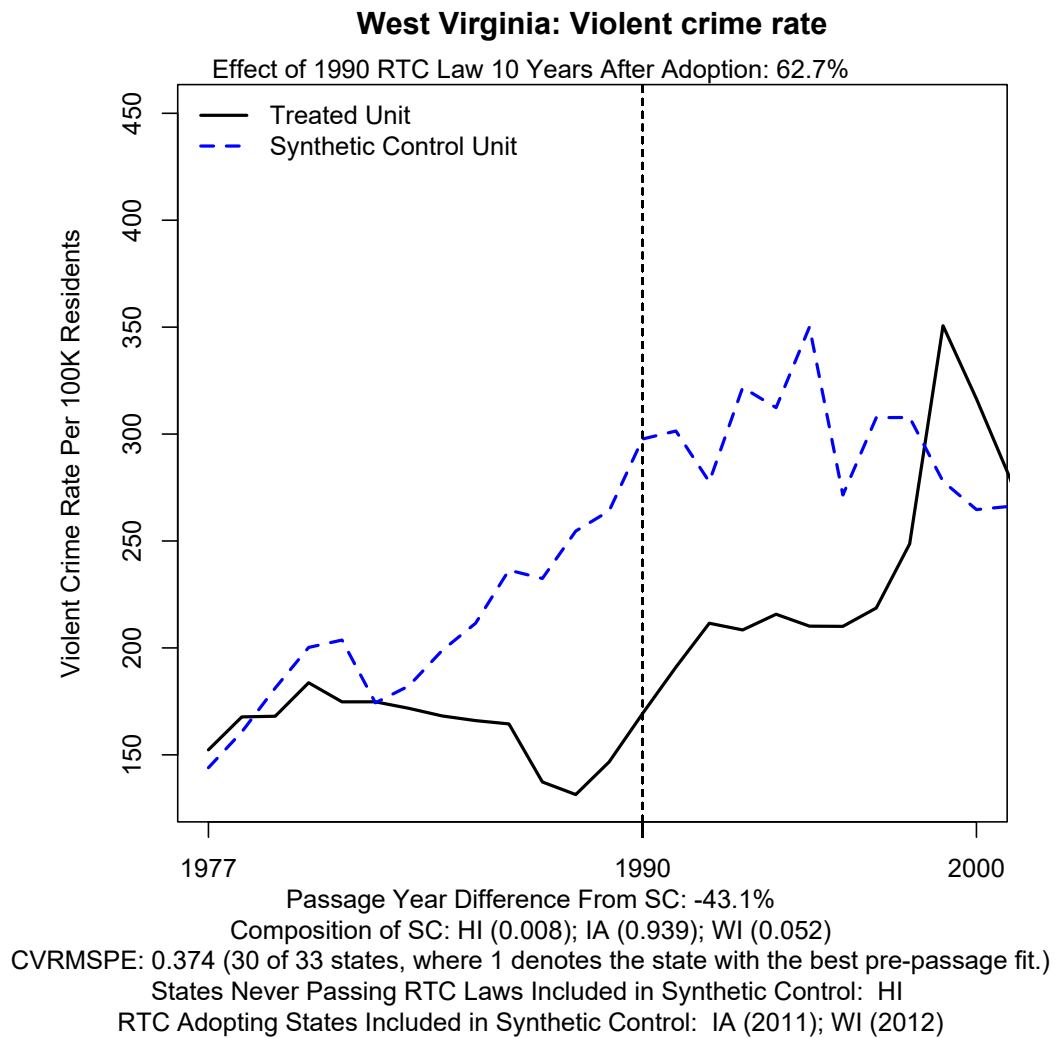


Figure I32

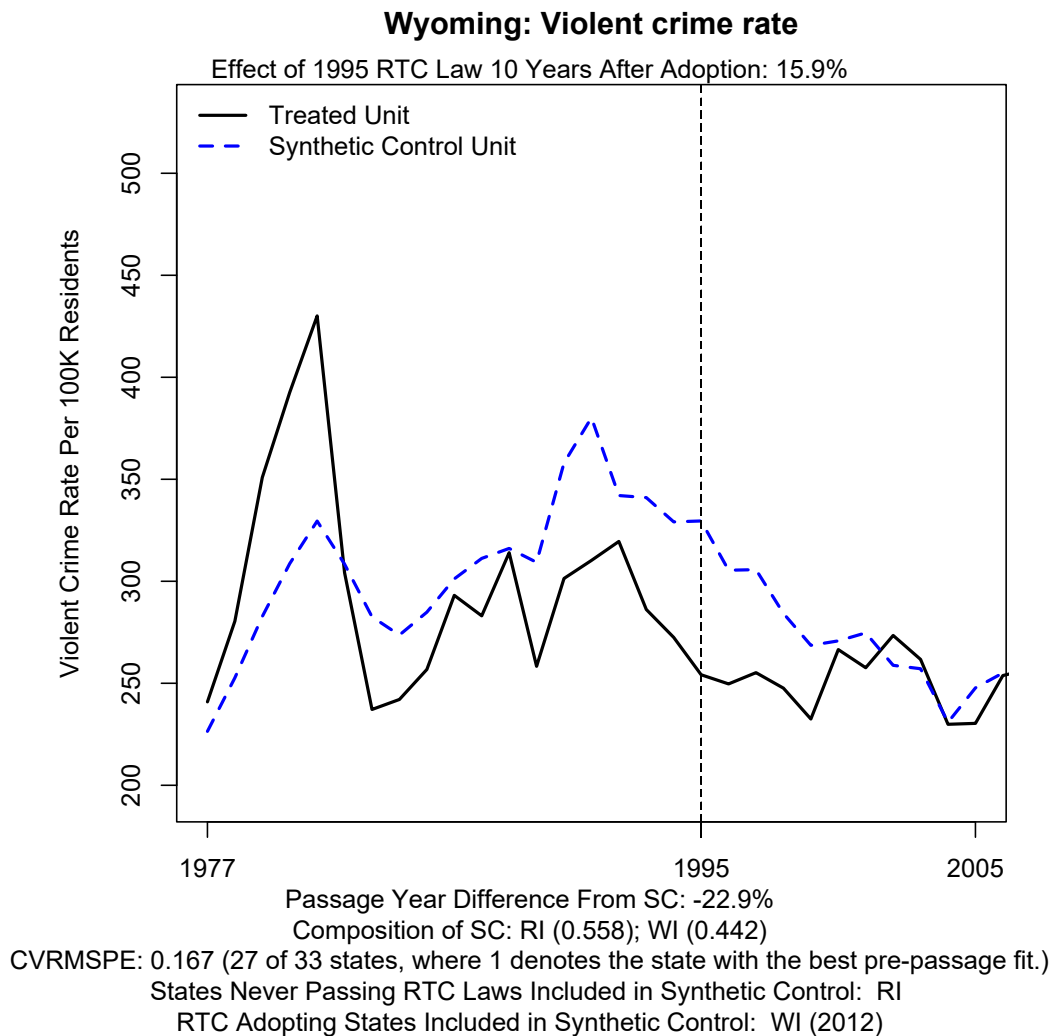


Figure I33

## Appendix J: Data Sources

| <i>Variable(s)</i>                               | <i>Years Available</i> | <i>Source</i>              | <i>Model(s)</i> | <i>Notes</i>                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|------------------------|----------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RTC variables<br>( <i>shall</i> & <i>after</i> ) | 1977-2014              | State session laws         | DAW, LM         | Statutes researched via Westlaw and HeinOnline. See footnote 35 for explanations of these variables' constructions. Note that the spline variable is coded as 0 in all years for states that passed before the data period, which depends on the model under consideration. For example, for the DAW model (1979-2014), it is coded as 0 for states that passed before 1979. |
| Crime                                            | 1977-2014              | FBI                        | DAW, LM         | UCR Data Tool for data through 2013; Table 4 of 2015 crime report for data in 2014. Each crime rate is the corresponding crime count, divided by the population metric used by the FBI, times 100,000.                                                                                                                                                                       |
| Police staffing                                  | 1977-2014              | FBI                        | DAW             | Agency-year-level police employment data were acquired from the FBI and aggregated to the state-year level. The police employee rate is the total number of employees, divided by the population as given in the same dataset.                                                                                                                                               |
| Population                                       | 1977-2014              | Census                     | DAW, LM         | Intercensal estimates are used, except in 1970 and 1980, for which decadal-census estimates are used. The DAW model weights regressions by population; the LM also includes it as a covariate.                                                                                                                                                                               |
| Population by age, sex, and race                 | 1977-2014              | Census                     | DAW, LM         | Intercensal estimates are used.                                                                                                                                                                                                                                                                                                                                              |
| Income metrics                                   | 1977-2014              | BEA                        | DAW, LM         | Includes personal income, unemployment insurance, retirement payments and other, and income maintenance payments. All 4 measures are divided by the CPI to convert to real terms.                                                                                                                                                                                            |
| Consumer price index                             | 1977-2014              | BLS                        | DAW, LM         | CPI varies by year but not by state.                                                                                                                                                                                                                                                                                                                                         |
| Incarceration                                    | 1977-2014              | BJS                        | DAW             | The number of prisoners under the jurisdiction of a state as a percentage of its intercensal population.                                                                                                                                                                                                                                                                     |
| Land area                                        | 1977-2014              | Census                     | LM              | Land area over a given decade is taken from the most recent decadal Census. The density variable is intercensal population divided by land area.                                                                                                                                                                                                                             |
| Poverty rate                                     | 1979-2014              | Census                     | DAW             | The Census directly reports the percentage of the population earning less than the poverty line.                                                                                                                                                                                                                                                                             |
| Unemployment rate                                | 1977-2014              | BLS                        | DAW, LM         |                                                                                                                                                                                                                                                                                                                                                                              |
| Arrests                                          | 1977-2014              | FBI                        | LM              | Agency-month-year-level arrests data, separated by age, sex, race, and crime category, were acquired from the FBI and aggregated by state-year. For each crime category, the arrest rate is the number of arrests for that crime as a percentage of the (UCR-reported) number of crimes.                                                                                     |
| Beer                                             | 1977-2015              | NIH                        | DAW             | The NIH reports per-capita consumption of ethanol broken down by beverage type, including beer.                                                                                                                                                                                                                                                                              |
| Population in metropolitan statistical areas     | 1977-2014              | Census / NBER, FBI / ICPSR | DAW             | 1977-1980: Intercensal estimated population in counties that at least overlapped with an MSA in 1980. 1981-2014: Obtained from ICPSR-provided UCR arrests data.                                                                                                                                                                                                              |

All variables are at the state-year level unless otherwise noted. Variable creation scripts are available from the authors upon request.



## **Appendix K: Methodology to Choose the Number of Lags of the Dependent Variable to Include as Predictors in Synthetic Control**

The prior synthetic control literature has used five different approaches concerning the inclusion of the dependent variable in selecting the best synthetic control: 1) lags of the dependent variable in every pre-treatment year, 2) three lags of the dependent variable,<sup>86</sup> 3) the average of the dependent variable in the pre-treatment period, 4) the value of the dependent variable in the year prior to RTC adoption, and 5) no lags of the dependent variable.<sup>87</sup> To choose the optimal approach among these five options, we use the following cross-validation procedure with overall violent crime rate as the dependent variable: we first define our training period as 1977 through the sixth year prior to RTC adoption, the validation period as the fifth year prior to RTC adoption through one year prior to RTC adoption, and the full pre-treatment period as 1977 through one year prior to RTC adoption. We then use data from the training period to determine the composition of the synthetic control (essentially acting as if the RTC law were adopted five years earlier than it was). Specifically, for each of the 33 treatment units, we assign the treatment five years before the treatment actually occurred, and then run the synthetic control program using the standard DAW predictors and a five year reporting window. We then examine the fit during the training period, the validation period, and the entire pre-treatment period to see how closely for each of our five lag options the synthetic control estimate matches each adopting state's violent crime time-series.

Tables K1-K3 (Panel A) compare the fit of the five synthetic control estimates during the training period, validation period, and the entire pre-treatment period using three different loss functions. Table K1 defines the error using the mean squared error between the actual value of the dependent variable and the synthetic control estimate during a given period; Table K2 uses the mean of the absolute value of this difference between the actual value and synthetic control estimate; finally, Table K3 uses the CV of the RMSPE. For Tables K1-K3, an unweighted average of the error for each of the 33 treatment states is presented. For Tables K4-K6 (Panel B) a population-weighted average of the error for each of the 33 treatment states is presented, where population from the first year of the relevant period is used.<sup>88</sup>

The results from Tables K1-K6 provide strong evidence that using yearly lags of the depen-

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<sup>86</sup>In the three-lag model, the first lag is the value of the dependent variable in 1977, the second lag is the value of the dependent variable in the year prior to RTC adoption, and the third lag is the value of the dependent variable in the year that is midway between the year corresponding to the first and second lag.

<sup>87</sup>The first choice is used, for example, in Bohn, Lofstrom, and Raphael (2014), the second choice is used by Abadie, Diamond, and Hainmueller (2010), and the third and fourth choices are suggested by Kaul et al. (2016).

<sup>88</sup>The first year of the training and full pre-treatment period is 1977, while the first year of the validation period is the fifth year prior to RTC adoption.

dent variable generates the best fit among the five options. As expected, across all six tables, the error in the *training period* is lowest using yearly lags, regardless of how the error is defined or whether population weights are used to aggregate the measure of error over all treatment states. Additionally, yearly lags provide the lowest error in the *validation period* in four of the six cases, being surpassed only marginally by the one lag average specification twice when using population weights (Tables K4 and K5). Finally, yearly lags have the lowest error in all six tables over the full pre-treatment period.

A potential concern with using all pre-intervention outcomes of the dependent variable as synthetic control predictors is that the synthetic control unit will not closely match the treated unit on the explanatory variables during the pre-treatment period.<sup>89</sup> To explore this issue, we calculated for each DAW variable, state, and year, the absolute percentage difference between the true value of the variable and the value for the corresponding synthetic control across all five lag options. We then average by state and finally average across all RTC-adopting states for each explanatory variable. We then create the ratio of this statistic using a particular lag choice to the average of this statistic across all five lag choices. This ratio allows us to assess the predictor fit generated by each individual lag specification relative to the average fit.

Table K7 reveals that while yearly lags produces a good fit for an array of variables, the fit for the demographic variables is less good, particularly for the non-white non-black categories. To summarize the findings in Table K7, using all of the lags of the violent crime rate in generating a synthetic control generates the best fit in a number of measures of fit and prediction, but there are tradeoffs among the lag choices in terms of generating synthetic controls that more closely match all the explanatory variables of the DAW model. While we opted to rely on yearly lags in our main presentation to take advantage of the generally superior fit, a reasonable alternative might be the one lag average model. This specification better matches explanatory variables, while maintaining a reasonably close (but worse) fit of the dependent variable.

Importantly, our treatment effect percentage (TEP) results are robust to any of these five lag specifications. As Table K8 shows for violent crime using DAW covariates and five alternative lag specifications,<sup>90</sup> the point estimate of the tenth-year average treatment effect percentage ranges from 11.8 percent (one lag average) to 15.4 percent (three lags), while we highlight the estimate for yearly lags of 14.3 percent (which has the lowest standard error in the tenth year across all five models). In other words, for all five lag choices, we estimate RTC laws generate at least double-digit increases in the rate of violent crime.

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<sup>89</sup>See Kaul et al. (2016).

<sup>90</sup>Our results are also robust to the LM specifications as well as crime rates for murder, property, aggravated assault, rape and robbery. Furthermore, lag choices do not influence TEP results after CVRMSPE-based exclusion. Results are available upon request.

## A. Violent Crime Fit Comparison of 5 Lag Choices - Unweighted Average

**Table K1: Define Fit Using Mean Squared Error**

|                                  | <i>Training Period; Mean Squared Error</i> | <i>Validation Period; Mean Squared Error</i> | <i>Full Pre-Treatment Period; Mean Squared Error</i> |
|----------------------------------|--------------------------------------------|----------------------------------------------|------------------------------------------------------|
| Three lags                       | 2,686.622                                  | 7,595.525                                    | 4,207.864                                            |
| Yearly lags                      | 1,377.452                                  | 6,433.835                                    | 2,946.029                                            |
| One lag average                  | 1,752.449                                  | 7,855.294                                    | 3,546.032                                            |
| One lag final pre-treatment year | 3,903.140                                  | 8,920.437                                    | 5,517.578                                            |
| No lags                          | 2,421.579                                  | 8,559.487                                    | 4,253.367                                            |

Notes: After getting a measure of fit for each state, an unweighted average is taken to arrive at a single measure of fit. Training Period from 1977 through RTC year - 6; Validation Period from RTC year - 5 through RTC year - 1

**Table K2: Define Fit Using Mean Absolute Difference**

|                                  | <i>Training Period; Mean Absolute Difference</i> | <i>Validation Period; Mean Absolute Difference</i> | <i>Full Pre-Treatment Period; Mean Absolute Difference</i> |
|----------------------------------|--------------------------------------------------|----------------------------------------------------|------------------------------------------------------------|
| Three lags                       | 33.414                                           | 65.556                                             | 43.740                                                     |
| Yearly lags                      | 24.069                                           | 60.085                                             | 35.614                                                     |
| One lag average                  | 27.885                                           | 65.127                                             | 39.546                                                     |
| One lag final pre-treatment year | 38.077                                           | 67.925                                             | 47.813                                                     |
| No lags                          | 34.676                                           | 71.569                                             | 46.511                                                     |

Notes: After getting a measure of fit for each state, an unweighted average is taken to arrive at a single measure of fit. Training Period from 1977 through RTC year - 6; Validation Period from RTC year - 5 through RTC year - 1

**Table K3: Define Fit Using CVRMSPE**

|                                  | <i>Training Period; CVRMSPE</i> | <i>Validation Period; CVRMSPE</i> | <i>Full Pre-Treatment Period; CVRMSPE</i> |
|----------------------------------|---------------------------------|-----------------------------------|-------------------------------------------|
| Three lags                       | 0.132                           | 0.251                             | 0.191                                     |
| Yearly lags                      | 0.105                           | 0.229                             | 0.168                                     |
| One lag average                  | 0.116                           | 0.245                             | 0.179                                     |
| One lag final pre-treatment year | 0.146                           | 0.261                             | 0.201                                     |
| No lags                          | 0.143                           | 0.274                             | 0.206                                     |

Notes: After getting a measure of fit for each state, an unweighted average is taken to arrive at a single measure of fit. Training Period from 1977 through RTC year - 6; Validation Period from RTC year - 5 through RTC year - 1

## B. Violent Crime Fit Comparison of 5 Lag Choices - Population Weighted Average

**Table K4: Define Fit Using Mean Squared Error**

|                                  | <i>Training Period; Mean Squared Error</i> | <i>Validation Period; Mean Squared Error</i> | <i>Full Pre-Treatment Period; Mean Squared Error</i> |
|----------------------------------|--------------------------------------------|----------------------------------------------|------------------------------------------------------|
| Three lags                       | 1,831.318                                  | 5,432.279                                    | 2,940.866                                            |
| Yearly lags                      | 805.011                                    | 5,309.441                                    | 2,120.682                                            |
| One lag average                  | 1,135.997                                  | 5,285.855                                    | 2,329.984                                            |
| One lag final pre-treatment year | 2,551.610                                  | 6,075.208                                    | 3,694.090                                            |
| No lags                          | 1,718.201                                  | 6,197.124                                    | 3,015.222                                            |

Notes: After getting a measure of fit for each state, a population weighted average is taken to arrive at a single measure of fit. Training Period from 1977 through RTC year - 6; Validation Period from RTC year - 5 through RTC year - 1. Population from first year of relevant period is used.

**Table K5: Define Fit Using Mean Absolute Difference**

|                                  | <i>Training Period; Mean Absolute Difference</i> | <i>Validation Period; Mean Absolute Difference</i> | <i>Full Pre-Treatment Period; Mean Absolute Difference</i> |
|----------------------------------|--------------------------------------------------|----------------------------------------------------|------------------------------------------------------------|
| Three lags                       | 26.799                                           | 53.647                                             | 35.243                                                     |
| Yearly lags                      | 18.646                                           | 51.913                                             | 28.715                                                     |
| One lag average                  | 22.887                                           | 50.601                                             | 31.491                                                     |
| One lag final pre-treatment year | 29.342                                           | 54.235                                             | 37.234                                                     |
| No lags                          | 30.319                                           | 60.414                                             | 39.664                                                     |

Notes: After getting a measure of fit for each state, a population weighted average is taken to arrive at a single measure of fit. Training Period from 1977 through RTC year - 6; Validation Period from RTC year - 5 through RTC year - 1. Population from first year of relevant period is used.

**Table K6: Define Fit Using CVRMSPE**

|                                  | <i>Training Period; CVRMSPE</i> | <i>Validation Period; CVRMSPE</i> | <i>Full Pre-Treatment Period; CVRMSPE</i> |
|----------------------------------|---------------------------------|-----------------------------------|-------------------------------------------|
| Three lags                       | 0.074                           | 0.129                             | 0.105                                     |
| Yearly lags                      | 0.052                           | 0.119                             | 0.089                                     |
| One lag average                  | 0.062                           | 0.121                             | 0.094                                     |
| One lag final pre-treatment year | 0.082                           | 0.135                             | 0.111                                     |
| No lags                          | 0.086                           | 0.149                             | 0.119                                     |

Notes: After getting a measure of fit for each state, a population weighted average is taken to arrive at a single measure of fit. Training Period from 1977 through RTC year - 6; Validation Period from RTC year - 5 through RTC year - 1. Population from first year of relevant period is used.

**Table K7: Comparing DAW Explanatory Variables in the RTC adopting states and their synthetic controls: Ratio of mean absolute percentage difference between treatment and synthetic controls for each variable to the average of this value for all five lag specifications**

| Variable                        | 3 Lags | Yearly Lags | 1 Lag Average | 1 Lag final<br>pre-Treatment Year | No Lags |
|---------------------------------|--------|-------------|---------------|-----------------------------------|---------|
| Population                      | 0.84   | 0.85        | 0.98          | 1.19                              | 1.13    |
| Poverty rate                    | 0.99   | 1.00        | 1.03          | 1.01                              | 0.97    |
| Lagged incarceration rate       | 0.95   | 1.01        | 1.00          | 1.03                              | 1.00    |
| Beer                            | 0.95   | 1.02        | 1.02          | 1.05                              | 0.96    |
| Unemployment rate               | 1.03   | 1.05        | 1.01          | 0.96                              | 0.96    |
| Lagged police employment        | 0.85   | 1.07        | 1.03          | 1.02                              | 1.03    |
| Real income (p.c.)              | 0.97   | 1.07        | 1.00          | 0.94                              | 1.01    |
| Percent MSA                     | 0.99   | 1.12        | 1.07          | 0.94                              | 0.88    |
| Age white male 20-39            | 1.12   | 1.16        | 1.00          | 0.91                              | 0.81    |
| Age black male 15-19            | 1.08   | 1.16        | 1.03          | 1.00                              | 0.72    |
| Age black male 20-39            | 1.09   | 1.24        | 1.03          | 0.95                              | 0.69    |
| Age white male 15-19            | 1.11   | 1.27        | 0.97          | 0.87                              | 0.79    |
| Age other male 15-19            | 0.92   | 1.56        | 1.16          | 0.72                              | 0.65    |
| Age other male 20-39            | 0.91   | 1.59        | 1.14          | 0.72                              | 0.63    |
| Mean, non-demographic variables | 0.95   | 1.02        | 1.02          | 1.02                              | 1.00    |
| Mean, demographic variables     | 1.04   | 1.33        | 1.05          | 0.86                              | 0.72    |
| Overall mean                    | 0.99   | 1.15        | 1.03          | 0.95                              | 0.88    |

Notes: We take the average of the absolute percentage difference in economic predictors between Treatment and Synthetic Control states using five lag specifications. The values reported are the ratio of this statistic for each lag specification to the average of this statistic for all five lag choices. Age groups represent the percent of population that is white male, black male or other male in two age brackets (15-19 and 20-39).

**Table K8: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, Various Lag specifications, Full Sample, 1977-2014**

|                        | (1)     | (2)     | (3)     | (4)     | (5)      | (6)      | (7)       | (8)       | (9)       | (10)      |
|------------------------|---------|---------|---------|---------|----------|----------|-----------|-----------|-----------|-----------|
| Average normalized TEP | -0.328  | 2.190   | 3.961** | 4.957** | 7.617*** | 8.210*** | 11.047*** | 13.577*** | 14.847*** | 15.411*** |
| 3 Lags                 | (1.076) | (1.444) | (1.884) | (2.096) | (2.380)  | (2.911)  | (2.885)   | (3.994)   | (3.976)   | (3.284)   |
| N                      | 33      | 33      | 33      | 33      | 33       | 33       | 33        | 31        | 31        | 31        |
| Average normalized TEP | -0.117  | 2.629*  | 3.631*  | 4.682** | 6.876*** | 7.358**  | 10.068*** | 12.474*** | 14.021*** | 14.344*** |
| Yearly lag             | (1.076) | (1.310) | (1.848) | (2.068) | (2.499)  | (3.135)  | (2.823)   | (3.831)   | (3.605)   | (2.921)   |
| N                      | 33      | 33      | 33      | 33      | 33       | 33       | 33        | 31        | 31        | 31        |
| Average normalized TEP | -0.184  | 2.045   | 3.366*  | 3.885*  | 5.856**  | 6.256*   | 8.595***  | 11.295**  | 11.840*** | 11.770*** |
| 1 Lag average          | (1.157) | (1.355) | (1.924) | (2.151) | (2.492)  | (3.076)  | (2.877)   | (4.327)   | (4.219)   | (3.734)   |
| N                      | 33      | 33      | 33      | 33      | 33       | 33       | 33        | 31        | 31        | 31        |
| Average normalized TEP | 0.325   | 3.293** | 4.639** | 5.083** | 7.432*** | 8.084**  | 10.859*** | 13.187*** | 13.899*** | 14.222*** |
| 1 Lag final year       | (1.175) | (1.539) | (1.921) | (2.094) | (2.371)  | (3.047)  | (2.887)   | (4.175)   | (4.187)   | (3.359)   |
| N                      | 33      | 33      | 33      | 33      | 33       | 33       | 33        | 31        | 31        | 31        |
| Average normalized TEP | -0.485  | 1.458   | 3.193** | 4.183** | 6.028**  | 6.320*   | 10.061*** | 12.266*** | 12.631*** | 13.751*** |
| No lags                | (1.155) | (1.723) | (1.536) | (1.879) | (2.443)  | (3.183)  | (3.557)   | (4.144)   | (4.115)   | (3.917)   |
| N                      | 33      | 33      | 33      | 33      | 33       | 33       | 33        | 31        | 31        | 31        |

Standard errors in parentheses

Column numbers indicate post-treatment year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA ME MI MN MO MS MT NC ND NE NM NV OH OK OR PA SC SD TN TX UT VA WV WY

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## Appendix L: Simulating Earlier RTC Passage

Footnote 55 in the text outlined an approach to validate our synthetic control estimates, using a “phantom-adoption” test. Essentially, we pretend that the RTC states adopted their laws five years earlier than they did, and we then used our synthetic control approach to estimate what the crime rate was for the five pre-adoption years. A perfect result would show a zero effect over that pre-adoption period.

Tables L1-L6 present both normalized and non-normalized synthetic control estimates for violent crime, murder, and property crime with a phantom RTC law five years before actual passage. Each table thus shows estimated effects of RTC laws on the five years prior to their adoption, as well as the ten years after. For the normalized versions, none of the estimates for pre-passage years are statistically significant, other than the year prior to true adoption for property crime. Conversely, for the non-normalized models, the pre-passage estimates are considerably larger and often highly significant. This distinction lends further credibility to the choice to use normalized estimates (subtracting off the differential between actual and synthetic control estimates in the last pre-adoption year) rather than using unadjusted figures.

This “phantom-adoption” test is particularly reassuring for violent crime since it yields relatively modest pre-treatment values (only a statistically insignificant 3.2 percent in the year prior to actual adoption, as seen in Table A28), and the estimates rise sharply after RTC adoption. Unfortunately, the results from this “phantom-adoption” test for the murder and property crime estimates are not as reassuring. For example, the synthetic control estimate for the year prior to adoption in our preferred normalized approach is roughly 8 percent for murder (Table A30) and 7 percent for property crime (Table A32). While neither of these estimates is statistically significant, they are both more than twice the size of the estimates for violent crime, which leads us to emphasize the results for violent crime more than those for our other crime measures.

**Table L1: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, Full Sample, 1977-2014**

|                        | <i>Prior to RTC Passage</i> |                  |                  |                  |                  | <i>After RTC Passage</i> |                   |                    |                    |                      |                      |                      |                      |                      |                      |
|------------------------|-----------------------------|------------------|------------------|------------------|------------------|--------------------------|-------------------|--------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                        | (1)                         | (2)              | (3)              | (4)              | (5)              | (1)                      | (2)               | (3)                | (4)                | (5)                  | (6)                  | (7)                  | (8)                  | (9)                  | (10)                 |
| Average normalized TEP | -0.889<br>(1.437)           | 1.896<br>(2.289) | 2.600<br>(3.098) | 1.065<br>(3.054) | 3.241<br>(3.148) | 3.066<br>(3.087)         | 6.103*<br>(3.389) | 7.409**<br>(3.195) | 7.640**<br>(3.429) | 10.289***<br>(3.318) | 11.294***<br>(3.609) | 14.262***<br>(3.748) | 17.476***<br>(4.796) | 18.081***<br>(5.027) | 18.396***<br>(5.267) |
| N                      | 30                          | 30               | 30               | 30               | 30               | 30                       | 30                | 30                 | 30                 | 30                   | 30                   | 30                   | 28                   | 28                   | 28                   |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the violent crime rate in treatment and synthetic control states at given simulated post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS MT NC NE NM NV OH OK OR PA SC TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table L2: The Impact of RTC Laws on the Violent Crime Rate, DAW covariates, Full Sample, 1977-2014, No Subtraction**

|                            | <i>Prior to RTC Passage</i> |                   |                    |                  |                    | <i>After RTC Passage</i> |                     |                     |                    |                      |                      |                      |                      |                      |                      |
|----------------------------|-----------------------------|-------------------|--------------------|------------------|--------------------|--------------------------|---------------------|---------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                            | (1)                         | (2)               | (3)                | (4)              | (5)                | (1)                      | (2)                 | (3)                 | (4)                | (5)                  | (6)                  | (7)                  | (8)                  | (9)                  | (10)                 |
| Average non-normalized TEP | 1.104<br>(1.997)            | 3.916*<br>(1.958) | 4.643**<br>(1.920) | 3.125<br>(2.483) | 5.316**<br>(2.514) | 5.150**<br>(2.060)       | 8.194***<br>(2.760) | 9.508***<br>(3.398) | 9.744**<br>(3.815) | 12.399***<br>(4.102) | 13.418***<br>(4.606) | 16.400***<br>(4.161) | 19.715***<br>(5.641) | 20.337***<br>(5.583) | 20.679***<br>(5.074) |
| N                          | 30                          | 30                | 30                 | 30               | 30                 | 30                       | 30                  | 30                  | 30                 | 30                   | 30                   | 30                   | 28                   | 28                   | 28                   |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the violent crime rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS MT NC NE NM NV OH OK OR PA SC TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



**Table L3: The Impact of RTC Laws on the Murder Rate, DAW covariates, Full Sample, 1977-2014**

|                        | <i>Prior to RTC Passage</i> |                  |                  |                  |                  | <i>After RTC Passage</i> |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|------------------------|-----------------------------|------------------|------------------|------------------|------------------|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                        | (1)                         | (2)              | (3)              | (4)              | (5)              | (1)                      | (2)              | (3)              | (4)              | (5)              | (6)              | (7)              | (8)              | (9)              | (10)             |
| Average normalized TEP | 1.117<br>(3.713)            | 1.596<br>(5.302) | 3.091<br>(5.549) | 3.912<br>(6.764) | 7.756<br>(6.430) | 8.580<br>(6.697)         | 4.947<br>(5.077) | 5.408<br>(6.163) | 5.004<br>(6.766) | 1.529<br>(6.157) | 2.042<br>(7.394) | 1.172<br>(6.798) | 8.539<br>(8.264) | 5.682<br>(6.482) | 8.267<br>(7.206) |
| N                      | 30                          | 30               | 30               | 30               | 30               | 30                       | 30               | 30               | 30               | 30               | 30               | 30               | 28               | 28               | 28               |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS MT NC NE NM NV OH OK OR PA SC TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table L4: The Impact of RTC Laws on the Murder Rate, DAW covariates, Full Sample, 1977-2014, No Subtraction**

|                            | <i>Prior to RTC Passage</i> |                  |                  |                  |                   | <i>After RTC Passage</i> |                   |                  |                  |                  |                  |                  |                    |                   |                     |
|----------------------------|-----------------------------|------------------|------------------|------------------|-------------------|--------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|--------------------|-------------------|---------------------|
|                            | (1)                         | (2)              | (3)              | (4)              | (5)               | (1)                      | (2)               | (3)              | (4)              | (5)              | (6)              | (7)              | (8)                | (9)               | (10)                |
| Average non-normalized TEP | 3.043<br>(3.460)            | 3.576<br>(4.377) | 5.123<br>(4.357) | 5.984<br>(4.768) | 9.853*<br>(5.072) | 10.699**<br>(4.985)      | 7.090*<br>(4.142) | 7.575<br>(4.906) | 7.198<br>(5.668) | 3.751<br>(5.084) | 4.296<br>(6.128) | 3.445<br>(5.425) | 11.855*<br>(6.815) | 9.003*<br>(4.685) | 11.558**<br>(5.608) |
| N                          | 30                          | 30               | 30               | 30               | 30                | 30                       | 30                | 30               | 30               | 30               | 30               | 30               | 28                 | 28                | 28                  |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the murder rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS MT NC NE NM NV OH OK OR PA SC TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table L5: The Impact of RTC Laws on the Property Crime Rate, DAW covariates, Full Sample, 1977-2014**

|                        | <i>Prior to RTC Passage</i> |                  |                  |                  |                   | <i>After RTC Passage</i> |                    |                    |                   |                  |                   |                     |                     |                    |                    |
|------------------------|-----------------------------|------------------|------------------|------------------|-------------------|--------------------------|--------------------|--------------------|-------------------|------------------|-------------------|---------------------|---------------------|--------------------|--------------------|
|                        | (1)                         | (2)              | (3)              | (4)              | (5)               | (1)                      | (2)                | (3)                | (4)               | (5)              | (6)               | (7)                 | (8)                 | (9)                | (10)               |
| Average normalized TEP | -0.259<br>(1.595)           | 0.845<br>(2.828) | 1.044<br>(3.707) | 4.059<br>(4.180) | 6.879*<br>(3.478) | 6.223*<br>(3.149)        | 7.394**<br>(3.397) | 8.239**<br>(3.661) | 7.870*<br>(3.923) | 7.145<br>(4.485) | 8.716*<br>(4.724) | 10.188**<br>(4.452) | 11.625**<br>(4.951) | 10.665*<br>(5.280) | 11.518*<br>(6.047) |
| N                      | 30                          | 30               | 30               | 30               | 30                | 30                       | 30                 | 30                 | 30                | 30               | 30                | 30                  | 28                  | 28                 | 28                 |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the difference between the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval and at time of the treatment

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS MT NC NE NM NV OH OK OR PA SC TN TX UT VA WV WY

States excluded for poor pre-treatment fit:

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table L6: The Impact of RTC Laws on the Property Crime Rate, DAW covariates, Full Sample, 1977-2014, No Subtraction**

|                            | <i>Prior to RTC Passage</i> |                      |                     |                      |                      | <i>After RTC Passage</i> |                      |                      |                     |                     |                     |                      |                      |                      |                      |
|----------------------------|-----------------------------|----------------------|---------------------|----------------------|----------------------|--------------------------|----------------------|----------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
|                            | (1)                         | (2)                  | (3)                 | (4)                  | (5)                  | (1)                      | (2)                  | (3)                  | (4)                 | (5)                 | (6)                 | (7)                  | (8)                  | (9)                  | (10)                 |
| Average non-normalized TEP | 9.344**<br>(3.607)          | 10.512***<br>(3.709) | 10.771**<br>(4.169) | 13.844***<br>(4.644) | 16.716***<br>(4.682) | 16.096***<br>(4.693)     | 17.292***<br>(5.147) | 18.165***<br>(6.206) | 17.827**<br>(6.476) | 17.135**<br>(6.973) | 18.736**<br>(7.039) | 20.234***<br>(6.645) | 21.557***<br>(6.790) | 20.629***<br>(6.951) | 21.549***<br>(7.279) |
| N                          | 30                          | 30                   | 30                  | 30                   | 30                   | 30                       | 30                   | 30                   | 30                  | 30                  | 30                  | 30                   | 28                   | 28                   | 28                   |

Standard errors in parentheses

Column numbers indicate post-passage year under consideration; N = number of states in sample

Dependent variable is the percentage difference in the property crime rate in treatment and synthetic control states at given post-treatment interval

Results reported for the constant term resulting from this regression

States in group: AK AR AZ CO FL GA ID KS KY LA MI MN MO MS MT NC NE NM NV OH OK OR PA SC TN TX UT VA WV WY

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## CALIFORNIA: STRONG GUN LAWS SAVE LIVES

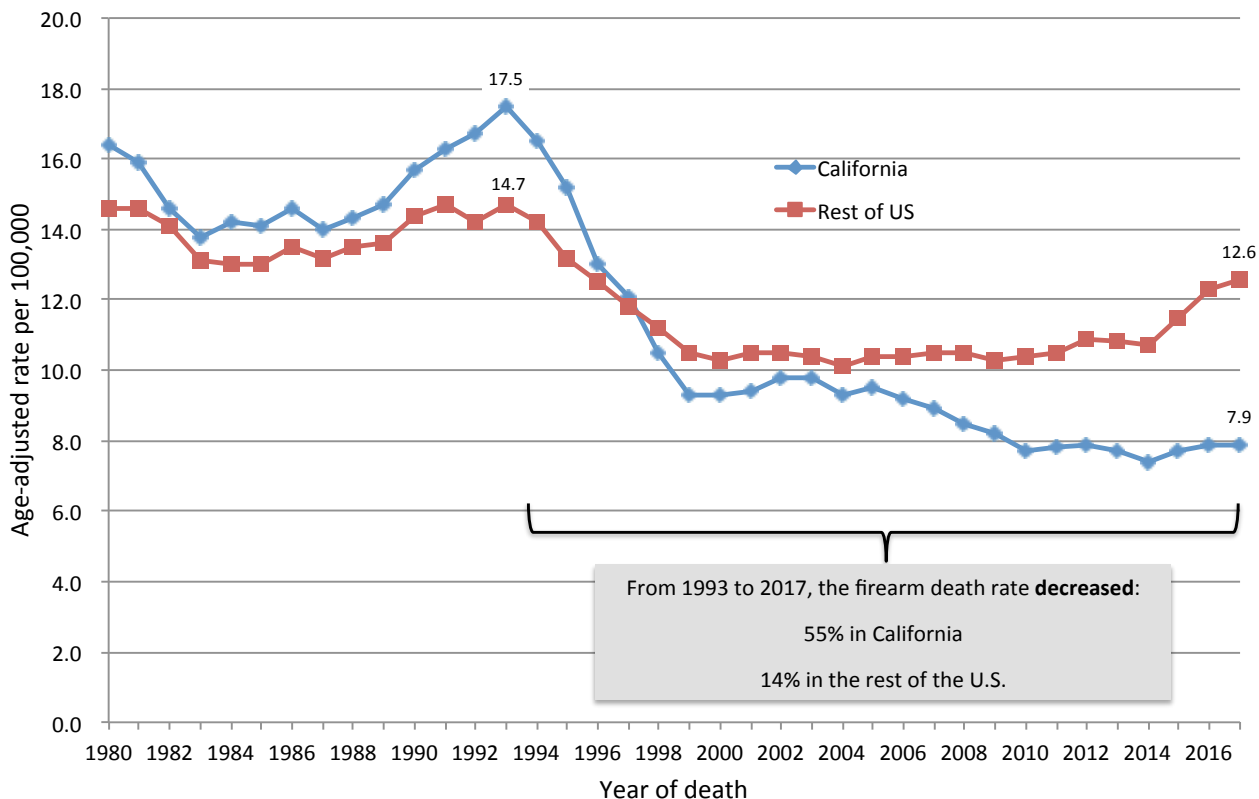
### *Trends in California Firearm Mortality Compared to the Rest of the U.S.*

During the 1980s and early 1990s, California's firearm mortality rate was consistently higher than in the rest of the U.S. The state responded by enacting the strongest firearm laws in the country. (See the overview of California firearm laws below.)

To help evaluate the impact of California's firearm laws, this report compares firearm mortality rates in California with those in the rest of the U.S. from 1980 through 2017 (the most recent data available).

In California and the rest of the U.S., firearm mortality rates peaked in 1993. Then, as California's strong firearm laws took effect, the state's firearm mortality rate began a steep decline. From 1993 to 2017, California's firearm mortality rate decreased 55 percent—almost four times the decrease in the rest of the nation. **By 2017, the firearm mortality rate in California was substantially lower than the rate in the rest of the country.**

**Firearm deaths in California compared to the rest of the U.S.**



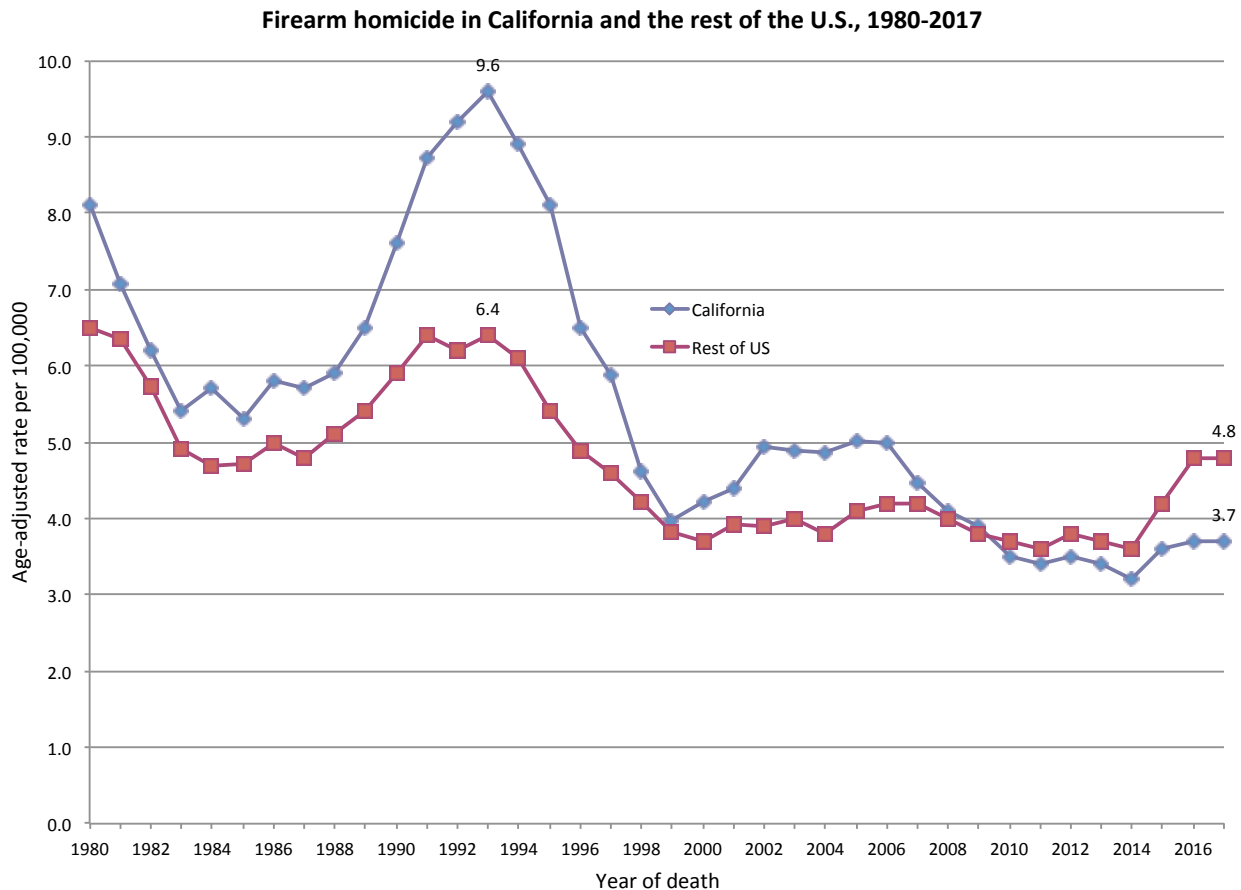
In 2017, there were nearly 40,000 firearm deaths in the U.S., of which 3,184 (8 percent of the total) were in California, which has 12 percent of the U.S. population. In 2017, if the firearm mortality rate in the rest of the U.S. were as low as in California, **more than 13,500 firearm deaths would have been prevented.**

### Firearm homicide

Of the 3,184 firearm deaths in California in 2017, 45 percent (n=1,435) were firearm homicides. Of the 36,589 firearm deaths in the rest of the U.S., 36 percent were firearm homicides (n=13,107).

In 2017, California's firearm homicide rates:

- decreased with age—8.1 per 100,000 for 15-24-year olds compared with 1.0 per 100,000 for 65-74-year-olds
- were higher among men (6.1 per 100,000) than women (1.1 per 100,000)
- were higher among blacks (16.1 per 100,000) than Hispanics (4.2 per 100,000), non-Hispanic whites (1.7 per 100,000), and Asian/Pacific Islanders (1.2 per 100,000).

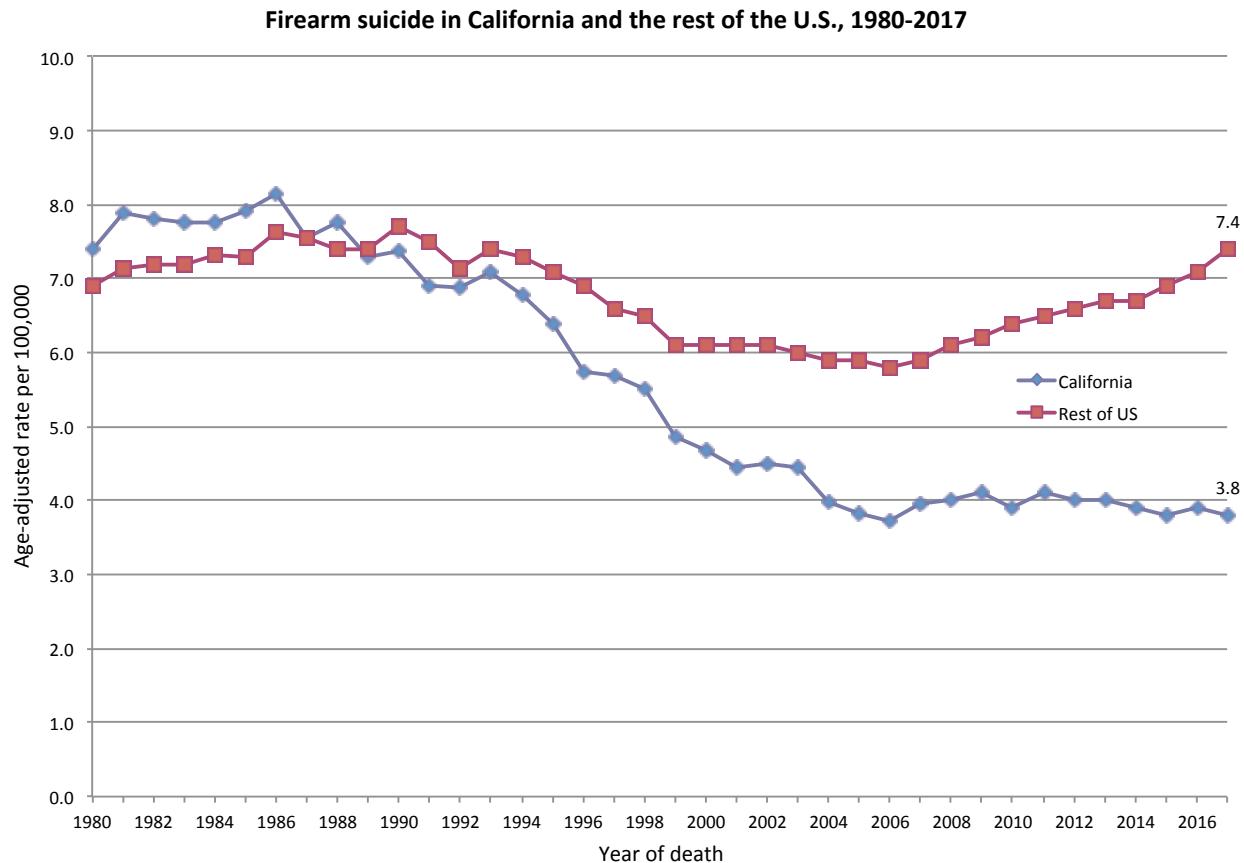


### Firearm suicide

In 2017 in California, 51 percent of all firearm deaths were firearm suicides (n=1,610). In the rest of the U.S., 61 percent of all firearm deaths were firearm suicides (n=22,244). In the rest of the U.S., firearm suicide rates have increased steadily since 2006, but in California, they have remained relatively stable.

In 2017, California's firearm suicide rates:

- increased with age—3.1 per 100,000 among 15-24-year-olds compared with 11.7 per 100,000 among 75-84-year-olds, and 12.4 per 100,000 among those 85 years or older
- were higher among men (7.3 per 100,000) than women (0.7 per 100,000)
- were higher among non-Hispanic whites (6.4 per 100,000) than Hispanics (1.8 per 100,000), blacks (2.2 per 100,000), and Asian/Pacific Islanders (1.4 per 100,000).



California has done the best job in the country of enacting laws that make it harder for people who are a danger to themselves and others to acquire dangerous firearms. These laws have helped reduce both firearm homicides and firearm suicides, and have enabled law enforcement to combat gun trafficking and seize illegally owned firearms.

However, more must be done to make our communities safe. **Many Californians are killed or seriously wounded with firearms each year, and California's firearm death rate has begun to rise again, though the increase is far less than in the rest of the country.** The U.S. has the weakest firearm laws of any industrialized nation, and weak federal laws undermine California's stronger laws.

Firearm violence destroys families and communities. We must all work together to keep dangerous weapons out of the hands of dangerous people. We are accomplishing this in California by enacting sensible firearm laws that save lives.

Data source: CDC, National Center for Health Statistics, WONDER online database. Underlying cause of death used to select firearm deaths. Rates were calculated using Census population estimates adjusted to the 2000 and 2010 US population. In this report, the "rest of the U.S." is the U.S. population excluding California.

## **Overview of California Firearm Laws\***

### **Illegal Gun Possession, Gun Trafficking and Gun Crimes**

- Background checks are required for all gun sales/transfers, including private party sales.
- People buying firearms must wait ten days before taking possession.
- The California Department of Justice (CalDOJ) maintains records of gun sales.
- It is illegal to sell or transfer to persons under age 21 any type of firearm, with certain exceptions, for example transfers among family members.
- Ammunition sellers must register and obtain a license. After July 1, 2019, they will conduct background checks on ammunition buyers and transmit information on the sales to CalDOJ.
- Persons with certain mental health determinations, felons, and persons guilty of certain violent misdemeanors are prohibited from purchasing or possessing firearms.
- People convicted of misdemeanor hate crimes are prohibited from purchasing or possessing firearms for ten years.
- Law enforcement must provide CalDOJ with data for tracing illegal or crime guns.
- Gun shows are regulated. For example, background checks and waiting periods are required for all firearm sales. CalDOJ monitors the compliance of gun shows and vendors.
- Handgun purchases are limited to one per 30-day period in order to reduce gun trafficking.
- CalDOJ checks to see if “prohibited persons,” such as those who have become felons, previously purchased a handgun. Guns illegally owned can be seized.
- Local law enforcement has discretion in issuing permits to carry concealed weapons.
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Data compiled and summarized by Griffin Dix, Ph.D. (Brady Oakland/Alameda County Chapter) and Loren Lieb, M.P.H. (Brady San Fernando Valley Chapter), 12/26/18, final rev. 6/16/19



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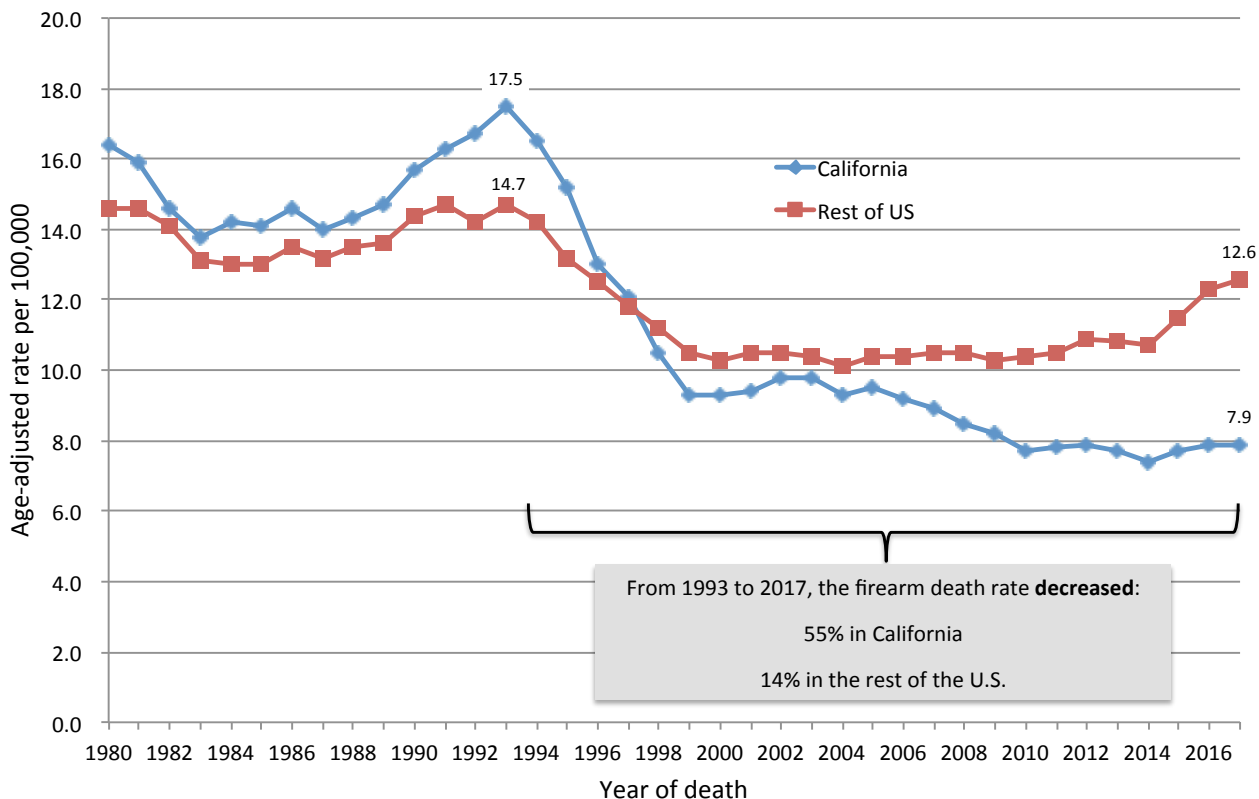
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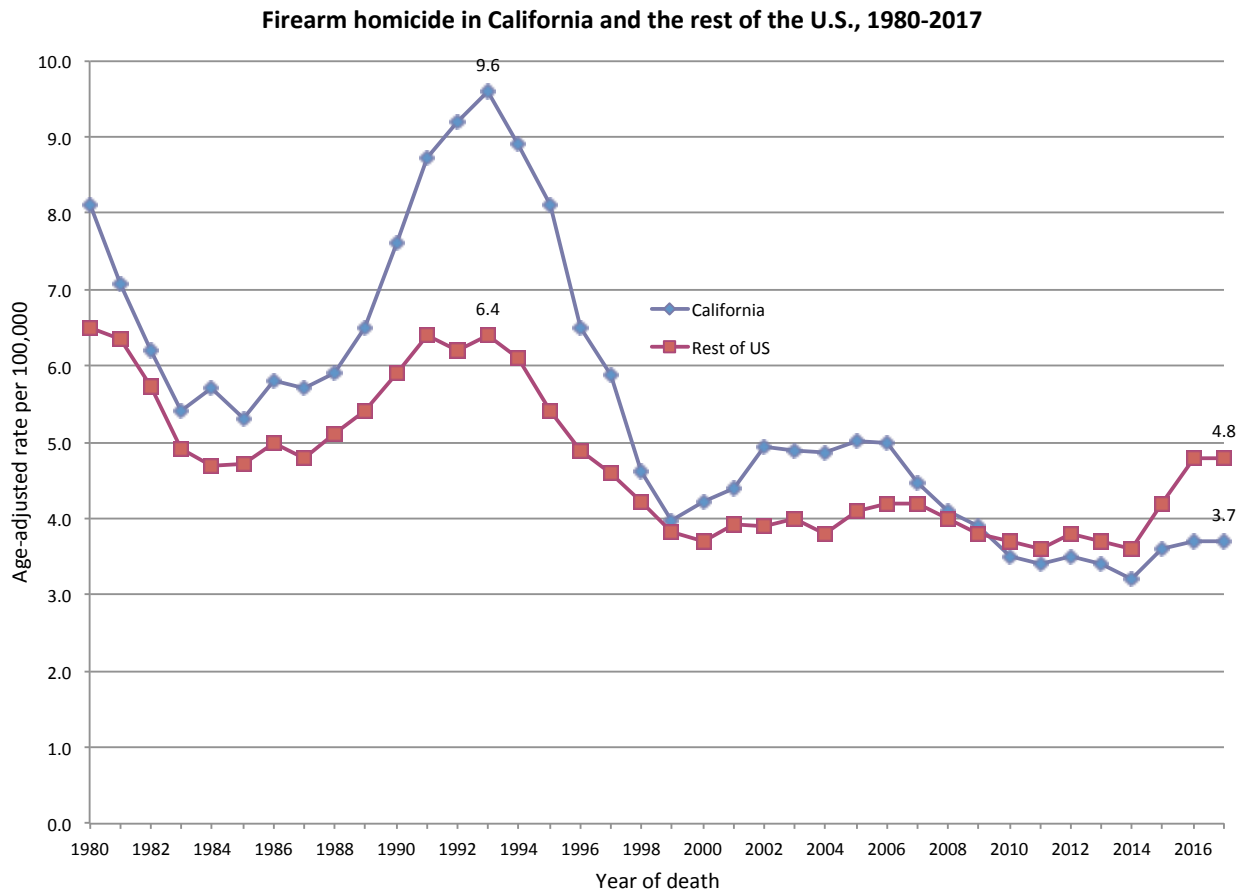
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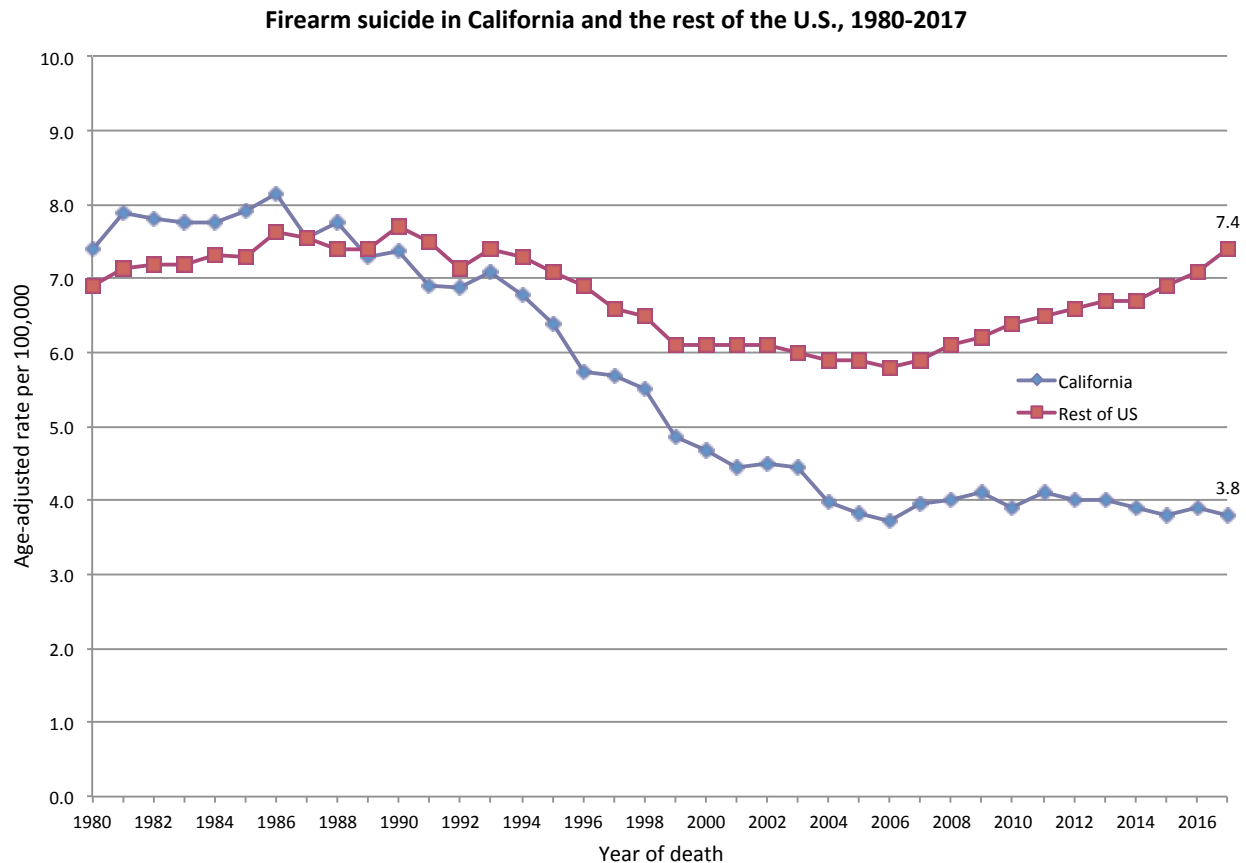


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Study Finds Significant Increase in Firearm Assaults in States that Relaxed Conceal Carry Permit Restrictions | Johns Hopkins | Bloomberg School of Public Health

# Study Finds Significant Increase in Firearm Assaults in States that Relaxed Conceal Carry Permit Restrictions

Specific provisions in conceal carry laws may reduce risks associated with civilian gun carrying

Published **September 20, 2022**

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A new study by researchers at the Johns Hopkins Bloomberg School of Public Health found that the average rate of assaults with firearms increased an average of 9.5 percent relative to forecasted trends in the first 10 years after 34 states relaxed restrictions on civilians carrying concealed firearms in public.

The study examined two aspects of policy changes: the overall impact on gun violence when states changed their laws for civilians carrying concealed firearms from more to less restrictive ones and, secondly, whether less restrictive measures—known as “shall issue” laws—containing specific safety and screening provisions influenced gun violence outcomes.

The study found that moving to less restrictive laws was associated with a 24 percent increase in the rate of assaults with firearms (12.75 per 100,000) when individuals convicted of violent misdemeanors were eligible to obtain concealed-carry licenses. The researchers also found that states with shall issue laws that had live-fire firearm safety training requirements did not see the significant increases in firearm assaults that were estimated for states that lacked such requirements.

**Johns Hopkins University**

**Johns Hopkins Bloomberg School of Public Health**  
615 N. Wolfe Street, Baltimore, MD 21205  
(<https://publichealth.jhu.edu>)

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The findings were published online September 20 in the *American Journal of Epidemiology*.

"In general, violent crime increased after states loosened concealed carry permitting requirements," says Mitchel Doucette, PhD, assistant scientist in the Department of Health Policy and Management and director of research methods at the Center for Gun Violence Solutions at the Bloomberg School. "Allowing more individuals to carry concealed guns in public—including some who would have previously been denied carry permits due to prior arrests or restraining orders—can increase inappropriate use of firearms in response to interpersonal conflicts, disputes, or other situations."

For their analysis, the researchers identified 36 states that weakened their conceal carry permit requirements from 1980 to 2019. They excluded two states—Kansas and Missouri—due to other significant firearm laws changing around the same time.

The researchers used advanced statistical modeling to estimate what would have happened if the laws had not changed. Rates of violent crime for each of the 34 states adopting shall issue concealed carry laws in the analysis were then compared to the best "synthetic controls"—predicted crime rates derived from data from eight states that had restrictive permitting requirements in place throughout the study period.

The study comes against the backdrop of a U.S. Supreme Court decision in July that found New York's state law requiring that permittees have a proper cause or special need to obtain a concealed carry weapons permit as unconstitutional. Permits will still be required, but the decision narrows New York's authority to deny them. Similar laws with proper cause requirements in other states, including California, Hawaii, Maryland, Massachusetts, and New Jersey, have been revised or are under review.

The study also found a significant average increase in the rate of homicides without a firearm—8.8 percent—in states that relaxed restrictions on civilians carrying concealed firearms in public during the same period.

Currently, 25 states do not require civilians to have a permit to carry a concealed firearm, referred to as permitless carry. The other 25 states require state or local law enforcement to issue civilians a permit to carry a firearm if they meet criteria based on criminal history or training requirements. Most of the states included in the study adopting shall issue laws had previously required a good or proper cause for needing a license to carry a concealed firearm.

For their analysis, the researchers used data from the Federal Bureau of Investigation's Uniform Crime Reports and the Centers for Disease Control and Prevention's National Center for Health Statistics. The researchers identified state laws using databases and by reviewing the state's legislative history.

In what is thought to be the first analysis of its kind, and working with the same set of 34 states that had relaxed their laws from 1980 and 2019, the researchers examined the impact of shall- issue laws with the following provisions: live-firearm training; discretion to deny a permit if an applicant is unstable or immoral; and discretion to deny a permit if an applicant has a history of violence and/or a history of other violent misdemeanor convictions.

The analysis found that states that changed their laws without including one or more of these three provisions had an average increase of 10.26 gun assaults per 100,000 population annually (a 21.6 percent increase) and an additional 1.44 per 100,000 gun homicides (34.9 percent increase) per year compared to their forecasted trends. For states that did not require live- firearm training, the average rate of gun assaults increased to 8.28 per 100,000 people (18.3 percent increase).

The researchers note that requiring live firearm training is an important step but needs further study to understand the impacts of this provision.

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“States are actively reevaluating their laws after the Supreme Court’s decision,” says Daniel Webster, ScD, MPH, Bloomberg Professor of American Health and co-director of the Center for Gun Violence Solutions at the Bloomberg School. “Our findings suggest that the more you can make this more objective for states issuing conceal-carry licenses, the better the outcomes in terms of screening potentially dangerous people out.”

“Impact of Changes to Concealed Carry Weapons Laws on Fatal and Non-Fatal Violent Crime, 1980-2019” was written by Mitchell Doucette, Alexander McCourt, Cassandra Crifasi, and Daniel Webster.

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# # #

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# State gun laws, gun ownership, and mass shootings in the US: cross sectional time series

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## ABSTRACT

### OBJECTIVE

To determine whether restrictiveness-permissiveness of state gun laws or gun ownership are associated with mass shootings in the US.

### DESIGN

Cross sectional time series.

### SETTING AND POPULATION

US gun owners from 1998-2015.

### EXPOSURE

An annual rating between 0 (completely restrictive) and 100 (completely permissive) for the gun laws of all 50 states taken from a reference guide for gun owners traveling between states from 1998 to 2015. Gun ownership was estimated annually as the percentage of suicides committed with firearms in each state.

### MAIN OUTCOME MEASURE

Mass shootings were defined as independent events in which four or more people were killed by a firearm. Data from the Federal Bureau of Investigation's Uniform Crime Reporting System from 1998-2015 were used to calculate annual rates of mass shootings in each state. Mass shooting events and rates were further separated into those where the victims were immediate family members or partners (domestic) and those where the victims had other relationships with the perpetrator (non-domestic).

### RESULTS

Fully adjusted regression analyses showed that a 10 unit increase in state gun law permissiveness was associated with a significant 11.5% (95% confidence interval 4.2% to 19.3%,  $P=0.002$ ) higher rate of mass shootings. A 10% increase in state gun ownership was associated with a significant 35.1% (12.7% to 62.7%,  $P=0.001$ ) higher rate of mass shootings. Partially adjusted regression analyses produced similar results, as did analyses restricted to domestic and non-domestic mass shootings.

### CONCLUSIONS

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.

## Introduction

Despite an increasing frequency of mass shootings in the US and the seemingly disproportionate occurrence of mass shootings in some states and not others, little research has been carried out to understand state level factors that could influence mass shootings.<sup>1</sup> A 2018 report pointed to only three studies that had examined associations between gun laws and mass shooting events.<sup>2-5</sup> However, testing the effects of state gun laws on the occurrence of mass shootings was not the primary objective of at least one of these studies and the body of evidence they represent was inconclusive in terms of determining the effects of specific state gun laws on mass shootings.

Gun laws have the potential to influence the occurrence of mass shootings. There are limited national gun laws in the US, so the variety of state gun laws that have evolved provides an excellent opportunity for study. Previous studies have found that more permissive statewide gun laws are associated with higher levels of gun homicide and gun suicide,<sup>6-10</sup> although none of these studies considered whether state gun laws in general were associated with mass shootings. Gun ownership is also a potentially key variable to be examined in conjunction with gun laws, given that statewide gun ownership can lead to the implementation of laws, and the implementation of laws can result in changes to statewide gun ownership. Previous studies have found that gun ownership is associated with higher levels of gun assault and gun homicide, although none of these studies considered whether state gun ownership in general was associated with mass shootings.<sup>11-15</sup>

How gun laws and gun ownership influence mass shooting events in the US is not fully understood. Therefore, we conducted a cross sectional, time series analysis to broadly examine whether restrictiveness or permissiveness of state gun laws and state gun ownership were associated with mass shootings.

## Methods

### Independent variables

We used the 1998-2015 edition of the *Traveler's Guide to the Firearms Laws of the Fifty States* to obtain the independent variable of interest, an annual restrictiveness-permissiveness scale of US gun laws for each state.<sup>16</sup> This report is published annually by legal professionals as a reference guide for gun owners traveling between states and gives a rating between 0 (completely restrictive) and 100 (completely

## WHAT IS ALREADY KNOWN ON THIS TOPIC

More permissive state gun laws and higher levels of gun ownership are associated with higher levels of gun homicide and gun suicide in the US

## WHAT THIS STUDY ADDS

States with more permissive gun laws and greater gun ownership have higher rates of mass shootings

There is a growing divergence in recent years as rates of mass shootings in restrictive states have decreased and those in permissive states have increased

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permissive) for the firearm laws of all 50 states. The report considers more than 13 factors in developing the score, including: standard firearms ownership and permit requirements; if semi-automatic, high capacity magazines, machine guns, and suppressors are permitted or restricted; if the firearms laws across the state vary widely; if the state employs a right to self-defense, ability to conceal, ability to open and vehicle carry, ability to conceal carry in state parks, or whether a gun permittee can carry in a restaurant serving alcohol; whether there is a duty to notify law enforcement of permit status; and if one can keep a gun in their vehicle at colleges and K-12 schools (primary and secondary schools).

Gun ownership is not directly surveyed across all 50 states each year in the US. A review of over 24 gun ownership indicators found that the percentage of suicides committed with a firearm was the best measure for estimating gun ownership by state.<sup>17</sup> This has also been verified in several other studies across different regions,<sup>18-22</sup> in which the percentage of suicides committed with a firearm was shown to be highly correlated with the proportion of households reporting gun ownership (across 21 US states  $r=0.90$ ,<sup>23</sup> across nine census regions  $r=0.93$ <sup>24</sup>). Therefore, we chose to use the percentage of suicides committed with a firearm as a proxy measurement for gun ownership per state per year, which we obtained through the Centers for Disease Control and Prevention's online database, WONDER.<sup>25</sup>

We included the following annual measures of state-level characteristics in our analyses: median household income, percent high school graduation, percent female headed households, percent in poverty, percent unemployment, incarceration rate, and percent white. We took all covariates from the American Community Survey at the United States Census Bureau,<sup>26</sup> except incarceration rate, which was obtained from the Bureau of Justice Statistics.<sup>27</sup> We included year in all analyses as a fixed effect to account for other time varying factors.

### Outcome variables

We used the Supplementary Homicide Reports from the Federal Bureau of Investigation's Uniform Crime Reporting System (1998-2015) to obtain counts of mass shootings by state.<sup>28</sup> We compiled these data in line with the most commonly used definition of a mass shooting: one event in which four or more individuals were killed by a perpetrator using a firearm and the perpetrator themselves did not count toward the total number of victims.<sup>29-30</sup> These mass shooting events were analyzed in total and stratified as to whether the mass shooting was domestic or non-domestic in nature. Domestic mass shootings included instances where the perpetrator committed the act against an immediate family member or partner. Non-domestic mass shootings included all other types of relationships, such as acquaintances, employees, employers, friends, neighbors, strangers, extended family members, and others. Florida was excluded due to non-participation in the Uniform Crime Reporting System program.<sup>31</sup>

### Descriptive and unadjusted analyses

To understand how state gun law restrictiveness-permissiveness scores changed over the study period, we first estimated an ordinary least squares regression with year as the independent variable and permissiveness score as the dependent variable. We also calculated boxplots of the distribution of restrictiveness-permissiveness scores per state across all years. We stratified states with restrictiveness-permissiveness scores  $\leq 50$  (labeling them restrictive) and  $> 50$  (labeling them permissive). For comparative purposes, we also used a second stratification that separated states by the median restrictiveness-permissiveness score of  $\leq 79$  (restrictive) and  $> 79$  (permissive). We compared both stratifications with changes in mass shootings per million people over time. Average state restrictiveness-permissiveness scores and average state gun ownership percentages were calculated across all years of available data. We calculated Pearson correlation coefficients and scatterplots between these state restrictiveness-permissiveness scores and gun ownership percentages, as well as the population-based rates of mass shootings across all states in all years.

### Regression analyses

Data were analyzed by using generalized estimating equations with a negative binomial distribution and natural log link to determine the association between state gun laws and annual mass shootings. We chose this regression specification because of estimated variances exceeding conditional means. Repeated cross-sectional time-series measures were calculated as state-per-year. We used an offset of state population and, in the fully adjusted model, median household income, percent high school graduation, percent female headed households, percent in poverty, percent unemployment, incarceration rate, and percent white were included as covariates. These variables were chosen according to suggestions in the Supplementary Homicide Reports documentation,<sup>28</sup> as well as other studies that examined state laws with different firearm outcomes.<sup>6-10, 32</sup> We included year as an indicator variable in all analyses. A compound symmetry working correlation structure was assumed due to its best fit of the data as shown by consistently lowest quasi-likelihood under the independence model criterion among the datasets.

Fully adjusted models included all covariates and an indicator variable for year. Partially adjusted models were calculated by including confounders that changed the association between the restrictiveness-permissiveness score and the rate of mass shootings by more than 10%, a common method for confounder selection.<sup>33-34</sup> Partially adjusted models also included an indicator variable for year and avoided inclusion of less influential covariates that added limited information to our models. Restrictiveness-permissiveness score and incarceration rate were lagged by one year to account for reverse causation. Because restrictiveness-permissiveness of state



gun laws and state gun ownership were highly and significantly correlated (Pearson's  $r$  0.79,  $P < 0.001$ ) and interdependent, we did not include them in the same regression models.

#### Patient and public involvement

Neither patients nor the public were involved in the planning or execution of this study.

#### Results

##### Descriptive and unadjusted analyses

The average restrictiveness-permissiveness score of state gun laws showed an overall shift toward permissiveness from 1998-2014; for each additional year that passed, scores on average became more permissive by 0.16 units ( $P = 0.005$ ). From 1998-2014, there were 344 mass shootings incidents as reported by the Uniform Crime Reports. A total of 263 (76.5%) of these events were classified as non-domestic events, the remaining 81 (23.5%) were classified as domestic. The variability of restrictiveness-permissiveness scores over the study period was limited in most states. Massachusetts was found to have the most restrictive and Vermont the most permissive state gun laws over the study period (see supplementary fig 1).

Yearly changes in rates of mass shootings showed that restrictive states, on average, had lower rates of mass shootings compared with permissive states across most years. Figure 1 shows that a growing divergence was noted in 2010 with a decreasing rate of mass shootings in restrictive states and an increasing rate of mass shootings in permissive states. Scatterplots

of gun law restrictiveness-permissiveness scores, gun ownership, and rates of mass shooting showed positive and significant correlations between gun ownership and rates of mass shootings (Pearson's  $r$  0.42,  $P = 0.003$ ), gun law restrictiveness-permissiveness and rates of mass shootings (0.38,  $P = 0.007$ ), and gun law restrictiveness-permissiveness and gun ownership (0.79,  $P < 0.001$ ). Figure 2 shows that on average, more permissive states and states with higher rates of gun ownership had more mass shootings in these unadjusted, bivariate analyses.

##### Fully adjusted and partially adjusted analyses of all mass shooting outcomes

Table 1 shows that in fully adjusted models, a 10 unit increase in state gun law permissiveness was associated with a significant 11.5% (95% confidence interval 4.2% to 19.3%,  $P = 0.002$ ) higher rate of mass shootings. A 10% increase in state gun ownership was associated with a significant 35.1% (12.7% to 62.7%,  $P = 0.001$ ) higher rate of mass shootings.

In partially adjusted models, an indicator variable for year was included in all analyses, in addition to only covariates that changed the relation between the exposures of interest (restrictiveness-permissiveness and gun ownership) and mass shootings by greater than 10%. For state gun law restrictiveness-permissiveness, only median income fulfilled this criterion. For state gun ownership, no covariate changed the relation by even 5% so only year was included. Table 1 shows that a 10 unit increase in state permissiveness was associated with a significant 9.2% (95% confidence interval 1.7% to 17.2%,  $P = 0.01$ ) higher rate of mass shootings. A 10% higher state firearm ownership rate was associated with a significant 36.1% (20.1% to 54.2%,  $P < 0.001$ ) higher rate of mass shootings.

##### Analyses of non-domestic and domestic mass shooting outcomes

Table 2 shows that in the fully adjusted model that was restricted to non-domestic mass shooting outcomes only, for every 10 unit increase in state gun law permissiveness, there was a significant 11.3% (95% confidence interval 2.4% to 20.9%,  $P = 0.01$ ) higher rate of mass shootings. In the partially adjusted model (where only year and median income were included as covariates), there was a significant 8.5% (1.0% to 16.5%,  $P = 0.02$ ) higher rate of mass shootings. For every 10 unit increase in state gun ownership in the fully adjusted model, there was a significant 32.7% (9.1% to 61.4%,  $P = 0.005$ ) higher rate of mass shootings. In the partially adjusted model there was a significant 38.8% (22.4% to 57.3%,  $P < 0.001$ ) higher rate of mass shootings.

Table 2 shows that in the fully adjusted model that was restricted to domestic mass shooting outcomes only, for every 10 unit increase in state law permissiveness, there was a significant 14.0% (95% confidence interval 0.8% to 28.9%,  $P = 0.04$ ) higher rate of mass shootings. In the partially adjusted model, there was a non-significant 13.2% (-3.1% to 32.3%,

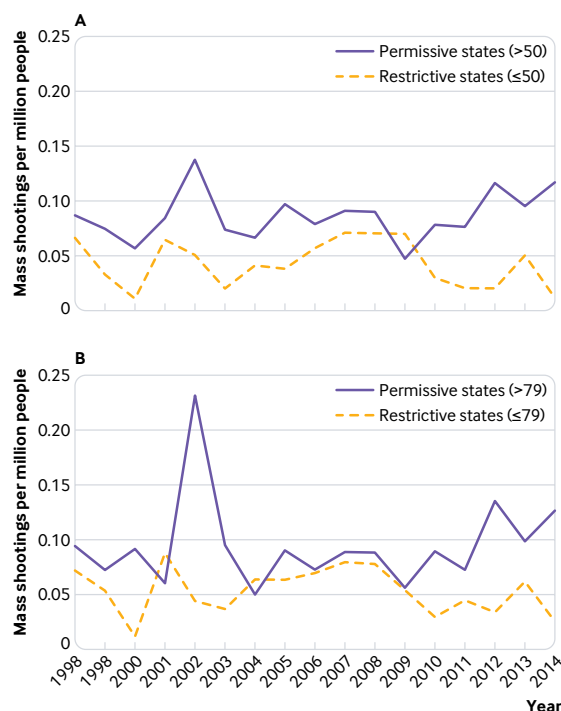


Fig 1 | Rates of mass shootings over time in restrictive versus permissive states for a restrictiveness-permissiveness score of 50 (A) and 79 (B). Years 1998-2014 were included because of the lag of the permissiveness score



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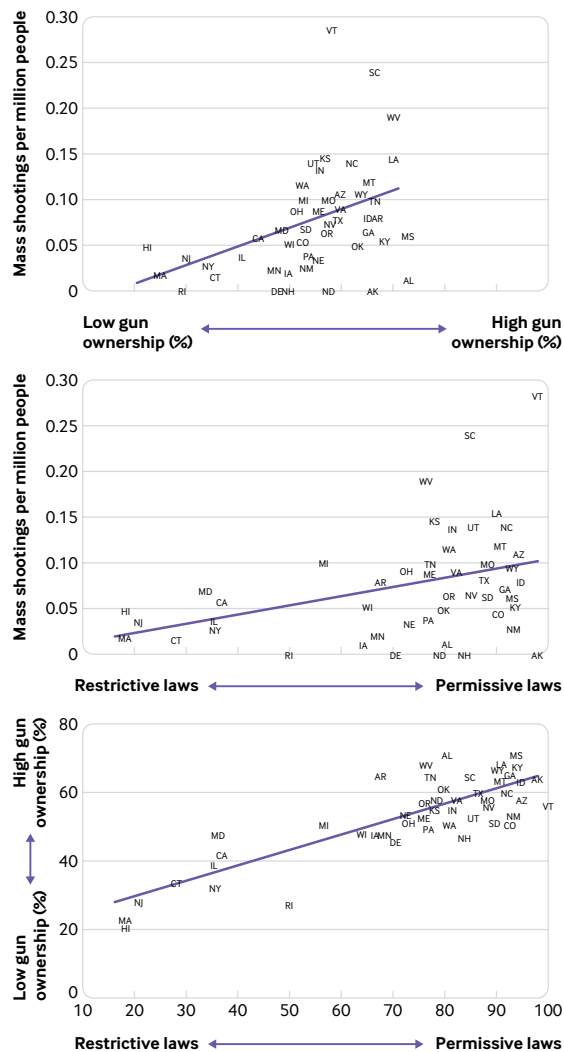


Fig 2 | Scatterplots of the relations between state rates of mass shootings, gun law restrictiveness-permissiveness scores, and gun ownership

$P=0.12$ ) higher rate of mass shootings. For every 10 unit increase in state gun ownership in the fully adjusted model, there was a significant 60.3% (17.3% to 118.9%,  $P=0.003$ ) higher rate of mass shootings. In the partially adjusted model, there was a borderline non-significant 31.2% (-1.7% to 75.0%,  $P=0.06$ ) higher rate of mass shootings.

### Discussion

Our analyses show that US state gun laws have become more permissive in recent decades, and that a

growing divide in rates of mass shootings appears to be emerging between restrictive and permissive states. A 10 unit increase in the permissiveness of state gun laws was associated with an approximately 9% higher rate of mass shootings after adjusting for key factors. A 10% increase in gun ownership was associated with an approximately 35% higher rate of mass shootings after adjusting for key factors. On the absolute scale, this means that a state like California, which has approximately two mass shootings per year, will have an extra mass shooting for every 10 unit increase in permissiveness over five years. It will also have three to five more mass shootings per five years for every 10 unit increase in gun ownership. These results were also consistent across multiple analyses and when stratified as to whether or not mass shootings were committed by someone in a close relationship with the victims.

### Previous research

These associations between state gun laws, gun ownership, and mass shootings are analogous to what was found in previous research for other types of gun injuries.<sup>6-10</sup> To develop effective state gun laws, the underlying cause of the association with rates of mass shootings needs to be identified. Perhaps as a result of outside pressures, relatively few specific gun laws have been scientifically studied, much less proven effective, for gun violence outcomes in general, and mass shootings in particular.<sup>2 35</sup> Domestic violence and suicide are commonly connected to mass shooting events, so state gun laws involving restraining orders and extreme risk protection orders may be valuable first opportunities for scientific evaluation.<sup>36 37</sup> Non-legislative approaches, such as environmental modifications, policing practices, and bystander training, could also be worthy of evaluation in potentially preventing and reducing the tragic impacts of mass shootings.<sup>38-41</sup> As with other large-scale, population-wide solutions to relatively infrequent mass health threats, both legislative and non-legislative approaches should be carefully studied for their potential beneficial effects as well as any unintended consequences that could emerge. This caveat is applicable here given the low rate of mass shootings compared with daily shooting events, although certain solutions could benefit both events.<sup>42-46</sup>

### Strengths and limitations

There are several limitations to our study. Our study design incorporated a time series component, lagged variables, and multiple covariate adjustment strategies,

Table 1 | Percent changes in relative rate of mass shootings for every 10 unit change in state gun law permissiveness or state gun ownership

| Exposure                     | Fully adjusted % change estimate (95% CI) | Partially adjusted % change estimate (95% CI) |
|------------------------------|-------------------------------------------|-----------------------------------------------|
| State gun law permissiveness | 11.5* (4.2 to 19.3)                       | 9.2† (1.7 to 17.2)                            |
| State gun ownership          | 35.1* (12.7 to 62.7)                      | 36.1‡ (20.1 to 54.2)                          |

\* $P<0.01$

† $P<0.05$

‡ $P<0.001$

**Table 2 | Percent changes in relative rate of mass shootings for every 10 unit change in state gun law permissiveness and state gun ownership separated into non-domestic and domestic categories**

| Exposure                     | Fully adjusted % change estimate (95% CI) |                       | Partially adjusted % change estimate (95% CI) |                     |
|------------------------------|-------------------------------------------|-----------------------|-----------------------------------------------|---------------------|
|                              | Non-domestic                              | Domestic              | Non-domestic                                  | Domestic            |
| State gun law permissiveness | 11.3* (2.4 to 20.9)                       | 14.0* (0.8 to 28.9)   | 8.5* (1.0 to 16.5)                            | 13.2 (–3.1 to 32.3) |
| State gun ownership          | 32.7† (9.1 to 61.4)                       | 60.3† (17.3 to 118.9) | 38.8‡ (22.4 to 57.3)                          | 31.2 (–1.7 to 75.0) |

\*P&lt;0.05

†P&lt;0.01

‡P&lt;0.001

and was primarily able to show broad associations between state gun laws, gun ownership, and mass shootings. The potential for omitted variable biases and reverse causation remain and future analyses are encouraged to build on our work by testing the before-and-after effects of enactment or repeal of gun laws in specific states, or both, alongside appropriately matched control states.

In addition, the state restrictiveness-permissiveness score we used has not been validated. However, this score had a wide range (0-100), was determined by legal professionals for use by actual gun owners, had nearly two decades of consistent data, and was highly correlated with other similar state-level scales that had been previously used ( $r=0.85$ ).<sup>6</sup> State gun laws and the enforcement of these laws can be difficult to separate and our measure of state gun laws might not reflect differing levels of enforcement among states with comparable restrictiveness-permissiveness scores.

There are concerns about potential under-reporting in the Uniform Crime Reporting System Supplemental Homicide reports due to some states failing to consistently report. However, these under-reported data would likely bias our results toward the null. If errors were randomly distributed, then there would be non-differential misclassification, leading to an underestimate of our association. Alternatively, if there is differential misclassification, evidence points to it being among more permissive states (such as Alabama, Nebraska, and Florida) most likely leading to, if anything, underestimation in the associations we found. Despite this, improved reporting systems for mass shootings, including better tracking of whether mass shooters legally possessed their firearms or crossed state lines to obtain their weapons, or both,<sup>47 48</sup> are needed to further improve the accuracy and detail of future analyses.

### Conclusion and future directions

The permissiveness or restrictiveness of state gun laws is associated with the rate of mass shootings in the US. States with more permissive gun laws and greater gun ownership have higher rates of mass shootings, and a growing divergence is noted in recent years as rates of mass shootings in restrictive states have decreased and those in permissive states have increased. Better data collection on mass shootings and more studies that test changes to specific state gun laws, compared with states that have not made changes, are necessary based on our findings, the general increase in state gun law permissiveness, and the pressing need reduce mass shootings in the US.

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**Competing interests:** All authors have completed the ICMJE uniform disclosure form at [www.icmje.org/coi\\_disclosure.pdf](http://www.icmje.org/coi_disclosure.pdf) and declare: no support from any organization for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work.

**Ethical approval:** Owing to the aggregated nature of the count data used in the study, the Institutional Review Board at Columbia University determined that the study was exempt.

**Patient consent:** Not applicable.

**Data sharing:** Statistical code and dataset available from the corresponding author.

The lead author (PMR) affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned have been explained.

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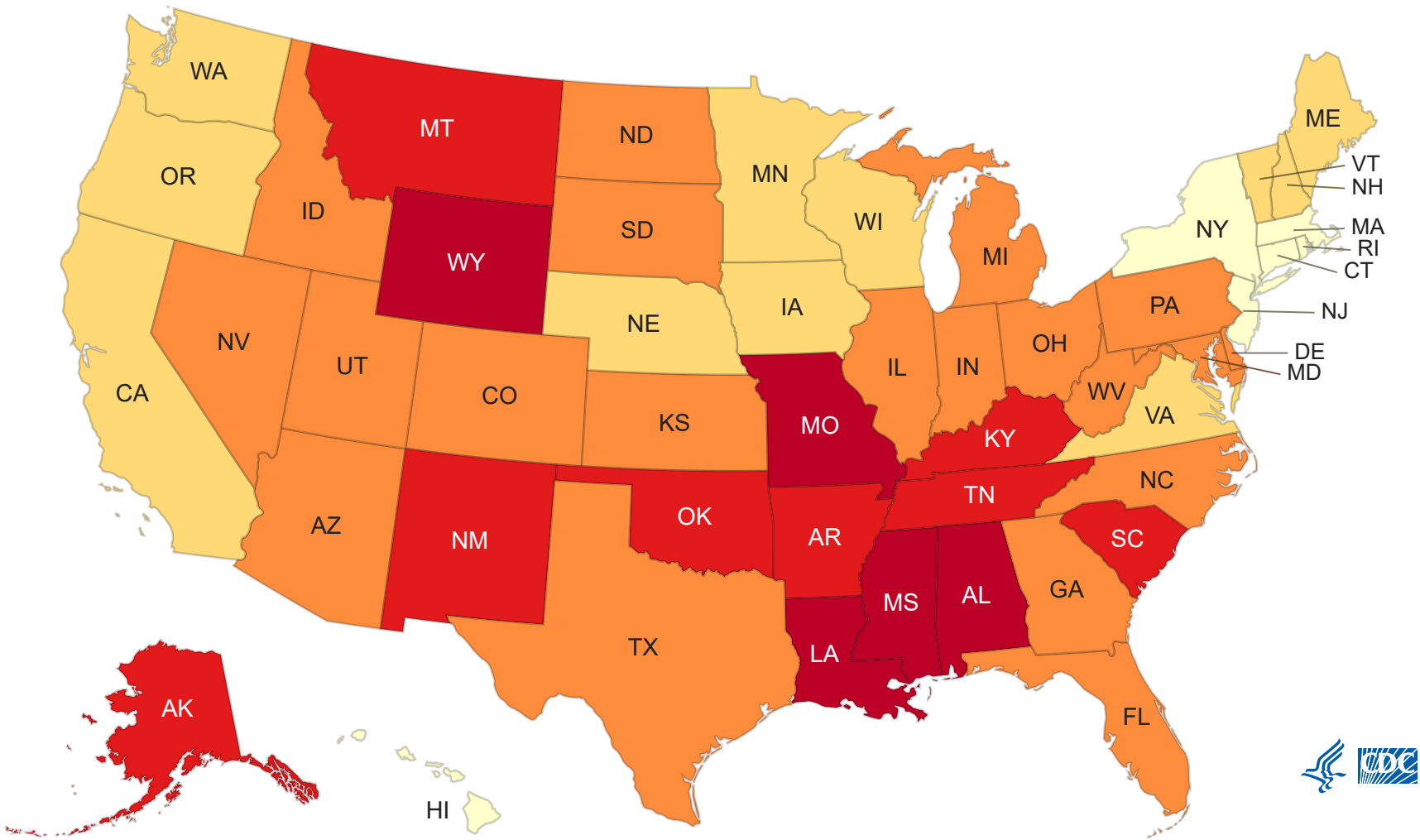
**Supplementary materials:** Supplementary figure 1

National Center for Health Statistics



National Center for Health Statistics

Firearm Mortality by State



Age-Adjusted Death Rates<sup>1</sup>

- ☐ 3.4 - < 8.44
- ☐ 8.44 - < 13.48
- ☐ 13.48 - < 18.52
- ☐ 18.52 - < 23.56
- ☐ 23.56 - 28.6

Filters

Year  

2020 ▾

Data Table

| Location                                            | Death Rate (Click for...) | Deaths |
|-----------------------------------------------------|---------------------------|--------|
| <input type="radio"/> <a href="#">Alabama</a> ↗     | 23.6                      | 1,141  |
| <input type="radio"/> <a href="#">Alaska</a> ↗      | 23.5                      | 175    |
| <input type="radio"/> <a href="#">Arizona</a> ↗     | 16.7                      | 1,265  |
| <input type="radio"/> <a href="#">Arkansas</a> ↗    | 22.6                      | 673    |
| <input type="radio"/> <a href="#">California</a> ↗  | 8.5                       | 3,449  |
| <input type="radio"/> <a href="#">Colorado</a> ↗    | 15.4                      | 922    |
| <input type="radio"/> <a href="#">Connecticut</a> ↗ | 6                         | 219    |
| <input type="radio"/> <a href="#">Delaware</a> ↗    | 14.4                      | 135    |
| <input type="radio"/> <a href="#">Florida</a> ↗     | 13.7                      | 3,041  |
| <input type="radio"/> <a href="#">Georgia</a> ↗     | 17.7                      | 1,897  |

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Stats of the States - Firearm Mortality

| Location                                             | Death Rate (Click for... | Deaths |
|------------------------------------------------------|--------------------------|--------|
| <input type="radio"/> <a href="#">Hawaii</a>         | 3.4                      | 50     |
| <input type="radio"/> <a href="#">Idaho</a>          | 17.6                     | 321    |
| <input type="radio"/> <a href="#">Illinois</a>       | 14.1                     | 1,745  |
| <input type="radio"/> <a href="#">Indiana</a>        | 17.3                     | 1,159  |
| <input type="radio"/> <a href="#">Iowa</a>           | 11.2                     | 351    |
| <input type="radio"/> <a href="#">Kansas</a>         | 16.9                     | 494    |
| <input type="radio"/> <a href="#">Kentucky</a>       | 20.1                     | 902    |
| <input type="radio"/> <a href="#">Louisiana</a>      | 26.3                     | 1,183  |
| <input type="radio"/> <a href="#">Maine</a>          | 10.4                     | 153    |
| <input type="radio"/> <a href="#">Maryland</a>       | 13.5                     | 803    |
| <input type="radio"/> <a href="#">Massachusetts</a>  | 3.7                      | 268    |
| <input type="radio"/> <a href="#">Michigan</a>       | 14.6                     | 1,454  |
| <input type="radio"/> <a href="#">Minnesota</a>      | 8.9                      | 513    |
| <input type="radio"/> <a href="#">Mississippi</a>    | 28.6                     | 818    |
| <input type="radio"/> <a href="#">Missouri</a>       | 23.9                     | 1,426  |
| <input type="radio"/> <a href="#">Montana</a>        | 20.9                     | 238    |
| <input type="radio"/> <a href="#">Nebraska</a>       | 10.1                     | 197    |
| <input type="radio"/> <a href="#">Nevada</a>         | 17                       | 547    |
| <input type="radio"/> <a href="#">New Hampshire</a>  | 8.9                      | 128    |
| <input type="radio"/> <a href="#">New Jersey</a>     | 5                        | 443    |
| <input type="radio"/> <a href="#">New Mexico</a>     | 22.7                     | 479    |
| <input type="radio"/> <a href="#">New York</a>       | 5.3                      | 1,052  |
| <input type="radio"/> <a href="#">North Carolina</a> | 16                       | 1,699  |
| <input type="radio"/> <a href="#">North Dakota</a>   | 13.8                     | 100    |
| <input type="radio"/> <a href="#">Ohio</a>           | 15.2                     | 1,764  |
| <input type="radio"/> <a href="#">Oklahoma</a>       | 20.7                     | 826    |
| <input type="radio"/> <a href="#">Oregon</a>         | 13                       | 592    |
| <input type="radio"/> <a href="#">Pennsylvania</a>   | 13.6                     | 1,752  |
| <input type="radio"/> <a href="#">Rhode Island</a>   | 5.1                      | 54     |
| <input type="radio"/> <a href="#">South Carolina</a> | 22                       | 1,131  |
| <input type="radio"/> <a href="#">South Dakota</a>   | 13.6                     | 120    |
| <input type="radio"/> <a href="#">Tennessee</a>      | 21.3                     | 1,473  |
| <input type="radio"/> <a href="#">Texas</a>          | 14.2                     | 4,164  |
| <input type="radio"/> <a href="#">Utah</a>           | 13.6                     | 429    |
| <input type="radio"/> <a href="#">Vermont</a>        | 11.6                     | 76     |
| <input type="radio"/> <a href="#">Virginia</a>       | 13.4                     | 1,174  |
| <input type="radio"/> <a href="#">Washington</a>     | 10.9                     | 864    |
| <input type="radio"/> <a href="#">West Virginia</a>  | 18.1                     | 325    |
| <input type="radio"/> <a href="#">Wisconsin</a>      | 12.2                     | 717    |
| <input type="radio"/> <a href="#">Wyoming</a>        | 25.9                     | 154    |

Download Data (CSV)

<sup>1</sup> The number of deaths per 100,000 total population.

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Stats of the States - Firearm Mortality

Source: <https://wonder.cdc.gov>

States are categorized from highest rate to lowest rate. Although adjusted for differences in age-distribution and population size, rankings by state do not take into account other state specific population characteristics that may affect the level of mortality. When the number of deaths is small, rankings by state may be unreliable due to instability in death rates.

Page last reviewed: March 1, 2022



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|             |                                   |
|-------------|-----------------------------------|
| <b>2022</b> | <b>Everytown Gun Law Rankings</b> |
|-------------|-----------------------------------|

*By Everytown Research & Policy*

# Gun Safety Policies Save Lives

Which states have the ideal laws to prevent gun violence?

We compared gun policy across the country, scoring every state on the **strength of its gun laws** and comparing it with its **rate of gun violence**. In states where elected officials have taken action to pass gun safety laws, fewer people die by gun violence. Choose a state to see how it stacks up on 50 key policies, or explore a policy to see how much of the country has adopted it.

| State & Rank | Gun Law Strength | Gun Violence Rate                |
|--------------|------------------|----------------------------------|
|              | Composite score  | Gun deaths per 100,000 residents |

## NATIONAL LEADERS

- 1 California
- 2 Hawaii
- 3 New York
- 4 Massachusetts

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- 5 Connecticut
- 6 Illinois
- 7 Maryland
- 8 New Jersey

#### **MAKING PROGRESS**

- 9 Washington
- 10 Colorado
- 11 Oregon
- 12 Rhode Island
- 13 Delaware
- 14 Virginia
- 15 Pennsylvania
- 16 New Mexico
- 17 Minnesota

#### **MISSING KEY LAWS**

- 18 Nevada
- 19 Florida
- 20 Nebraska
- 21 North Carolina
- 22 Vermont
- 23 Wisconsin
- 24 Michigan
- 25 Indiana
- 26 Maine
- 27 Louisiana
- 28 West Virginia

#### **WEAK SYSTEMS**

- 29 Alabama

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- 30 Ohio
- 31 South Carolina
- 32 Tennessee
- 33 Iowa
- 34 Texas
- 35 North Dakota
- 36 Georgia
- 37 Utah

#### NATIONAL FAILURES

- 38 Kansas
- 39 Alaska
- 40 Kentucky
- 41 Missouri
- 42 New Hampshire
- 43 Arizona
- 44 Oklahoma
- 45 Wyoming
- 46 South Dakota
- 47 Arkansas
- 48 Montana
- 49 Idaho
- 50 Mississippi

### Gun laws work

When we compare the states head-to-head on the top 50 gun safety policies, a clear pattern emerges. States with strong laws see less gun violence. Indeed, the 13 states that have failed to put basic protections into place—"national failures" on our scale—have nearly three times as many gun deaths as the eight national gun safety leaders.

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**Strong Gun Laws, Fewer Deaths**

The correlation is especially clear when looking at average data by tier. The tiers range from 7.4 gun deaths per 100,000 residents for the National Leaders to 20.0 gun deaths per 100,000 residents for the National Failures.

National Leaders

Making Progress

Missing Key Laws

Weak Systems

National Failures

The top 50 laws we focus on represent a wide range of interventions. Some block gun access by people who pose a threat with a firearm while others focus on limiting gun violence in public. Some seek to increase police accountability and protect civil rights, while another set targets bad actors in the gun industry.

All states should start with a core group of five foundational laws—passing background checks and/or purchase permitting, along with Extreme Risk laws and secure gun storage requirements; and rejecting Stand Your Ground and permitless carry laws. While each of the top 14 states in the gun law rankings has *all* five of these policies in place, none of the bottom 14 states maintains *any* of these critical protections.

The national gun safety landscape has seen states move in opposite directions in recent years. While all nine states in our “making progress” tier have made significant additions to their firearm laws in recent years—with each adding several points to its gun law score—a whopping 21 states at the other end of the scale have made the dangerous decision to repeal their concealed carry permit requirements since 2014.

Our gun law rankings are a roadmap for how to build the ideal state system. They will walk you through the most important policies and help you compare these protections across the country.

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## Even the strongest system can't protect a state from its neighbors' weak laws

The rankings clearly show that gun laws save lives. But no state is an island (except Hawaii), and any state may be vulnerable if its neighbors fail to protect public safety. That's how northeastern states with strong laws ended up victims of the infamous "iron pipeline," the route traffickers use to bring guns up from southeastern states with weak laws. The evidence tells a simple story about porous borders: Out of all guns showing up at crime scenes after crossing state lines, four out of five come from states that lack good background check laws.

Notable strong law states like Illinois and Maryland remain plagued with high gun violence in their biggest cities—in large part because they're targeted by traffickers. Indeed an outsized share of likely trafficked crime guns recovered in Illinois begin their journey in states with weak laws. And Virginia, which had weak gun purchase laws until 2020, has long been the top supplier of crime guns into Maryland. At the other end of the scale, states like New Hampshire, Vermont, and Rhode Island have unusually low gun death rates compared with their somewhat weaker policies, in part because they are buffered by robust laws among other states in the region.

## High gun ownership rates also play a role in strong states where deaths are higher

Access to a firearm drastically increases the likelihood of suicide and a gun in the home is associated with more gun homicide. Again, a state like Rhode Island has low gun violence relative to the strength of its laws—likely due in part to its very low gun ownership rate (it's third-lowest in the nation). On the other hand, states like Nevada and New Mexico have higher rates of gun violence than their laws might suggest—perhaps in part as a result of above-average gun ownership.

## It takes time for new laws to have an impact

Several states have had recent success passing strong policy—for example, Nevada added half of its gun law score in the past five years and New Mexico added over 40% of its score in the past three years. Both states enacted Extreme Risk, background check, and domestic violence laws, with New Mexico also

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limiting qualified immunity and Nevada tackling community violence, secure storage, and ghost guns. Those states can hope to see newfound protection in the coming years—and more lives saved.

At the other end of the scale, Iowa repealed both its background check and carry permit laws in 2021, losing over 40% of its gun law score in one year. This new, radical change in its score provides a partial and likely temporary explanation for its relatively low gun death rate. Iowans should be concerned about a future spike in violence.

## Federal laws help prevent gun violence nationwide

All 50 states can rely on a backbone of federal laws to help keep guns out of the wrong hands. Yet the federal system is far too weak overall—for example, failing to require background checks on all gun sales and giving special legal immunity to the gun industry. State policymakers should protect their residents by filling the many gaps in federal law, and must also take action where state power is at its strongest, such as requiring a process for domestic abusers to turn in guns when they become prohibited from having them.

## There's work to do beyond strong state laws

By comparing state gun laws with gun violence outcomes, we see how critical it is to enact strong policy. But a caveat is required: There is necessary *non-legislative* gun safety work this site doesn't show—including community-based violence intervention programs; regulatory efforts, funding campaigns, and on-the-ground implementation; local executive action and city and town ordinances; and responsible cultural norms around gun safety.

## Where do we go from here?

A safer future is possible. Our gun law rankings show which states are ahead and which are behind, and provide a checklist for how to get there.

---

**How did we calculate these rankings? Learn**





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more in our methodology.

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**How does gun violence impact your state?  
Learn more about gun violence statistics.**

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**Join our movement to advocate for change in  
your state.**

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**2022 Everytown Gun Law Rankings**

Last updated January 19, 2022

Methodology



## GUN LAWS SAVE LIVES

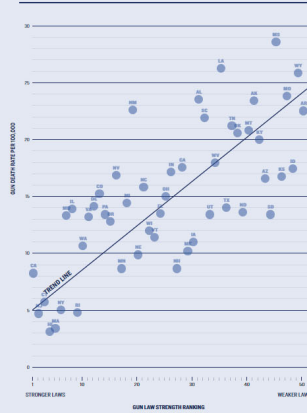
As grades worsen, gun death rates increase.

The correlation is undeniable: states with stronger gun laws have lower gun death rates. Simply put, gun laws save lives. But strong laws can't fully protect a state if its neighbors haven't done their part. Gun trafficking from states with weak gun laws undermines protections that work to prevent shootings and plays a major role in fueling violence in states with strong laws.

Until every state in the union steps up to support gun safety laws, America will continue to have one of the highest gun death rates in the world.

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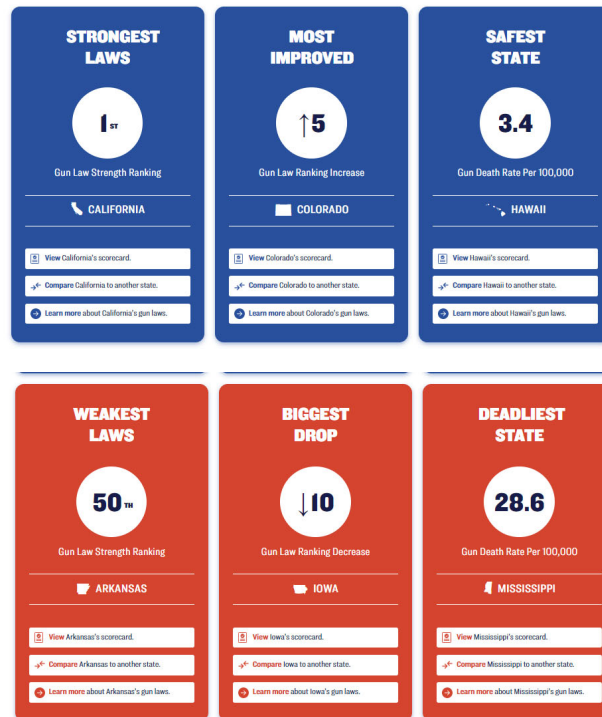
Annual state gun death rates per 100,000 by gun law strength ranking.



## YEAR IN REVIEW

Six days into 2021, armed insurrectionists stormed the US Capitol and set the tone for extremist legislators nationwide. Despite the horrific start to the year, many lawmakers and advocates across the country remained dedicated to passing gun safety bills in their home states—and succeeded. The progress our movement made last year was critical, but the fight to save lives is a marathon, not a sprint—and we can't let up now.

Here are a few of the best and worst states of 2021.



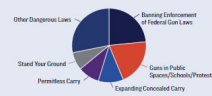
## LEGISLATIVE PROGRESS

In 2021, 27 states and DC passed 75 gun safety bills, including lifesaving legislation like improving background checks and increasing funding for community violence intervention programs. But 19 states also passed 64 dangerous gun laws—like permitless carry—that put communities at risk. We're fighting the gun lobby in states across the country, but we need your support to keep their deadly agenda at bay.

### New Gun Safety Laws In 2021



### New Gun Lobby Laws In 2021



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## HOW DOES YOUR STATE COMPARE?

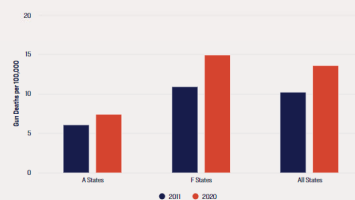
Select any two states to see how they stack up.

| CALIFORNIA                                                             | GRADE                              | ARKANSAS    |
|------------------------------------------------------------------------|------------------------------------|-------------|
| <b>A</b>                                                               |                                    | <b>F</b>    |
| <b>I</b>                                                               | GUN LAW STRENGTH RANK              | <b>50</b>   |
| <b>44</b>                                                              | GUN DEATH RATE RANK                | <b>8</b>    |
| <b>8.5</b>                                                             | GUN DEATHS PER 100K                | <b>22.6</b> |
| <b>↓37%</b>                                                            | % DIFFERENCE FROM NATIONAL AVERAGE | <b>↑66%</b> |
| <a href="#">SHARE</a> <a href="#">Twitter</a> <a href="#">Facebook</a> |                                    |             |

## SURGES IN VIOLENCE

Gun violence is on the rise nationally, but states with strong laws weather the surge better over time than states with weak laws.

Annual Gun Death Rates Per 100,000 In 2011 And 2020



Over the last decade, gun violence has jumped 22% across the country—driven by steady increases in gun suicides and a precipitous rise in gun homicides during the pandemic. **States with the weakest gun laws have been hit hardest by rising violence:** from 2011 to 2020, gun death rates rose by a staggering 37% in F states. A states saw a smaller increase over this period, one roughly half the size of F states.

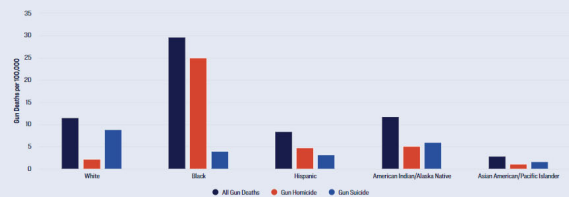
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## DISPROPORTIONATE IMPACT

The gun death rate for Black Americans is more than double that of white Americans, largely due to gun homicides, and the surge in gun violence we've seen over the past two years disproportionately affects communities of color. Our leaders must not only pass gun safety laws that protect all Americans but also invest in proven, lifesaving community violence intervention programs that interface directly with the small percentage of individuals at highest risk for violence.

Gun Death Rates By Race And Intent

View All



Source: CDC WONDER

READ MORE

## JOIN THE FIGHT

We're on a mission to save lives from gun violence. Here's how you can help.

### DONATE

We're working to pass lifesaving gun safety laws, but we need your support.

### GET INVOLVED

Join Giffords Law Center and become part of the movement to save lives.

### TALK TO AN EXPERT

Our attorneys can speak to the full spectrum of gun violence issues.

### LITIGATION

We're holding the gun lobby accountable in courts across the nation.

### STATISTICS

Learn more about the devastating scope of America's gun violence epidemic.

### GUN LAWS BY STATE

Explore the ins and outs of gun safety laws and policies in all 50 states.

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FACT SHEET AUG 18, 2022

# Fact Sheet: Weak Gun Laws Are Driving Increases in Violent Crime

AUTHOR



Nick Wilson

[Advancing Racial Equity and Justice](#) [Gun Violence Prevention](#)


States that have recently weakened their gun laws are seeing increases in violent crime.



American flags are flown at half-staff at the base of the Washington Monument in Washington, D.C., in response to a mass shooting in May 2021. (Getty/Kevin Dietsch)

The rising violent crime rate over the past two years is a pressing issue that requires immediate action. While many have blamed the criminal justice reform movement for the rise in violent crime, these increases can largely be attributed to an alarming escalation in gun violence. If elected officials are serious about stopping violent crime,

<https://www.americanprogress.org/article/fact-sheet-weak-gun-laws-are-driving-increases-in-violent-crime/>

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Fact Sheet: Weak Gun Laws Are Driving Increases in Violent Crime - Center for American Progress

they need to prioritize and support stronger gun laws at both the state and federal levels.

This fact sheet provides data that show the link between states' actions to weaken their gun laws and rising violent crime rates.

## Homicide rates are higher in states with weaker gun laws

- States that received an “F” grade based on the strength of their gun laws—according to the latest scorecard from the Giffords Law Center to Prevent Gun Violence—saw the highest homicide rates:<sup>1</sup>
  - States with “F” grades saw 25 percent higher homicide rates than states with “C” or “D” grades.<sup>2</sup>
  - States with “F” grades saw 61 percent higher homicide rates than states with “A” or “B” grades—states with the strongest gun laws.<sup>3</sup>
- The states with the highest firearm mortality rates are Alabama, Louisiana, Mississippi, Missouri, and Wyoming.<sup>4</sup> These states all received an “F” grade for their weak gun laws.<sup>5</sup>
- Children and teenagers are most vulnerable in states with weaker gun laws: In 2020, the 10 states with the highest rates of gun deaths among children and teenagers ages 1–19 were Louisiana, Alaska, Mississippi, South Carolina, Arkansas, Kansas, Indiana, Kentucky, Missouri, and Alabama.<sup>6</sup> All of these states received an “F” grade for their weak gun laws.
- Reports also suggest that rates of nonfatal gunshot injuries sustained during assaults are higher in states with weaker gun laws: In 2017, the most recent year with available data across all states, states that received an “F” grade had a rate of nonfatal gunshot injuries that was 22 percent higher than states with “C” or “D” grades and 59 percent higher than states with “A” or “B” grades.<sup>7</sup>



Children and teenagers are most vulnerable in states with weaker gun laws.

## Missouri's repeal of its handgun law led to an increase in gun homicide rates

- In 2007, Missouri repealed its permit-to-purchase (PTP) law, which required all handgun purchasers to have a valid license that they could obtain only after passing a background check.
- A 2020 study concluded that the law's repeal was associated with a 47 percent increase in gun homicide rates and a 23 percent increase in gun suicide rates.<sup>8</sup>
- The number of guns sold in Missouri that were later recovered in connection with criminal investigations in the neighboring states of Iowa and Illinois rose by 37 percent following the repeal of the PTP law.<sup>9</sup>
- From 2007 to 2016, Missouri's overall gun-related child death rate was the sixth-highest in the nation—62 percent higher than the national rate.<sup>10</sup> Specifically,

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during the same period, the child gun homicide rate in Missouri was the third-highest in the nation.<sup>11</sup>

## Iowa has seen a dramatic increase in gun violence after weakening its state gun laws

- Iowa saw the largest drop in Giffords' 2021 annual state scorecard rankings, dropping from a "C" in 2020 to an "F" in 2021 after repealing two crucial gun safety measures: requirements for permits to purchase firearms and for permits to carry concealed firearms in public places.<sup>12</sup>
- State Sen. Jason Schultz (R) sponsored the bill eliminating state permit requirements and argued that weakening the gun laws would reduce crime: "More guns equal less crime and ladies and gentlemen when all the good guys are armed the bad guys live a short, dangerous, brutish life," Schultz said on the Iowa Senate floor.<sup>13</sup>
- In 2018, the Center for American Progress and Progress Iowa warned that efforts by the Iowa Legislature to pass dangerous legislation weakening existing gun laws, including then-existing permitting requirements, would lead to increased violence.<sup>14</sup>
- In 2019, Iowa was ranked 43rd in gun violence across the country, with 9.1 firearm related deaths per 100,000 people—25 percent lower than the national average.<sup>15</sup>
- Gun homicides increased 23.5 percent in Iowa between 2019 and 2020:
  - Nonfatal shootings increased by 11.7 percent, from 204 in 2019 to 228 in 2020.
  - In 2021, nonfatal shootings increased by another 7.5 percent, to 245.<sup>16</sup>
- Gun violence is the most common cause of homicide in Iowa, with firearms responsible for 73 percent of homicides from 2016 to 2020.<sup>17</sup>



"More guns equal less crime and ladies and gentlemen when all the good guys are armed the bad guys live a short, dangerous, brutish life."

Iowa state Sen. Jason Schultz (R)

## Mississippi has the weakest gun laws and the highest firearm death rate in the country

- According to the Centers for Disease Control and Prevention, Mississippi has the highest firearm mortality rate in the country, at 28.6 per 100,000 people.<sup>18</sup>
- Giffords claims "Mississippi has the weakest gun laws in the country,"<sup>19</sup> and Everytown for Gun Safety ranks the state at 50th in the country for having the worst gun laws.<sup>20</sup>
- In 2020, Mississippi had the highest rate of crime gun exports in the country because gun traffickers and individuals legally prohibited from purchasing firearms

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are traveling from states with stronger gun laws to Mississippi to take advantage of its weak gun laws.<sup>21</sup>

## Mass shootings are increasing faster in states with weak gun laws

- A 2019 study found that U.S. state gun laws have become more permissive in recent decades, concluding: “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.”<sup>22</sup>
- State laws requiring permits to purchase a gun are associated with 60 percent lower chance of a mass public shooting occurring.<sup>23</sup>
- When a mass shooting occurred, states with a large-capacity magazine ban had 38 percent fewer fatalities and 77 percent fewer nonfatal injuries.<sup>24</sup>



“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.”

Paul M. Reeping and others, “State gun laws, gun ownership, and mass shootings in the US: cross sectional time series.”

## Police officers are more likely to be fatally shot in states with weaker gun laws

- States that received an “F” grade from the Giffords Law Center<sup>25</sup> based on the strength of their gun laws saw higher rates of police officers fatally shot from 2017 to 2021.<sup>26</sup>
- States with “F” grades had a rate of police officers fatally shot that was 75 percent higher than states with “Cs” or “Ds” and 152 percent higher than states with “As” or “Bs”—those with the strongest gun laws.<sup>27</sup>

## States that strengthen gun laws see reductions in violent crime

- Connecticut’s 1995 handgun purchaser licensing law, also known as PTP, was associated with an estimated 27.8 percent decrease in its firearm homicide rate from 1995 to 2017.<sup>28</sup>
- Indiana and Connecticut were the first states to implement an extreme risk protection order.<sup>29</sup> For approximately every 10 risk-based firearm removal actions, one life was saved.<sup>30</sup>
- Hawaii is the only state that has a complete registry of all firearms and had the lowest gun death rate in 2020, the most recent year for which data are available.<sup>31</sup>

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A 2022 Johns Hopkins University report found that the five states with the lowest

- gun death rates in 2020 had both an extreme risk protection order law and a firearm purchaser licensing law or a waiting period.<sup>32</sup>

## Conclusion

Voters are increasingly recognizing that gun violence is a serious problem in U.S. society and that weak gun laws are driving the rise in violent crime.<sup>33</sup> When state legislatures repeal effective gun laws, such as those requiring a permit to purchase a firearm or to carry guns in public places, violent crime increases and communities becomes less safe. Elected officials who claim to support law enforcement continue to weaken state gun laws that make officers' jobs more dangerous, despite law enforcement opposition.<sup>34</sup> If elected officials are serious about reducing violent crime, strengthening gun violence prevention laws at both the state and federal levels must be on the top of their agendas.

## Endnotes

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- 1 The following states received an "F" grade on the latest scorecard from the Giffords Law Center to Prevent Gun Violence: Alabama, Alaska, Arizona, Arkansas, Georgia, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Missouri, Montana, New Hampshire, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, West Virginia, and Wyoming. See Giffords Law Center to Prevent Gun Violence, "Annual Gun Law Scorecard," available at <https://giffords.org/lawcenter/resources/scorecard/> (last accessed August 2022).
- 2 The following states received a "C" or "D" grade: Florida, Indiana, Michigan, Minnesota, Nebraska, Nevada, New Mexico, North Carolina, Ohio, Vermont, and Wisconsin. See Ibid.
- 3 The following states received an "A" or "B" grade: California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Virginia, and Washington. See Ibid.
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# Fact Sheet: Weakening Requirements to Carry a Concealed Firearm Increases Violent Crime

States weakening concealed carry requirements is an increasing trend resulting in rising violent crime.

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A Utah teacher learns how to handle a handgun during a concealed-weapons training class in December 2012 in West Valley City, Utah. (Getty/George Frey)

Every state allows people to carry concealed weapons in public, but half of them require a permit.

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- **Permitless carry:** 25 states allow individuals to carry loaded, concealed handguns in public without first undergoing a background check, obtaining a license, or receiving any firearm training.
- **Shall issue:** 10 states require a permit but allow authorities no discretion to deny a permit if the applicant meets minimum requirements. Seven additional states allow authorities limited discretion to withhold permits for individuals who meet basic requirements but exhibit public safety concerns.
- **May issue:** Eight states and the District of Columbia allow authorities wide discretion to deny a permit.

The 42 states with permitless carry and shall issue laws are commonly referred to as right-to-carry states, accounting for approximately three-quarters of the U.S. population.<sup>1</sup> These laws reflect a relatively recent trend in which states are removing or weakening permitting standards for concealed carry.<sup>2</sup> In 2010, Arizona became the third state after Vermont and Alaska to allow permitless carry. In April 2022, Georgia became the 25th state to enact legislation eliminating permit requirements for concealed carry<sup>3</sup> and the 21st state to do so in the past seven years.<sup>4</sup>

By making it easy for almost anyone to carry a concealed handgun in public, right-to-carry laws increase violent crime, firearm robberies, gun thefts, workplace homicides, and mass shootings. Right-to-carry laws make it harder for law enforcement to solve violent crimes and are opposed by many law enforcement leaders across the country. Similarly, permitless carry harms public safety by removing essential safety measures designed to ensure that those carrying handguns in public have been properly trained and vetted. Evidence overwhelmingly suggests that the removal of concealed carry permitting systems is associated with higher rates of gun homicide and violent crime.

**25 states**  
**have enacted legislation**  
**eliminating permit requirements**  
**for concealed carry. In April 2022,**  
**Georgia became the 21st state to**  
**do so in the past seven years.**

This fact sheet provides data that shows the link between states weakening requirements to carry a concealed firearm and rising violent crime; increased gun thefts; disputes escalating into shootings; and more officer-involved shootings.

In April 2022, Georgia became the 25th state to enact legislation eliminating permit requirements for concealed carry<sup>5</sup> and the 21st state to do so in the past seven years.<sup>6</sup>

## **Weakening requirements to carry a concealed firearm increases violent crime**

Recent studies have concluded that right-to-carry laws are associated with double digit increases in homicides and violent crime.

- A 2022 study found that right-to-carry laws increase firearm homicides by 13 percent and firearm violent crimes by 29 percent.<sup>7</sup>
- A 2019 study concluded that the adoption of shall issue or right-to-carry laws were associated with a 13 percent to 15 percent increase in violent crime rates a decade after implementation.<sup>8</sup>
- A 2017 study found that shall issue laws were associated with a 10.6 percent higher handgun homicide rate.<sup>9</sup>

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- A 2022 study found that states weakening concealed carry laws and allowing individuals convicted of violent misdemeanors to obtain a license to concealed carry was associated with a 24 percent increase in the rate of assaults with firearms.<sup>10</sup> “In general, violent crime increased after states loosened concealed carry permitting requirements,” said lead author Mitchel Doucette. “Allowing more individuals to carry concealed guns in public—including some who would have previously been denied carry permits due to prior arrests or restraining orders—can increase inappropriate use of firearms in response to interpersonal conflicts, disputes, or other situations.”<sup>11</sup>

States with more permissive concealed carry laws have higher gun homicide rates than states with regulations that provide law enforcement agencies the discretion to deny concealed carry weapon licenses.

- A 2021 study concluded that firearm homicide rates are higher in states with more permissive concealed carry laws.<sup>12</sup> The study found that more permissive concealed carry legislation is associated with an 11 percent increase in firearm homicide rates. “Permissive concealed carry legislation is a significant contributor to our nation’s gun violence epidemic,” said study author Dr. Emma Fridel.<sup>13</sup>
- A 2022 analysis found that states with permitless carry laws saw a 22 percent increase in gun homicide for the three years following the law’s passage.<sup>14</sup>
- A 2019 study found that right-to-carry laws were associated with a 29 percent increase in firearm workplace homicides.<sup>15</sup>
- An analysis of 111 mass shootings from 1966 to 2015 where six or more people were fatally shot found that states who implemented right-to-carry laws saw the average death toll in high-fatality mass shootings increase from an average of 7.5 before the law to 8.4 after.<sup>16</sup>

Seventy-four percent of firearms researchers who are knowledgeable about concealed carry literature disagree with the claim that weakening concealed carry requirements have reduced crime rates.<sup>17</sup>

- “In the last five years, the research has tipped very, very, very strongly in only one direction—and that is that these laws increase violent crime,” said Stanford University Law Professor John Donahue.<sup>18</sup>

## **Permitless carry increases gun thefts and violent crime**

Opportunities for gun thefts increase when states weaken requirements to carry a concealed firearm and allow more people to legally carry firearms outside the home without a permit.

- The dramatic rise in gun thefts from vehicles has increased the supply of illegal firearms, making it cheaper and easier for prohibited individuals to illegally obtain guns.<sup>19</sup>
- A 2020 study using five years of data from Charlotte, North Carolina, found that right-to-carry laws are associated with increased gun thefts and violent crime.<sup>20</sup>
- A 2017 study found that gun owners who carried their guns during the previous months were three times more likely to have their firearms stolen than other gun owners.<sup>21</sup>

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- A 2022 study by leading researchers Philip Cook and John Donahue found that a state passing a right-to-carry (RTC) law “elevates gun thefts by roughly 35 percent, introducing tens of thousands of guns into the hands of criminals or illegal gun markets each year. We also show RTC laws cause statistically significant increases in crime.”<sup>22</sup>
- Thirty-seven percent of U.S. households are in the Southern region, but two-thirds of guns stolen in the U.S. are from the South.<sup>23</sup> A 2017 Harvard study found that Northeast states with strong gun laws such as Massachusetts, New York, Rhode Island, and Connecticut have the lowest rates of gun theft and are net importers of crime guns from states with weaker gun laws, including the South. “The Southern region has the highest percentage of households with firearms and the least safe storage practices. Not surprisingly, most Southern states are ‘exporters’ of guns traced in crime,” the study concluded.<sup>24</sup>

Loose gun laws that encourage carrying firearms outside the home is fueling the increase in firearm robberies, which are more frightening, costly, and deadly than nonfirearm robberies.

- A 2022 study found that firearm violent crime rises 29 percent after a state introduces a right-to-carry law, with firearm robbery rates experiencing the largest increase.<sup>25</sup>
- “The most rigorous and recent studies are showing that states deregulating civilian gun carrying tends to elevate violent crime, particularly with guns,” explains Daniel Webster, co-director of the Johns Hopkins Center for Gun Violence Solutions. “The people who get permits or licenses to carry tend to be in a pretty law-abiding group, but what we’re finding is that as gun-carrying gets deregulated and more people are doing it, a lot more guns are being stolen, particularly from motor vehicles.”<sup>26</sup>

## Increased gun carrying leads to disputes escalating into shootings

- As states rollback requirements to carry firearms in public, road rage incidents are becoming much deadlier. Injuries and deaths from gun-related road rage incidents increased from 263 in 2017 to 522 in 2021.<sup>27</sup>
- Two of the three states with the fewest rates of road rage incidents are states with may issue laws—with stronger requirements—while all five states with the highest rates of road rage incidents were right-to-carry states, with weak concealed carry requirements.<sup>28</sup>
- During a July 2022 press conference, Mayor Van Johnson (D) said most shootings in Savannah, Georgia, are not random acts of violence but are the result of disputes escalating into gun violence. Johnson explained that a permitless carry law signed in April 2022 by Georgia Gov. Brian Kemp (R) is undermining the city’s efforts to reduce violent crime. “Tempers are raging in our community. And when tempers are raging, and a gun is introduced into the situation, you have violent acts of gun violence that are irreversible and changes lives forever,” Johnson said.<sup>29</sup>
- The following month, a football game was cancelled before halftime after individuals fighting in front of the stadium fled from Savannah police into the stands, causing fans to panic. “From initial reports, I’m thankful that no shots were fired and no one was shot. However, the panic that was caused by the thought of



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such an act occurring, it is concerning,” Mayor Johnson said. “In light of the insane constitutional carry laws that we have in Georgia, I think that cities have to take a hard look at public events where many people are gathered, to balance safety versus fun.”<sup>30</sup>

- Following a violent June 2022 weekend in downtown Savannah, including a triple shooting in City Market and the fifth officer-involved shooting of the year, Mayor Johnson said the permitless carry law was to blame for the shootings in busy areas of the city. “We cannot control that when you have a situation of gunfire, everyone’s pulling out guns,” Johnson said. “This handcuffs our law enforcement efforts and it makes all of our public areas at any time a potential crime scene.”<sup>31</sup>
- At a June 2022 *Washington Post* event, Baltimore Police Commissioner Michael Harrison said increased gun carrying is leading to disputes escalating into shootings:

[T]here are some who believe that if more people, law-abiding citizens, could carry guns, then they could participate in self-defense, but what happens is then we move to an area of conflict resolution where that’s the only option. Well, we’re already seeing that with the criminal offender who has poor conflict resolution skills and are using firearms to settle many conflicts. Here’s what we know about Baltimore, and here’s what I hear other chiefs say. The majority of our shooting crimes, while those individuals might be tied to a drug organization in some way, large or small, at the point the trigger is pulled, it’s usually some conflict, and the conflict is not drugs. It’s some disrespect. It’s some social media issue. It is the ex-boyfriend, the new boyfriend. It is what somebody had to say, and it’s a conflict or it’s a retaliation from a previous conflict, which is still conflict. And people are solving it with guns and shooting and killing each other, and all more guns will do is cause people to use those guns to solve their conflict.<sup>32</sup>

- Ed Flynn, then-Chief of the Milwaukee Police Department, criticized the Michigan legislature for weakening concealed carry laws, saying, “Stupid disputes that would have been fistfights are now shootings. Facebook fights are now shootings. Road rages are now shootings. It’s an irresponsible law passed by irresponsible legislators. That’s what’s driving the violence.”<sup>33</sup>

## **A majority of U.S. voters and gun owners support basic requirements to carry firearms**

- A May 2022 Marquette Law School national survey, conducted before the school shooting in Uvalde, Texas, found that 81 percent of U.S. adults oppose laws allowing concealed carry without a licensing requirement.<sup>34</sup> The same poll found that 72 percent of adults in the 25 states with permitless carry opposed the laws.<sup>35</sup>
- An April 2021 Pew Research poll found that only 20 percent of U.S. adults favored allowing people to carry concealed guns without a permit. This includes only 8 percent of Democrats and 35 percent of Republicans.<sup>36</sup>
- A 2017 Johns Hopkins University poll found that 83 percent of gun owners agreed “... that a person who can legally carry a concealed gun should be required to pass a

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test demonstrating they can safely and lawfully handle a gun in common situations they might encounter.”<sup>37</sup>

- Seventy percent of Pennsylvania voters opposed a 2021 bill approved by the Pennsylvania House of Representatives to carry a concealed handgun without a license according to a March 2022 Franklin and Marshall College poll.<sup>38</sup>
- More than 60 percent of Ohio voters opposed a law to allow permitless carry according to November 2020 poll.<sup>39</sup>
- A majority of Texans oppose allowing legal gun owners over the age of 21 to carry handguns in most public places without a license or training, according to an October 2021 poll.<sup>40</sup>
- Two-thirds of Iowans opposed a permitless carry law signed into law by Gov. Kim Reynolds (R) in 2021.<sup>41</sup>
- Fifty-nine percent of Tennessee voters disapproved of a 2021 bill signed by Gov. Bill Lee (R) that removed the requirement for adults to obtain a permit to carry a handgun.<sup>42</sup>

## Permitless carry makes law enforcement jobs harder and more dangerous

- Relaxing restrictions on civilians carrying concealed guns in public increases officer-involved shootings. A 2022 study found that 10 states who removed requirements to carry a concealed handgun from 2014 to 2020 experienced a 12.9 percent average increase in officer-involved shootings.<sup>43</sup>
- Baldwin County Sheriff’s deputy Curtis Summerlin—who was shot in an officer-involved shooting that killed a fellow sheriff deputy—opposed Alabama’s 2022 permitless carry bill. “I don’t want to see another deputy harmed, and I sure don’t want to have to go back through what I went through for three years when the next guy decides ‘I’m going to pull this gun and shoot at a cop.’ I don’t want anyone to have to go through that. It’s very emotional for me,” said Summerlin.
- Right-to-carry laws make it harder for law enforcement to solve violent crimes. According to a 2022 study, right-to-carry laws are associated with a 13 percent decline in the rates that police clear violent crime, “suggesting that RTC laws strike at the very heart of law enforcement’s abilities to address criminal conduct.”<sup>44</sup>
- A 2019 study suggests a police “pull-back” effect following states passing right-to-carry laws. “Police may be less enthusiastic about investigating certain suspicious activities or engaging in effective crime-fighting actions given the greater risks that widespread gun carrying poses to them, whether from permit holders or the criminals who steal their guns,” the study states.<sup>45</sup>
- Hamilton County Sheriff Charmaine McGuffey warned that Ohio’s new permitless carry law would lead to increased violent crime because it makes it harder for law enforcement to do their jobs. “To vote for people to be able to concealed carry without a license, without any training, without any documentation, it makes it exponentially harder for law enforcement to prevent gun crimes,” McGuffey said. “It is going to promote lawlessness. I think that there will be people who carry weapons concealed for the purpose of being vigilantes.”<sup>46</sup>

Lincoln Police Chief Teresa Ewins expressed concerns that Nebraska’s legislation weakening concealed carry requirements would embolden armed bystanders to

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intervene when they see a crime, making it difficult for law enforcement to identify which person carrying a weapon is the active threat. “As a police officer, you’re putting the pieces together as you get on the scene and you only have seconds to make a decision,” Ewins said. “If someone feels the right to go into a business or a coliseum or an arena [while concealed carrying], then there’s going to be an argument. Then law enforcement will have to respond and try to deescalate. This is just another layer of difficulty for them because it’s hard to understand who has a gun, who doesn’t have a gun and then having people who are not trained.”<sup>47</sup>

## **Law enforcement organizations across the country have publicly opposed laws weakening concealed carry requirements.**

- Law enforcement organizations opposed to Tennessee’s right-to-carry law signed by Gov. Bill Lee (R) in 2021 included the Tennessee Sheriffs’ Association, the Tennessee Association of Chiefs of Police, and the Tennessee Bureau of Investigation.<sup>48</sup> Metropolitan Nashville Police Chief John Drake opposed the bill, saying, “I felt we would begin to see a sharp increase in gun thefts and the likely outcome would be increased gun violence.” Drake said his fears have come true in 2022 as gun thefts and stolen guns recovered at violent crime scenes have dramatically increased.<sup>49</sup>
- Ohio’s Fraternal Order of Police opposed a permitless carry law signed by Gov. Mike DeWine (R) in 2022. “Putting more gasoline on a fire doesn’t put the fire out, and that’s what they’re doing here,” said Michael Weinman, director of governmental affairs for the union representing around 24,000 officers. “If we put more guns on the street, you’re going to have people who don’t know what their rights and responsibilities are, and it just doesn’t help.”<sup>50</sup>
- Indiana Association of Chiefs of Police Vice President Patrick Flannelly believes the 2021 permitless carry bill signed by Gov. Eric Holcomb (R) threatens the safety of police and the community. “What we have done now is we’ve taken away the one tool that police officers had out on the street to be able to act quickly and efficiently for not only their personal safety but for the safety of our communities.”<sup>51</sup>
- Alabama’s permitless carry law—signed by Gov. Kay Ivey (R) in 2022 and going into effect on January 1, 2023—was opposed by the Alabama Sheriffs Association, the Alabama Association of Chiefs of Police, the Alabama District Attorneys Association, the Alabama Association of School Resource Officers, and multiple local law enforcement agencies.<sup>52</sup>
- In 2021, Louisiana Gov. John Bel Edwards (D) vetoed a permitless carry bill opposed by law enforcement, including the Louisiana Association of Chiefs of Police and multiple Sheriffs. “This is an absolutely terrible bill, not only for the men and women who wear this badge and serve the public, but it’s a terrible bill for the public as well,” said East Baton Rouge Sheriff Sid Gautreaux III. “This poses an exponential threat to every law enforcement officer in this state.” The permitless carry bill was reintroduced in 2022 and St. John Parish Sheriff Mike Tregre says the lack of training requirements will make it harder for law enforcement and make people less likely to become a police officer. “There’s a fascination with guns now with young people,” Tregre said. “Now, we’re just going to open the doors for

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everybody to carry a gun. How are my officers going to know who's carrying legally and illegally? How do I train for that?"<sup>53</sup>

## Murders and aggravated assaults in Arizona increased after permitless carry

- Arizona was only the third state to allow permitless carry but many states quickly followed suit. "All we're doing is handcuffing good people, restricting their constitutional, God-given right to carry and perhaps their ability to defend their families," said Arizona State Sen. Russell Pearce (R), sponsor of Arizona's permitless carry bill.<sup>54</sup>
- Janet Napolitano (D) vetoed Pearce's previous attempt to remove concealed firearm requirements, but it became law in 2010 when Gov. Jan Brewer (R) signed the NRA-backed bill.<sup>55</sup>
- Arizona Association of Chiefs of Police lobbyist John Thomas testified that the permitless carry law "will take Arizona back to the Wild West ... with no consideration of officer safety."<sup>56</sup>
- The repeal of Arizona's concealed carry requirement led to an 11 percent increase in gun injuries and deaths and a 24 percent increase in the probability that an individual involved in a violent crime would be fatally shot.<sup>57</sup>
- The number of aggravated assaults committed with a firearm went from 3,422 in 2010<sup>58</sup> to 7,149 in 2020,<sup>59</sup> more than doubling.
- Violent crimes in Arizona increased by 21 percent from 2010 to 2020. According to state crime reports, there were a total of 23,823 violent crimes committed in Arizona in 2010, or one violent crime every 22 minutes.<sup>60</sup> By 2020, that number had grown to 28,777, or one violent crime every 18 minutes.<sup>61</sup>
- The total numbers of murders in Arizona increased by 19 percent from 354 murders in 2010<sup>62</sup> to 423 murders in 2020.<sup>63</sup> That places the 2020 intentional homicide rate in Arizona ahead of states with strong gun laws like California, Connecticut, Hawaii, Massachusetts, New Jersey, and New York.<sup>64</sup>
- Despite this increase in firearm violence, the Arizona House approved two bills in 2022 with no Democratic support to further expand concealed carry rights, including allowing guns in libraries and on school grounds. State Sen. Wendy Rogers (R) sponsored a third bill in 2022 to weaken Arizona's concealed carry laws by allowing carrying on college campuses, "I am a believer that guns save lives, and if a student has a concealed weapons permit than he or she should be able to carry on campus and thus make the campus safer."<sup>65</sup>

## Concealed carry is linked to increased violent crime in Wisconsin

- In 2011, Wisconsin Gov. Scott Walker (R) signed a concealed carry law that allows anyone who can meet relatively minimal eligibility requirements to get a permit to carry a concealed firearm.<sup>66</sup>
- While advocates of Wisconsin's concealed carry law argued that it would promote public safety, the reality is that the lax legislation has contributed to higher rates of violent crime in the state.

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- Baraboo, Wisconsin, Police Chief Mark Schauf opposed the law at the time, saying
- “as police officers, we’re required to have training before we get our weapons and a certain number of training hours throughout the year. If we have to be trained, it would only make sense that a person in public would want to be trained, as well.”<sup>67</sup>
  - After a four-year decline in aggravated assaults with a gun from 2007 to 2011, trends shifted upward after 2011.<sup>68</sup> While the annual average of aggravated assaults with firearms from 2004 to 2011 was 1,700, this increased to 2,600 aggravated assaults per year from 2012 to 2019, a 56 percent increase.<sup>69</sup>
  - A Center for American Progress analysis of the five largest cities in Wisconsin found that the annual value of stolen guns reported to police increased 50 percent following the law’s passage.<sup>70</sup>
  - Gun-related homicides and aggravated assaults of police officers rose after the weakening of requirements. While three officers were killed with a gun from 2004 to 2011, seven officers were murdered with a gun from 2012 to 2019.<sup>71</sup>
  - Gun-related assaults against law enforcement officers also increased considerably. From 2004 to 2011, an average of 19 officers were assaulted with a gun in Wisconsin every year. This figure rose to 31 officers assaulted with a gun per year from 2012 to 2019. In other words, the number of gun-related assaults against police officers rose by 63 percent.<sup>72</sup>

## Georgia’s new permitless carry law is dangerous and unpopular

- A January 2022 poll found that 70 percent of registered voters in Georgia oppose allowing adults to carry concealed handguns in public without a license.<sup>73</sup>
- Despite public opposition, Gov. Brian Kemp (R) signed a permitless carry law in April 2022. During the bill signing, Kemp said the bill “makes sure that law abiding Georgians—including our daughters and your family, too—can protect themselves without having to ask permission from state government. The Constitution of the United States gives us that right—not the government.”<sup>74</sup>
- A *Washington Post* article explains the dynamic in Georgia a month before:

**As violent crime jumps in the state, residents are arming themselves at record levels, which is leading to more crime and spurring new efforts by state GOP lawmakers to loosen permitting requirements for carrying concealed weapons. It’s a trend that has echoed across the country, as gun violence continues to rattle communities.**<sup>75</sup>

- Permitless carry bill sponsor State Sen. Jason Anavitate (R) argued, “Georgians should not need a permit to exercise their 2nd Amendment rights, defend themselves and protect their families. This law will keep safeguards in place to ensure that only law abiding citizens can purchase and obtain a firearm while eliminating the bureaucratic red tape that infringes on Georgians’ constitutional rights.”<sup>76</sup>
- “Less checks means more guns, more violence, more deaths and more bloodshed,” Georgia State Sen. Elena Parent (D) said about the bill. “In eliminating this requirement, you’re basically saying we won’t have this check on these criminals,

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now that check will no longer exist.”<sup>77</sup> Parent added, “This is a dangerous agenda of right-wing gun groups. We have a majority that is in thrall to gun extremists.”<sup>78</sup>

- “I think it would probably cause an increase in gun crimes,” said Col. Henderson Carswell of the Bibb County Sheriff’s Office.<sup>79</sup>
- Savannah Police Chief Roy W. Minter Jr. said more than 100 guns were stolen out of unlocked vehicles last year in the city. “One of the concerns I have [with the legislation] is more people leaving their guns in cars, people leaving their guns in other places, because now there is more freedom to have that gun with them,” he said.<sup>80</sup>
- At least 460 firearms were reported stolen to Columbus, Georgia, police from January to October of 2021. City leaders said many guns were taken from vehicles and organized gangs searched cars in shopping centers and neighborhoods because many residents travel with firearms.<sup>81</sup>
- In 2021, 2,008 firearms were stolen from vehicles in Atlanta and another 148 vehicles were stolen that contained a weapon.<sup>82</sup> Atlanta Police Chief Rodney Bryant said that weakening concealed carry requirements will increase the number of illegal guns used in violent crimes and impede law enforcement’s ability to reduce crime. “It reduces our ability to intervene early in getting an illegal gun off the street until something more catastrophic has happened,” Bryant said.
- Atlanta’s Midtown Music Festival was cancelled in August 2022 over concerns that the recent permitless carry law and a 2014 “guns everywhere” concealed carry law meant that festival organizer Live Nation couldn’t prohibit guns at the 50,000-person festival. House Minority Leader James Beverly (D) said the event was canceled “because artists don’t feel safe to perform in a state with senseless gun laws.”<sup>83</sup>

## Conclusion

Right-to-carry laws increase violent crime, firearm robberies, gun thefts, workplace homicides, and mass shootings by making it easier for almost anyone to carry a concealed handgun in public. Conservative state legislatures weakening requirements to carry a concealed firearm is a recent trend that makes policing more difficult and dangerous, resulting in law enforcement leaders across the country publicly opposing these laws. Scientific research consistently shows that the removal of concealed carry permitting systems is associated with higher rates of gun homicides and violent crime.

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## Sensible Solutions To Prevent Gun Violence in the US

Gun violence in the United States is a pervasive public health issue. Ending this crisis requires a multipronged approach to address the many forms of gun violence that affect our communities. Firearm suicides, homicides, intimate partner and domestic violence, community gun violence, gun trafficking, and more all contribute to the immediate and growing need for comprehensive gun violence prevention policies.

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