EXHIBIT A
to

BRIEF OF *AMICI CURIAE*
GIFFORDS LAW CENTER TO PREVENT GUN VIOLENCE AND CALIFORNIA LIEUTENANT GOVERNOR GAVIN NEWSOM IN SUPPORT OF APPELLANTS AND REVERSAL

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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

VIRGINIA DUNCAN, RICHARD LEWIS, PATRICK LOVETTE, DAVID MARGUGLIO, CHRISTOPHER WADDELL, CALIFORNIA RIFLE & PISTOL ASS'N, INC., a California corporation,

Plaintiffs,

vs.

XAVIER BECERRA, in his official capacity as Attorney General of the State of California; and DOES 1-10,

Defendants.

Case No. 17-CV-10017 -BEN-JLB

EXHIBIT A TO BRIEF OF AMICUS CURIAE LAW CENTER TO PREVENT GUN VIOLENCE IN SUPPORT OF DEFENDANT'S OPPOSITION TO PLAINTIFFS' MOTION FOR A PRELIMINARY INJUNCTION

Date: June 13, 2017
Time: 10:00 A.M.
Place: 5A

The Hon. Roger T. Benitez

EXHIBIT A

LOUIS KLAREVAS

RAMPAGE NATION

SECURING AMERICA FROM MASS SHOOTINGS

teaches in the Department of Global Affairs at the University of Massachusetts–Boston. He also regularly serves as a consultant to the federal government on national-security matters. A frequent commentator on homeland security and foreign policy, he has appeared on numerous news programs, including CNN, ABC, NPR, and the BBC. In the past, he has taught at American University, George Washington University, City University of New York, and New York University. In addition, he has served as the Defense Analysis Research Fellow at the London School of Economics and a Senior Fulbright Scholar in Security Studies.

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THE REAL NUMBERS

It's easy to be dismissive of pundits and partisans, even ones with *PhD* after their names like John Lott. After all, they often take to the airwaves, the print media, and the blogosphere to impart a variety of assertions about rampage violence, usually with little consequence for being erroneous, biased, or intentionally deceptive. But there's one place where claims don't get a free pass: the courts. Under oath and subject to cross-examination, "experts" aren't afforded an escape from scrutiny during litigation. Case in point: the legal battle over the constitutionality of Colorado's recent ban on large-capacity magazines.

After a mentally disturbed man wielding an assault weapon armed with a 100-round magazine killed twelve and wounded an additional fifty-eight cinema patrons in Aurora, Colorado, the state legislature enacted tight restrictions on the sale, possession, and transfer of any magazines that held more than fifteen rounds of ammunition. The objective of the statute was to reduce the carnage of shooting sprees by limiting the number of bullets a semiautomatic weapon can fire in a single feed. In 2013, this law came under attack when a group of thirty plaintiffs—a combination of gun-rights organizations, firearms dealers, and individual gun owners—asked a federal court to strike it down, arguing that it violated the Second Amendment. At the crux of their case, the plaintiffs asserted that mass shootings are rare to begin with, so magazine restrictions are likely to have little to no positive impact on the casualty tolls of gun attacks. Believing that the ban would have a negligible impact on gun violence, they insisted that it unnecessarily infringed on their rights to lawfully own large-capacity magazines.[71]

To help establish their claim, the plaintiffs in *Colorado Outfitters Association et al. v. Hickenlooper* put criminologist Gary Kleck on the stand to make a key point: "Mass shootings are extremely rare."[72] Perhaps you'll recall the name from the previous chapter. Kleck was the first scholar to define and study mass shootings as a unique subset of gun violence. In the past decade, he has become one of the go-to scholars for the gun-rights movement, earning $350 an hour as an expert witness who testifies against certain gun-control measures.[73]

When Kleck conducted his initial study of mass shootings in 1997, he defined them as "incident[s] in which six or more victims were shot dead with a gun, or twelve or more total were wounded."[74] He has since broadened his definition to "shooting[s] in which more than six people were shot, fatally or nonfatally, in a single incident."[75] While Kleck's conceptualization still maintains a fairly high casualty threshold—remember the emerging consensus is that mass shootings are acts of violence where four or more people are shot—he testified that in the nearly two decades between January 1994 and July 2013, there were only fifty-seven mass shootings in the United States. With fewer than three mass shootings per year, on average, Kleck concluded that any such attack was a "rare event."[76]

On cross-examination, Assistant Attorney General for Colorado Matthew Grove began with a simple question: "So if you missed a quarter of the data, that might be a problem, right?"[77] Kleck admitted it would. When the time came to discuss Kleck's analysis, Grove asked: "You testified earlier that you considered *all* mass shooting incidents that met your criteria of seven or more killed or wounded, correct?" Again, Kleck confirmed Grove's leading question, acknowledging that there were only fifty-seven such attacks in the twenty-year period he examined.[78] Grove then turned to the data set. Handing Kleck a binder full of exhibits, Grove had Kleck read through each document. Here's a sampling from the transcripts of how this played out:

> Q. Please take a moment to read Exhibit 101. . . . This article is entitled, "Tech worker charged in seven deaths at Massachusetts firm." Correct?
>
> A. That's correct.
>
> Q. And in the second paragraph, it says, "Prosecutors accuse McDermott of acting with premeditation and without mercy when colleagues were shot repeatedly with a 12-gauge shotgun and an assault rifle fed with a 60-round magazine," correct?
>
> A. Yes.
>
> Q. And the next paragraph says, "The seven Edgewater Technology employees were shot a combined 30 times," correct?
>
> A. Correct.
>
> Q. This meets your criteria for inclusion in your report, correct?
>
> A. It does.
>
> Q. And it was not included in [your expert report], right?
>
> A. Correct. . . .

Q. Let's turn to Exhibit 102. . . . Title of this is, "Factory feud is cited in shooting in Indiana." Do you need a moment to read this?

A. Yes, please. Okay.

Q. So the very first sentence of this says, "The factory worker who killed a co-owner of the factory and wounded six others before fatally shooting himself was apparently angered over a dispute." So that's one dead, six wounded, correct?

A. That's correct.

Q. That meets your criteria?

A. Yes, it does.

Q. And you didn't include this in your report, did you?

A. No.[79]

This painful cross-examination continued for approximately forty-five minutes; each time, Kleck confirmed that he had omitted the specific mass shooting from his inquiry.[80] When Grove was finished, he had successfully pointed out that, even under Kleck's high casualty threshold, there were at least twenty-nine mass shootings that the plaintiff's expert failed to report. As Kleck admitted on the stand, "Yes, it's about 50 percent of the ones I analyzed."[81] Earlier, Kleck had testified that investigations that overlooked a quarter of the cases were problematic. Grove had just established that Kleck's analysis—which disregarded at least a third of the data (twenty-nine out of eighty-six cases)—was flawed by his own standards.

Grove followed up by reminding Kleck that, in his official expert report submitted to the court, he asserted "all [mass] shooting incidents were examined."

Kleck backtracked on his claim: "Yes, I did say all. Had I been more precise, I would have said, all that I knew of, or all that I could discover, or words to that effect."

"'All' would suggest every one, though, right?"

"Well, to me, it suggested all that I knew about," Kleck replied in one final attempt to salvage his testimony. But it was too late.[82]

On June 26, 2014, the judge in the case issued a fifty-page ruling upholding Colorado's restrictions on large-capacity magazines. Kleck's name, let alone his claims, never appeared in the decision. Not even in passing. Meanwhile, the court expressly stated that it accepted the views of the state's expert witness, Jeffrey Zax, who offered testimony

that at times directly contradicted Kleck. It was a signal. Like the pro-gun-rights lawsuit itself, the argument that mass shootings occur too infrequently to merit legislative action was dismissed.[83]

☆ ☆ ☆

Testifying under oath, Gary Kleck was forced to acknowledge that mass shootings occur with greater frequency than his research confirmed. In fact, they take place more often than most Americans probably realize—at a higher rate of incidence than even many in the gun-control camp claim. The real numbers are actually quite disturbing.

When I started conducted research for this book, I decided to collect information on every known gun massacre that took place in the United States over the past fifty years. While it was a labor-intensive process that required a full year of searching through a variety of data sets and news banks, I came up with 111 attacks that resulted in six or more people—not including the perpetrator(s)—*dying* as a result of gunshot wounds (see table 3.2).[84] As these are the deadliest gun attacks of the past five decades, they are the most disconcerting, deserving special attention.

The statistics paint a troubling picture. Since 1966, gun massacres have claimed 904 lives (see figure 3.1). What's most alarming about these extreme acts of violence is that they're taking place with greater frequency, with the sharpest increase in deaths occurring in the past decade (see figure 3.2).[85] Specifically, over one-third (39 out of 111) of gun massacres during the past fifty years occurred in the past decade (2006–2015). That's a 160 percent increase from the previous decade, which only experienced fifteen high-fatality mass shootings (see figure 3.3). Equally disturbing, the total number of people killed in gun massacres in the past decade (349 out of 904) accounts for nearly 40 percent of all murders in such acts of violence during the same fifty-year span (see figure 3.4). This is a massive increase from the previous decade, when only 111 people died in such shootings. The past decade has clearly been the worst, exceeding the second worst (1976–1985) by way more than a third in terms of number of incidents and by more than double in terms of total deaths.[86] It's also the only decade to average roughly nine deaths per attack (see table 3.3).

Table 3.2. Gun Massacres in the United States, 1966–2015.

	Date	City	State	Perpetrator(s)	Deaths
1	8/1/1966	Austin	TX	Charles Whitman	14
2	8/26/1966	New Haven	CT	Arthur Davis	6
3	10/23/1967	Lock Haven	PA	Leo Held	6
4	3/16/1968	Ironwood	MI	Eric Pearson	7
5	6/25/1968	Good Hart	MI	Undetermined	6
6	12/19/1968	Napa	CA	Charles Bray	6
7	9/3/1971	Phoenix	AZ	John Freeman	7
8	6/21/1972	Cherry Hill	NJ	Edwin Grace	6
9	1/7/1973	New Orleans	LA	Mark Essex	7
10	6/21/1973	Palos Hills	IL	William Workman	7
11	4/22/1973	Los Angeles	CA	William Bonner	7
12	6/9/1973	Boston	MA	George O'Leary	6
13	11/4/1973	Cleveland	OH	Cyril Rovansek	7
14	2/18/1974	Fayette	MS	Frankie Lias	7
15	11/13/1974	Amityville	NY	Ronald DeFeo	6
16	3/30/1975	Hamilton	OH	James Ruppert	11
17	10/19/1975	Sutherland	NE	Erwin Simants	6
18	3/12/1976	Trevose	PA	George Geschwendt	6
19	7/12/1976	Fullerton	CA	Edward Allaway	7
20	7/23/1977	Klamath Falls	OR	DeWitt Henry	6
21	8/26/1977	Hackettstown	NJ	Emile Benoist	6
22	7/16/1978	Oklahoma City	OK	Harold Stafford, Roger Stafford, and Verna Stafford	6
23	1/3/1981	Delmar	IA	Gene Gilbert	6
24	1/7/1981	Richmond	VA	Artie Ray Cherry, Michael Finazzo, and Tyler Frndak	6
25	5/2/1981	Clinton	MD	Ronald Ellis	6
26	8/21/1981	Indianapolis	IN	King Bell	6
27	2/17/1982	Farwell	MI	Robert Haggart	7
28	8/9/1982	Grand Prairie	TX	John Parish	6
29	8/20/1982	Miami	FL	Carl Brown	8
30	9/7/1982	Craig	AK	Undetermined	8
31	9/25/1982	Wilkes-Barre	PA	George Banks	13
32	2/18/1983	Seattle	WA	Kwan Fai Mak and Benjamin Ng	13
33	3/3/1983	McCarthy	AK	Louis Hastings	6
34	10/11/1983	College Station and Hempstead	TX	Eliseo Moreno	6
35	4/15/1984	Brooklyn	NY	Christopher Thomas	10
36	5/19/1984	Manley Hot Springs	AK	Michael Silka	8
37	6/29/1984	Dallas	TX	Abdelkrim Belachheb	6
38	7/18/1984	San Ysidro	CA	James Huberty	21
39	10/18/1984	Evansville	IN	James Day	6
40	8/20/1986	Edmond	OK	Patrick Sherrill	14
41	12/8/1986	Oakland	CA	Rita Lewis and David Welch	6
42	2/5/1987	Flint	MI	Terry Morris	6
43	4/23/1987	Palm Bay	FL	William Cruse	6
44	7/12/1987	Tacoma	WA	Daniel Lynam	7
45	9/25/1987	Elkland	MO	James Schnick	7
46	12/30/1987	Algona	IA	Robert Dreesman	6
47	2/16/1988	Sunnyvale	CA	Richard Farley	7
48	9/14/1989	Louisville	KY	Joseph Wesbecker	8
49	6/18/1990	Jacksonville	FL	James Pough	9
50	1/26/1991	Chimayo	NM	Ricky Abeyta	7
51	8/9/1991	Waddell	AZ	Jonathon Doody and Alessandro Garcia	9
52	10/16/1991	Killeen	TX	George Hennard	23
53	11/7/1992	Morro Bay and Paso Robles	CA	Lynwood Drake	6
54	1/8/1993	Palatine	IL	James Degorski and Juan Luna	7
55	5/16/1993	Fresno	CA	Allen Heflin and Johnnie Malarkey	7
56	7/1/1993	San Francisco	CA	Gian Luigi Ferri	8
57	12/7/1993	Garden City	NY	Colin Ferguson	6
58	4/20/1999	Littleton	CO	Eric Harris and Dylan Klebold	13
59	7/12/1999	Atlanta	GA	Cyrano Marks	6
60	7/29/1999	Atlanta	GA	Mark Barton	9
61	9/15/1999	Fort Worth	TX	Larry Ashbrook	7
62	11/2/1999	Honolulu	HI	Byran Koji Uyesugi	7
63	12/26/2000	Wakefield	MA	Michael McDermott	7
64	12/28/2000	Philadelphia	PA	Shihean Black, Dawud Faruqi, Khalid Faruqi, and Bruce Veney	7
65	8/26/2002	Rutledge	AL	Westley Harris	6
66	1/15/2003	Edinburg	TX	Humberto Garza, Robert Garza, Rodolfo Medrano, and Juan Ramirez	6
67	7/8/2003	Meridian	MS	Douglas Williams	6
68	8/27/2003	Chicago	IL	Salvador Tapia	6
69	3/12/2004	Fresno	CA	Marcus Wesson and Sebhrenah Wesson	9
70	11/21/2004	Birchwood	WI	Chai Soua Vang	6
71	3/12/2005	Brookfield	WI	Terry Ratzmann	7
72	3/21/2005	Red Lake	MN	Jeffrey Weise	9
73	1/30/2006	Goleta	CA	Jennifer San Marco	7
74	3/25/2006	Seattle	WA	Kyle Huff	6
75	6/1/2006	Indianapolis	IN	James Stewart and Desmond Turner	7
76	12/16/2006	Kansas City	KS	Hersel Isadore	6
77	4/16/2007	Blacksburg	VA	Seung Hui Cho	32
78	10/7/2007	Crandon	WI	Tyler Peterson	6
79	12/5/2007	Omaha	NE	Robert Hawkins	8
80	12/24/2007	Carnation	WA	Michele Anderson and Joseph McEnroe	6
81	2/7/2008	Kirkwood	MO	Charles Lee Thornton	6
82	9/2/2008	Alger	WA	Isaac Zamora	6
83	12/24/2008	Covina	CA	Bruce Pardo	8
84	1/27/2009	Los Angeles	CA	Ervin Lupoe	6
85	3/10/2009	Kinston, Samson, and Geneva	AL	Michael McLendon	10
86	3/29/2009	Carthage	NC	Robert Stewart	8
87	4/3/2009	Binghamton	NY	Jiverly Wong	13
88	11/5/2009	Fort Hood	TX	Nidal Hasan	13
89	1/19/2010	Appomattox	VA	Christopher Speight	8
90	8/3/2010	Manchester	CT	Omar Thornton	8
91	1/8/2011	Tucson	AZ	Jared Loughner	6
92	7/7/2011	Grand Rapids	MI	Rodrick Dantzler	7
93	8/7/2011	Copley Township	OH	Michael Hance	7
94	10/12/2011	Seal Beach	CA	Scott Dekraai	8
95	12/25/2011	Grapevine	TX	Aziz Yazdanpanah	6
96	4/2/2012	Oakland	CA	One Goh	7
97	7/20/2012	Aurora	CO	James Holmes	12
98	8/5/2012	Oak Creek	WI	Wade Page	6
99	9/27/2012	Minneapolis	MN	Andrew Engeldinger	6
100	12/14/2012	Newtown	CT	Adam Lanza	27
101	7/26//2013	Hialeah	FL	Pedro Vargas	6
102	9/16/2013	Washington	DC	Aaron Alexis	12
103	7/9/2014	Spring	TX	Ronald Lee Haskell	6
104	9/18/2014	Bell	FL	Don Spirit	7
105	2/26/2015	Tyrone	MO	Joseph Jesse Aldridge	7
106	5/17/2015	Waco	TX	Undetermined	9
107	6/17/2015	Charleston	SC	Dylann Roof	9
108	8/8/2015	Houston	TX	David Conley	8
109	10/1/2015	Roseburg	OR	Christopher Harper-Mercer	9
110	11/15/2015	Palestine	TX	William Hudson	6
111	12/2/2015	San Bernardino	CA	Syed Rizwan Farook and Tashfeen Malik	14

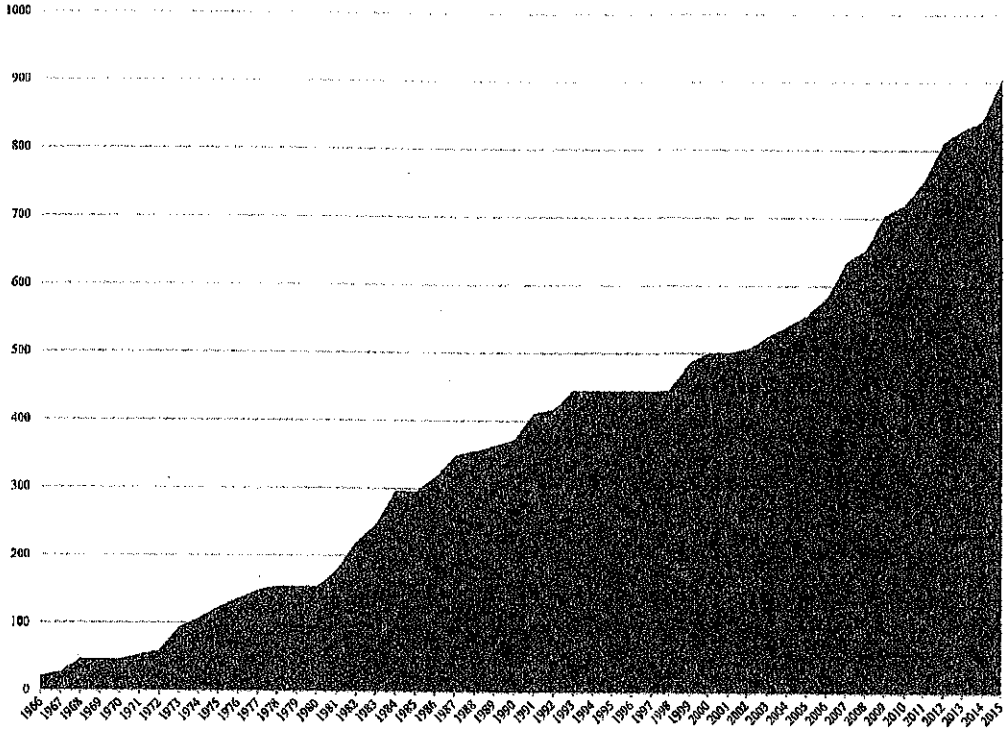
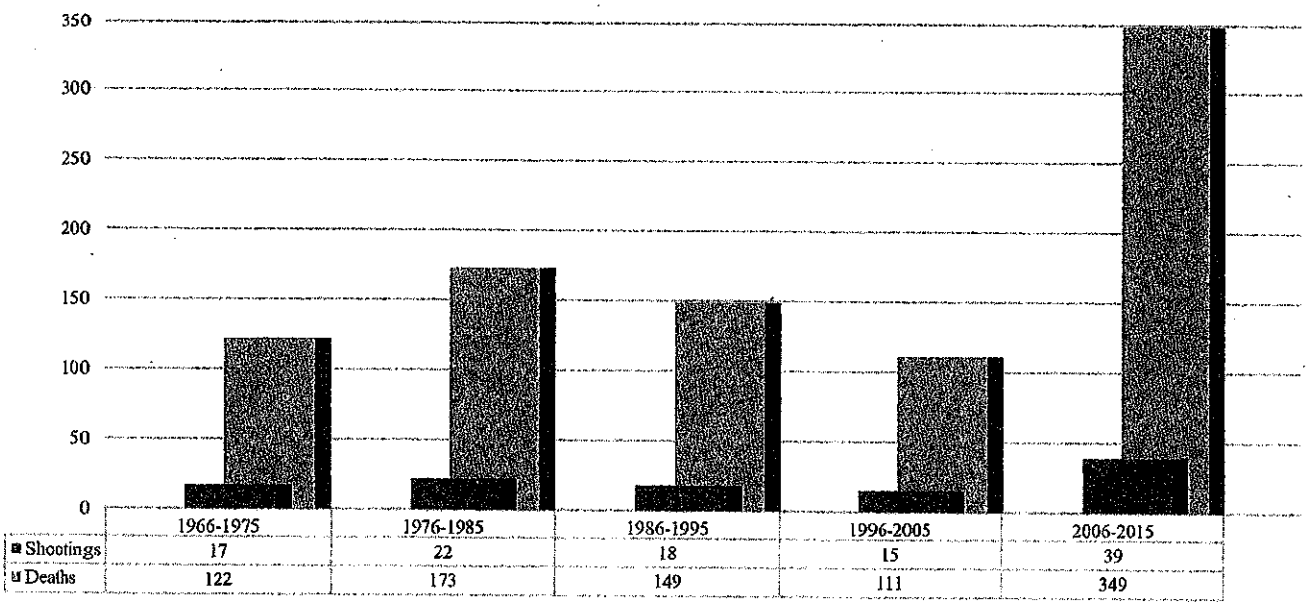


Fig. 3.1. Cumulative Death Toll of Gun Massacres in the United States, 1966–2015. Source: Table 3.2.



	1966-1975	1976-1985	1986-1995	1996-2005	2006-2015
Shootings	17	22	18	15	39
Deaths	122	173	149	111	349

Fig. 3.2. Gun Massacres in the United States by Decade, 1966–2015. Source: Table 3.2.

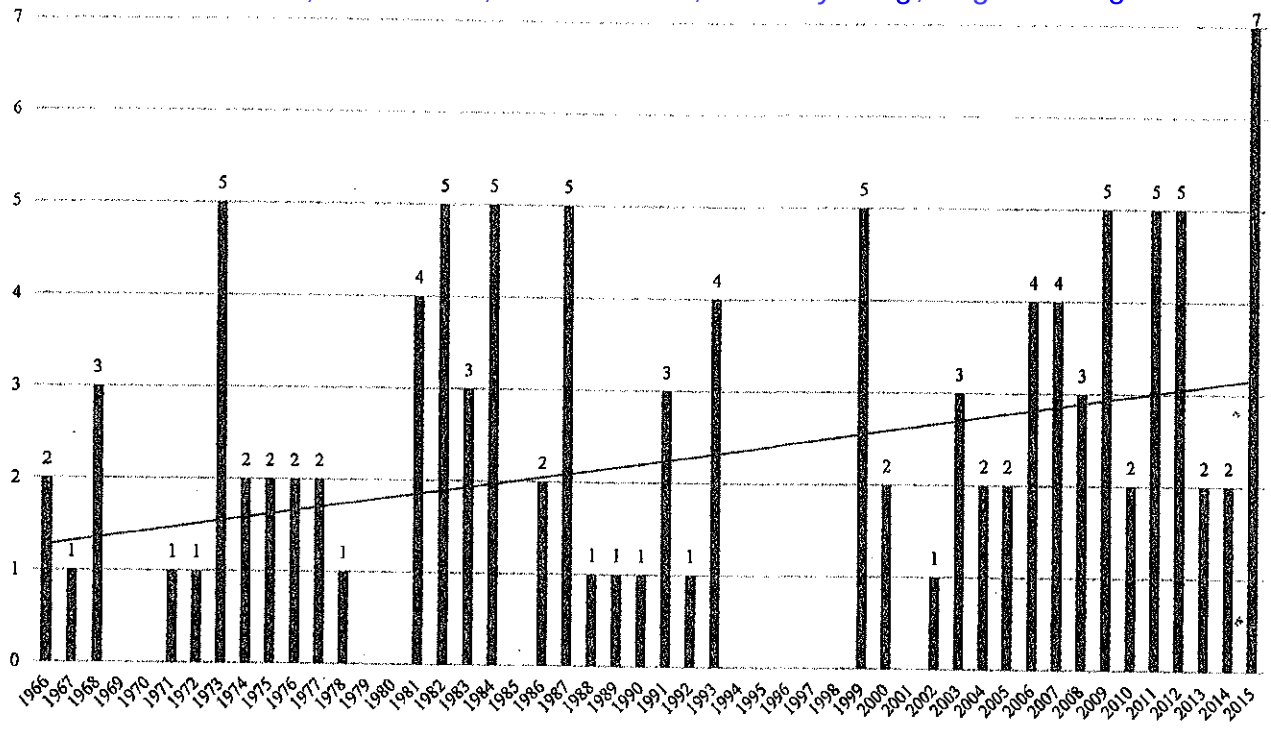


Fig. 3.3. Annual Number of Gun Massacres in the United States, 1966–2015. Source: Table 3.2.

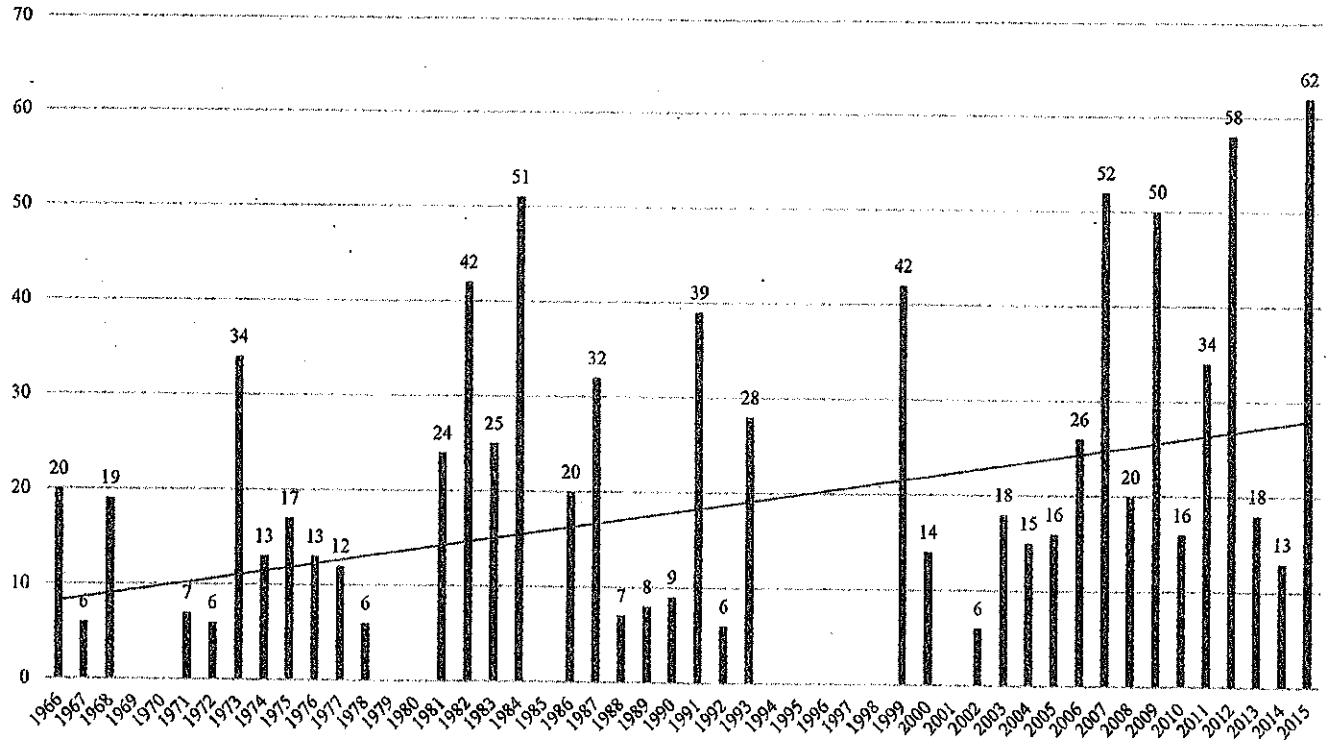


Fig. 3.4. Annual Death Toll of Gun Massacres in the United States, 1966–2015. Source: Table 3.2.

Table 3.3. Average Death Tolls of Gun Massacres in the United States by Ten-Year Period, 1966–2015.

Ten-Year Period	Average Death Toll Per Gun Massacre
1966–1975	7.2
1976–1985	7.9
1986–1995	8.3
1996–2005	7.4
2006–2015	8.9

A breakdown of the data shows how this disturbing pattern came to be. Until 2015, there has never been a year with more than five gun massacres. In 2015, there were seven gun massacres. Moreover, the past decade has experienced more "five-plus-shooting-years"[87] than any other decade (see figure 3.3). It's also the only decade with consecutive five-plus-shooting-years (2011 and 2012). When expanded to track four-plus-shooting-years, the past decade qualifies as the most disturbing ten-year-period, surpassing the next closest ten-year-period (1976–1985) by three additional years of four-plus gun massacres.

The past decade is also the only decade not to have had a year without a gun massacre. Every other decade under study had at least two years of reprieve from such heinous acts of gun violence—and the five-year period from 1994 to 1998 experienced no such shootings at all. In terms of lethality, the past decade again stands apart from the others. For instance, while there have been only five years that experienced fifty or more deaths as a result of gun massacres, four of those years were in the past decade (see figure 3.4). Indeed, 2015 is the deadliest year on record for murders resulting from gun massacres, with sixty-two combined fatalities. Furthermore, a comparison of the last two decades reveals an eight-fold increase in the number of double-digit fatality shootings (see table 3.4).

Between 1966 and 2015, the population of the United States has increased nearly 65 percent, from approximately 195 million people to over 320 million people. Yet even this demographic shift has failed to reverse the troubling trend in rampage violence, as evidenced by incidence rates, which assess the occurrence of attacks and fatalities relative to the population in a given time. Over the past ten years, gun massacres have taken place at an unprecedented rate of one for roughly every eight million residents and deaths have been incurred at a rate that exceeds one fatality for every one million residents (see table 3.5). Even when accounting for population growth, the past decade still stands out as the worst ten-year period of the last fifty years, marked by a rising trajectory that doesn't bode well for the coming decade (see figure 3.5).

Table 3.4. The Deadliest Mass Shootings in the United States, 1966–2015.

Death Toll	Date	Perpetrator(s)	City	State
32	4/16/2007	Seung Hui Cho	Blacksburg	VA
27	12/14/2014	Adam Lanza	Newtown	CT
23	10/16/1991	George Hennard	Killeen	TX
21	7/18/1984	James Huberty	San Ysidro	CA
14	8/1/1966	Charles Whitman	Austin	TX
14	8/20/1986	Patrick Sherrill	Edmond	OK
14	12/2/2015	Syed Rizwan Farook and Tashfeen Malik	San Bernardino	CA
13	9/25/1982	George Banks	Wilkes-Barre	PA
13	2/18/1983	Kwan Fai Mak and Benjamin Ng	Seattle	WA
13	4/20/1999	Eric Harris and Dylan Klebold	Littleton	CO
13	4/3/2009	Jiverly Wong	Binghamton	NY
13	11/5/2009	Nidal Hasan	Fort Hood	TX
12	7/20/2012	James Holmes	Aurora	CO
12	9/16/2013	Aaron Alexis	Washington	DC
11	3/30/1975	James Ruppert	Hamilton	OH
10	4/15/1984	Christopher Thomas	Brooklyn	NY
10	3/10/2009	Michael McLendon	Kinston, Samson, and Geneva	AL

At a time when modern emergency medicine can save the lives of most gunshot victims if they reach the hospital alive within the "golden hour," the death rate of mass casualty gun attacks should've gone down significantly in the past decade.[88] That this hasn't happened speaks to the danger mass shootings pose.

Table 3.5. Ten-Year Incidence Rates for Gun-Massacre Attacks and Deaths, 1966–2015.

Decade	Attack Rate	Death Rate
1966–1975	0.08	0.59
1976–1985	0.10	0.76
1986–1995	0.07	0.59
1996–2005	0.05	0.39
2006–2015	0.13	1.12

Note: Rates are calculated using the mean population estimates for the United States (in millions) over the applicable ten-year periods.

Source: Attack and death tolls are drawn from table 3.2. Population data are drawn from United States Census Bureau, "Population Estimates," www.census.gov/popest/index.html (accessed May 3, 2016).

Above, I argued that high-fatality mass shootings are now in a distinct class. This becomes abundantly clear when gun massacres are compared to other common forms of homicide. The most recent decade of available data illustrates that, while most forms of homicide continue to decline, gun-massacre deaths are heading in the opposite trajectory (see figure 3.6). This presents a troubling mystery: Why are such deadly shooting sprees on the rise when most other homicides are on the wane? Equally baffling, this increase is occurring despite a steady decrease in gun-ownership rates (see figures 3.7 and 3.8).[89] Even if we allow for the fact that the absolute number of households with firearms has consistently held at around forty million over the last forty years, it still fails to correlate with the upsurge in gun massacres.[90]

My data set, while unique, is limited by the exclusion of mass shootings that didn't result in at least six victims being murdered. Indications are that if the bar is lowered below a minimum of six deaths, the rate of occurrence is even more disturbing. Unfortunately, due in part to a funding prohibition enacted by Congress—at the urging of the National Rifle Association (NRA)—government agencies eschew research that would compile such data.[91] Frustrated by these restrictions, a group of social-media-savvy individuals launched a crowdsourcing experiment on Reddit to track every gun assault in the United States that resulted in four or more people being shot.[92]

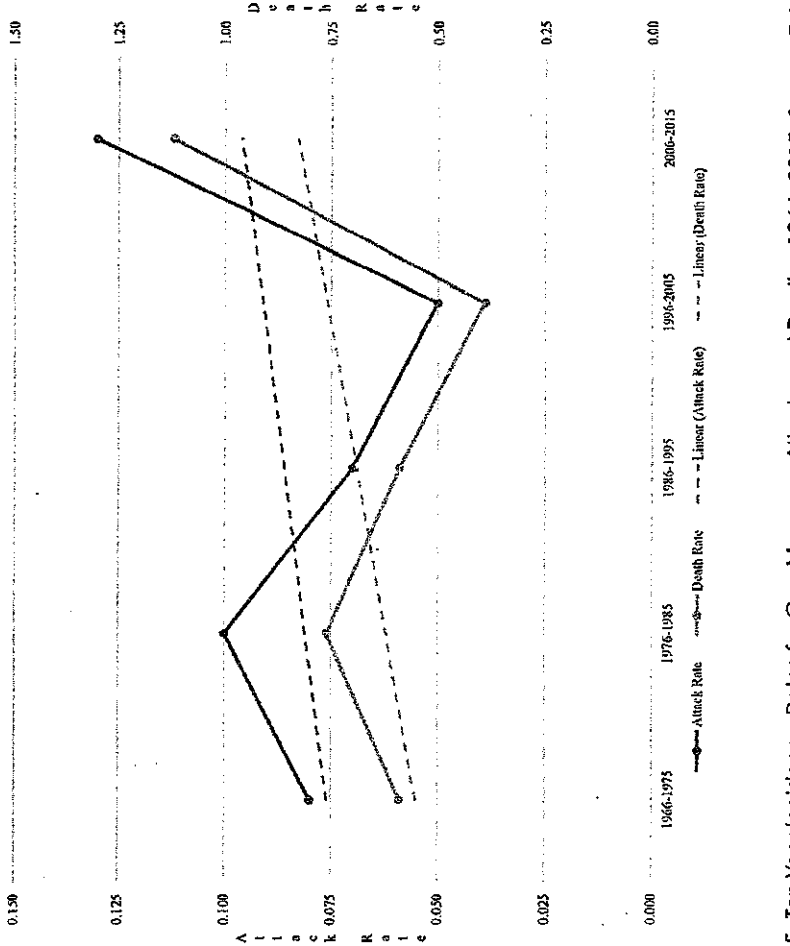


Fig. 3.5. Ten-Year Incidence Rates for Gun-Massacre Attacks and Deaths, 1966–2015. Source: Table 3.5.

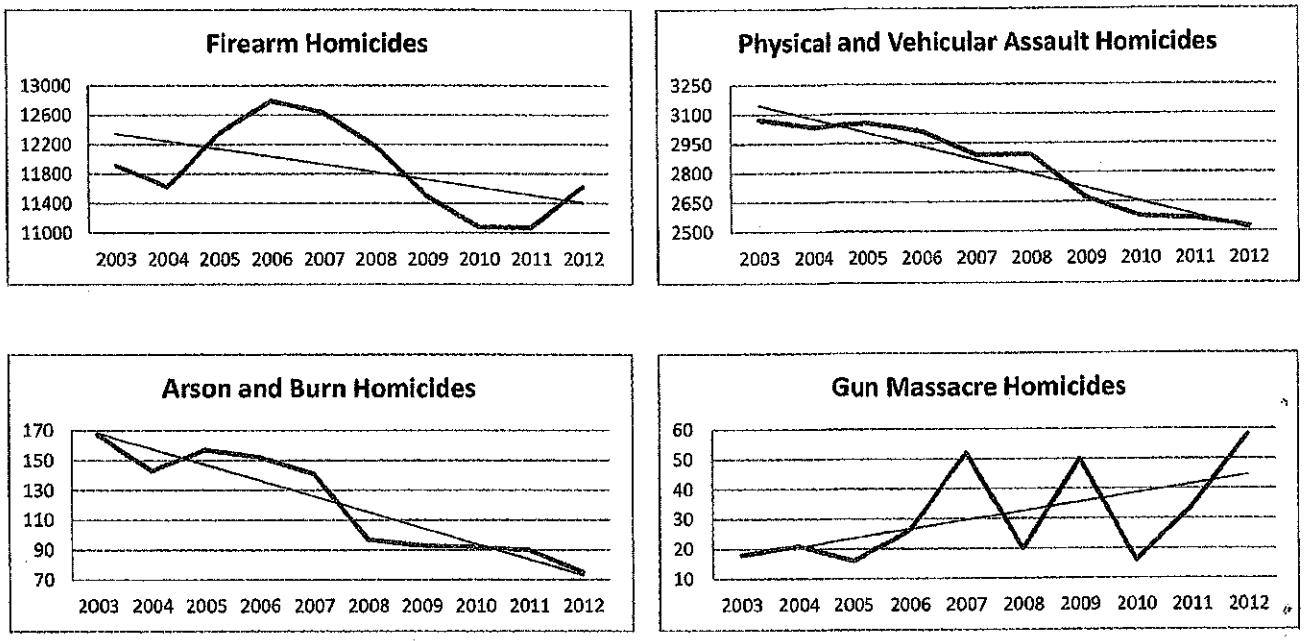


Fig. 3.6. Trends in Common Forms of Homicide, 2003–2012.

Note: The data represent the most recent decade of available data and indicate the cumulative number of such homicides per year. All data except for gun-massacre homicides are drawn from the Center for Disease Control WONDER Database (available at wonder.cdc.gov). Gun-massacre homicides are drawn from table 3.2.

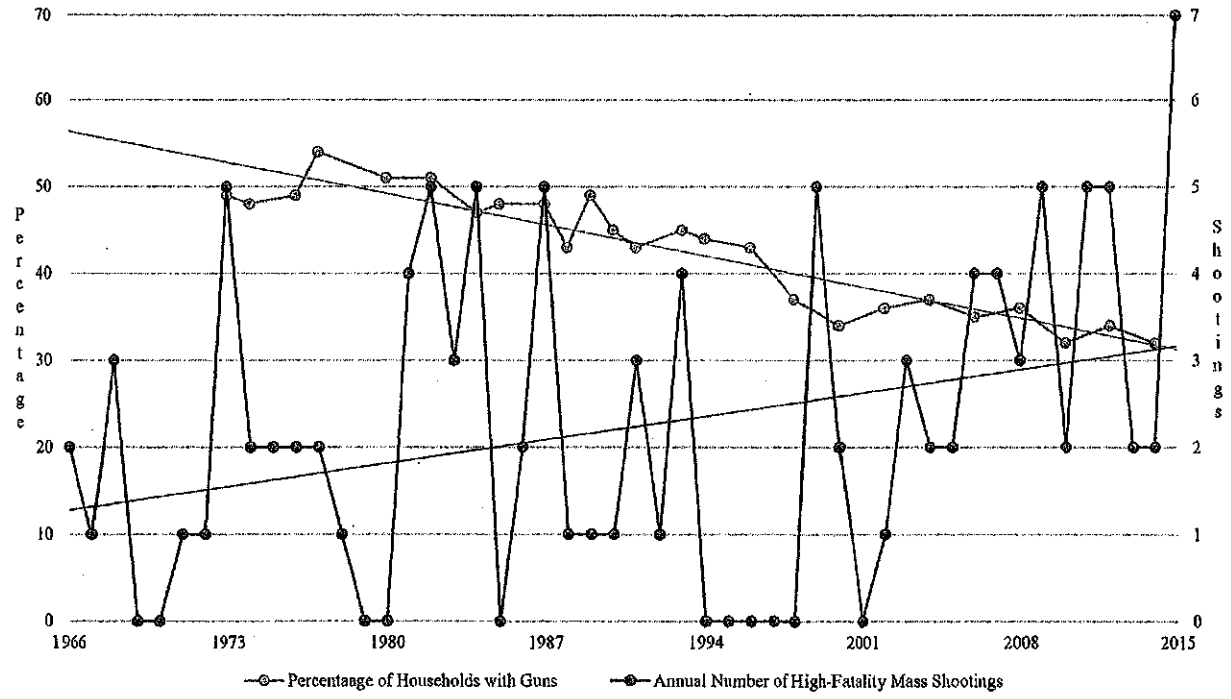


Fig. 3.7. Comparison of Trends in Gun Massacres and Gun-Ownership Rates, 1966–2015.
Source: Table 3.2 and General Social Survey Data (1973–2014).

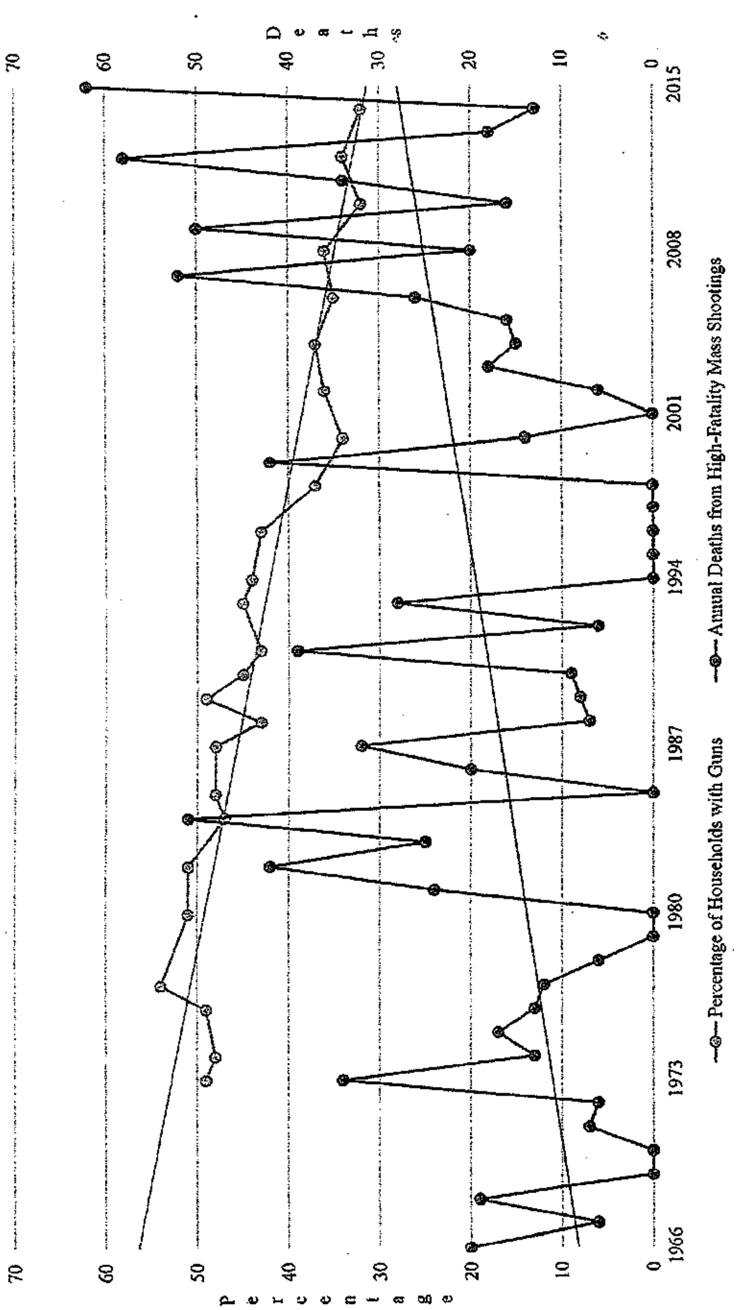


Fig. 3.8. Comparison of Trends in Gun-Massacre Deaths and Gun-Ownership Rates, 1966–2015.
Source: Table 3.2 and General Social Survey Data (1973–2014).

Table 3.6. Mass Shootings in the United States, 2013–2015.

Number of Mass Shootings Resulting in	2013	2014	2015	Combined
0 Deaths	130	145	159	434
1 Death	93	95	108	296
2 Deaths	47	30	38	115
3 Deaths	22	26	26	74
4 Deaths	34	19	26	79
5 Deaths	8	7	5	20
6 Deaths	3	2	3	8
7 Deaths	1	0	0	1
8 Deaths	0	1	2	3
9 Deaths	0	0	2	2
10 Deaths	0	0	1	1
...	...	...	...	...
13 Deaths	1	0	0	1
...	...	...	...	...
16 Deaths	0	0	1	1
Total Shootings	339	325	371	1,035
Total Deaths	467	364	469	1,300

Note: The Mass Shooting Tracker defines mass shootings as any gun attack where four or more people, including the shooter(s), are shot. As a result, the death tolls in this table include gunmen, if they died during the perpetration of their crimes.

Source: www.massshootingtracker.org.

In its first year (2013), the Mass Shooting Tracker logged a total of 339 multiple-victim shootings (see table 3.6). This dropped by fourteen, to 325 incidents, the following year. By 2015, however, the total number of mass shootings had jumped to 371, surpassing the rate of one per day. A review of the three-year period indicates that 1,300 people lost their lives during the commission of these 1,035 gun attacks. That's an annual average of 433 fatalities—a far cry from the "18 lives a year" gun-rights activist Emily Miller tells us die on average in mass shootings in the United States. What's arguably most alarming is that, in all three years, the number of lethal incidents in the Mass Shooting Tracker's data set exceeds the number of nonlethal inci-

dents. Indeed, on an annual average, six in ten mass shootings result in at least one death, and three in ten result in multiple deaths.

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Remember John Fund? He's the conservative columnist who claimed that, for Americans, the odds of dying in a mass shooting are equal to those of being struck by lightning. Well, not so. According to the National Weather Service, an average of 267 people are struck by lightning in the United States every year.[93] That's far less than the 433 individuals who lose their lives annually in a mass shooting. In fact, in any given year, the odds of being struck by lightning are about one in 1.2 million, whereas the odds of dying in a multiple-victim gun attack are about one in 700,000. And those are the chances of dying in a mass shooting. If we expand this calculation to the number of people who are shot in a mass shooting every year—so as to make a true apples-to-apples comparison—the odds increase significantly.

Since we're putting mass shootings in a proper perspective, let's add one final comparison to what most Americans consider to be the gravest threat to their security: terrorism.[94] Certainly, given the way politicians in Washington are always carrying on about groups like al Qaeda and ISIS, you might think that you're more likely to be killed by a terrorist than by a rampage gunman. But the opposite is true. In the ten years immediately following 9/11, terrorists killed twenty-seven individuals in the United States.[95] That's the same number of people Adam Lanza killed in Newtown. In other words, what terrorists took a decade to accomplish, a single, well-armed individual on a gun rampage pulled off in one morning.[96]

The bottom line is that, no matter how you crunch the numbers, the outcome is consistently the same: in the past decade, no single incident of violence has killed more people in the United States than the mass shooting. Quite simply, the most credible violent threat to American society currently comes out of the barrel of a gun—and, unfortunately, the threat is growing.

PART 2

PROBE

Table 6.1. Comparison of Firearm Capabilities.

Average Shooter

Firearm	Six-Shot Revolver	Semi-Auto Handgun (Ten-Round Magazines)	Semi-Auto Handgun (Thirty-Round Magazines)	Assault Rifle (One-Hundred-Round Drums)
Firing Rate	1 Shot per Second	2 Shots per Second	2 Shots per Second	2 Shots per Second
Reload Rate	20 Seconds	10 Seconds	10 Seconds	15 Seconds
Time Shooting	18 Seconds	20 Seconds	40 Seconds	50 Seconds
Time Not Shooting	42 Seconds	40 Seconds	20 Seconds	10 Seconds
Bullets Fired	18 Rounds	40 Rounds	80 Rounds	100 Rounds

Expert Shooter

Firearm	Six-Shot Revolver	Semi-Auto Handgun (Ten-Round Magazines)	Semi-Auto Handgun (Thirty-Round Magazines)	Assault Rifle (One-Hundred-Round Drums)
Firing Rate	1.5 Shots per Second	3 Shots per Second	3 Shots per Second	3 Shots per Second
Reload Rate	10 Seconds	5 Seconds	5 Seconds	10 Seconds
Time Shooting	20 Seconds	25 Seconds	40 Seconds	50 Seconds
Time Not Shooting	40 Seconds	35 Seconds	20 Seconds	10 Seconds
Bullets Fired	24 Rounds	75 Rounds	120 Rounds	150 Rounds

THE AURORA THEATER MASSACRE ARSENAL

Following the Aurora theater massacre, the Colorado legislature enacted three sweeping gun-control bills that, among other things, banned the sale of ammunition magazines with a capacity larger than fifteen bullets. Avid Second Amendment advocates revolted against these laws. In a blunt attempt to punish two major proponents of these public-safety measures, the gun-rights movement organized a recall campaign. On September 10, 2013, State Senate President John Morse and State Senator Angela Giron—both Democrats—were removed from office and replaced by pro-gun Republicans.[106]

State Senator Bernie Herpin was one of those who ascended to office in the wake of the recall, replacing Morse. In February 2014,

during a Senate committee hearing on a bill Herpin sponsored to repeal the ban on extended-capacity magazines, one of his Democratic colleagues questioned the utility of his proposal: "My understanding is that James Holmes bought his 100-round capacity magazine legally. So in fact, [the 2013 high-capacity magazine ban] would have stopped James Holmes from purchasing a 100-round magazine. I was wondering if you agree with me."[107] Herpin, in what was clearly a poorly thought-out response, replied: "As it turned out, that was maybe a good thing that he had a 100-round magazine, because it jammed. If he had four, five, six 15-round magazines, there's no telling how much damage he could have done until a good guy with a gun showed up." Herpin was trying to suggest that the larger the capacity of the magazine, the more likely it is that the magazine might jam. But to the families of the victims, Herpin's suggestion that the public should put its faith in product defects as a means to ensure its safety came across as stupid and insensitive.

The AR-15 that James Holmes fired at the Century 16 multiplex did, in fact, jam. But not before it discharged sixty-five rounds. As we have already seen, one-hundred-round drums provide greater kill potential than smaller-capacity magazines. Had Holmes—at best, an average shooter by his own admission—been using thirty-round magazines, it would have provided theater patrons with approximately two additional ten-second windows to escape or to confront Holmes before he could have gotten off sixty-five shots.[108] And had he been using ten-round magazines, the shooting downtime would have increased to six ten-second windows—a full minute.

Contrary to the suggestion floated by Herpin, the one-hundred-round drum used by James Holmes played a critical role in making the Aurora theater massacre one of the highest-casualty mass shootings in American history.[109]

★ ★ ★

James Holmes's arsenal—particularly his polymer AR-15 assault rifle armed with a one-hundred-round drum—lends credence to the proposition that, as firearms become lighter and their ammunition capacities become larger, they become more lethal. But that's the

anecdotal takeaway from one gun massacre (albeit one that registered an extremely high casualty toll). What about the weapons used in other gun massacres?

If all firearms were equal, we would find that, on average, they produced similar outcomes, especially similar fatality tolls. In practice, however, that's not the case. After examining the firearms used in the 111 gun massacres in my data set, it's clear that there is a significant difference between attacks that involve semiautomatic weapons and those that do not. Those massacres where there was no evidence that the weapons used were semiautomatic firearms resulted, on average, in fewer deaths per attack. In fact, those high-fatality mass shootings accounted for 27 percent of the 111 incidents in my data set, but for only 23 percent of the 904 cumulative deaths resulting from those incidents (see table 6.2). On the other hand, gun massacres involving semiautomatic firearms produced, on average, higher death tolls. Semiautomatic firearm attacks accounted for 73 percent of all the incidents in my data set, but 77 percent of the fatalities resulting from those incidents. The conclusion is unambiguous: semiautomatic firearms, when used in mass shootings, increase the lethality of such attacks.[110]

Table 6.2. Percentage of Gun-Massacre Incidents and Cumulative Fatalities by Firearm Type.

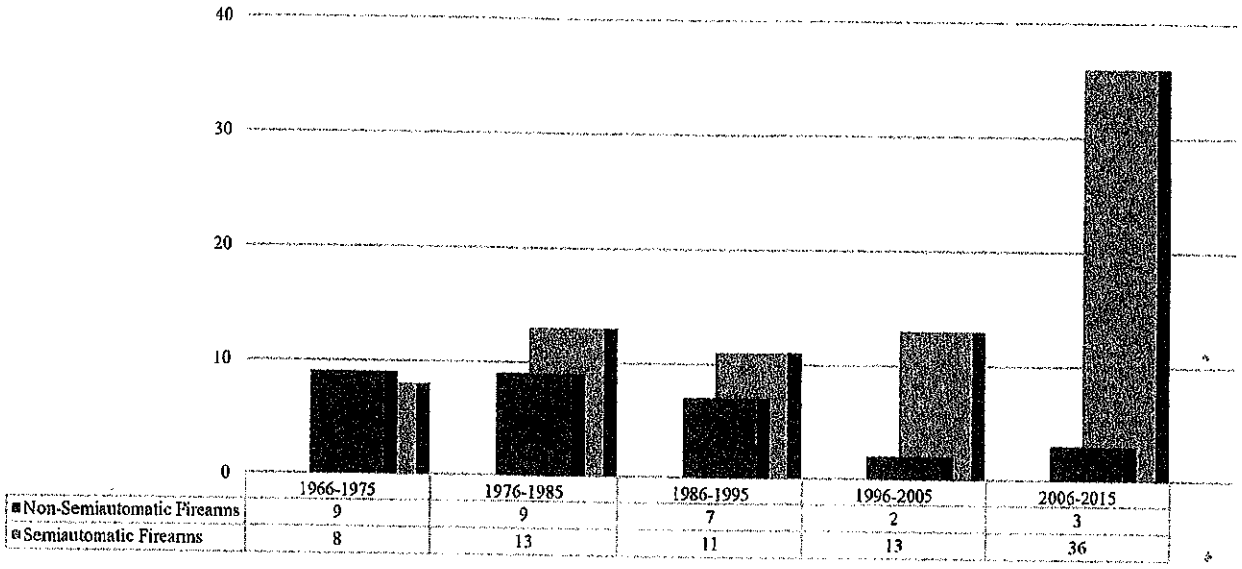
Gun Massacres between 1966 and 2015...	Percentage of All Incidents (N = 111)	Percentage of All Deaths (N = 904)	Difference (in Percentage)
...Not Involving Semi-Autos	27	23	−4
...Involving Semi-Autos	73	77	+4
...Involving Assault Weapons	25	29	+4
...Involving ECMs	47	55	+8
...Involving Polymer Guns	34	42	+8
...Involving Assault Weapons + ECMs	22	27	+5
...Involving ECMs + Polymer Guns	30	38	+8
...Involving Polymer Assault Weapons + ECMs	12	15	+3

Note: There is no separate category for polymer assault weapons without extended-capacity magazines (ECMs) as every gun massacre involving polymer assault weapons also involved ECMs.

This finding is particularly troubling because, over the course of the past fifty years, semiautomatic firearms have become more prevalent in high-fatality mass shootings (see figure 6.1). Their use in gun massacres has consistently increased decade after decade. The shift is particularly drastic when the first ten-year period of the past fifty years is compared to the most recent ten-year period. During the period 1966–1975, semiautomatic firearms were involved in 47 percent of all gun massacres. Jump forward to the present and you'll see that they have been involved in 92 percent of all gun massacres that have occurred in the past ten years. A similar pattern exists in terms of deaths resulting from semiautomatic firearm use in high-fatality mass shootings (see figure 6.2). During the period 1966–1975, semiautomatic firearm massacres accounted for 48 percent of all gun-massacre fatalities. In the past ten years, they have accounted for 95 percent of fatalities. It's also worth noting that, forty to fifty years ago, the range in the average number of deaths per gun massacre between those not involving semiautomatic weapons and those involving such weapons was relatively close: 7.1–7.3 (see figure 6.3). In the past decade, however, that difference has grown to its widest margin, with the former producing, on average, six fatalities per attack and the latter over nine deaths. In fact, in the past twenty years, the average death toll for incidents not involving semiautomatic firearms has bottomed out at six deaths—the minimum number of fatalities required for a shooting to meet the definition of a gun massacre.[111]

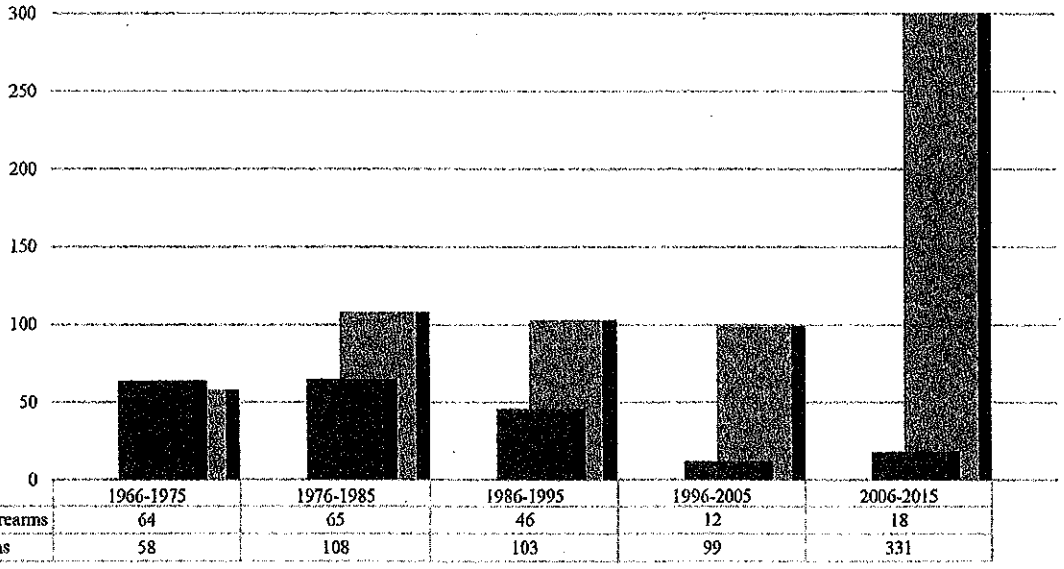
As discussed in chapter 3, gun massacres escalated extensively between the time periods 1966–1975 and 1976–1985. Afterward, they waned in both occurrence and lethality, reaching new lows in the 1990s, before spiking to unprecedented levels in the past ten years (see table 6.3). The use of semiautomatic firearms in such incidents has also grown to unprecedented levels of late.

Following the Aurora massacre, assault weapons seemed to bear the brunt of the blame. But, as I argued earlier in this chapter, polymer firearms and extended-capacity magazines are also considerably responsible for the increased bloodshed. A review of the data supports this assessment. In fact, the two factors that have correlated with the highest differential in death tolls are polymer guns and large-capacity magazines (see table 6.2). Assault weapons, on their own, were involved



	1966-1975	1976-1985	1986-1995	1996-2005	2006-2015
Non-Semiautomatic Firearms	9	9	7	2	3
Semiautomatic Firearms	8	13	11	13	36

Fig. 6.1. Number of Gun Massacres per Decade (Massacres Involving Semiautomatic Firearms versus Massacres Not Involving Semiautomatic Firearms).



	1966-1975	1976-1985	1986-1995	1996-2005	2006-2015
Non-Semiautomatic Firearms	64	65	46	12	18
Semiautomatic Firearms	58	108	103	99	331

Fig. 6.2. Number of Deaths Resulting From Gun Massacres per Decade (Massacres Involving Semiautomatic Firearms versus Massacres Not Involving Semiautomatic Firearms).

Fig. 6.3. Average Number of Deaths per Gun Massacre by Decade
(Massacres Involving Semiautomatic Firearms versus Massacres Not Involving Semiautomatic Firearms).

Table 6.3. Gun-Massacre Incidents and Fatalities by Firearm Type.

	1966–1975		1976–1985		1986–1995		1996–2005		2006–2015		Total	
All Gun Massacres												
Incidents	17		22		18		15		39		111	
Deaths	122		173		149		111		349		904	
Average Death Toll	7.2		7.9		8.3		7.4		8.9		8.1	
Gun Massacres Not Involving Semiautomatics												
Incidents	9		9		7		2		3		30	
Deaths	64		65		46		12		18		205	
Average Death Toll	7.1		7.2		6.6		6.0		6.0		6.8	
Gun Massacres Involving Semiautomatics												
Incidents	8		13		11		13		36		81	
Deaths	58		108		103		99		331		699	
Average Death Toll	7.3		8.3		9.4		7.6		9.2		8.6	
Gun Massacres Involving Assault Weapons												
Incidents	3		6		6		3		10		28	
Deaths	26		58		44		26		110		264	
Average Death Toll	8.7		9.7		7.3		8.7		11.0		9.4	
Gun Massacres Involving ECMs												
Incidents	3		5		9		9		26		52	
Deaths	26		53		82		72		261		494	
Average Death Toll	8.7		10.6		9.1		8.0		10.0		9.5	
Gun Massacres Involving Polymer Guns												
Incidents	1		2		3		7		25		38	
Deaths	6		19		38		61		253		377	
Average Death Toll	6.0		9.5		12.7		8.7		10.1		9.9	
Gun Massacres Involving Assault Weapons + ECMs												
Incidents	3		3		6		2		10		24	
Deaths	26		40		44		20		110		240	
Average Death Toll	8.7		13.3		7.3		10.0		11.0		10.0	
Gun Massacres Involving ECMs + Polymer Guns												
Incidents	1		2		3		6		21		33	
Deaths	6		19		38		52		226		341	
Average Death Toll	6.0		9.5		12.7		8.7		10.8		10.3	
Gun Massacres Involving Polymer Assault Weapons + ECMs												
Incidents	1		2		2		1		7		13	
Deaths	6		19		15		13		87		140	
Average Death Toll	6.0		9.5		7.5		13.0		12.4		10.8	

Note: There is no separate category for polymer assault weapons without extended-capacity magazines (ECMs) as every gun massacre involving polymer assault weapons also involved ECMs.

in only 25 percent of all gun massacres from the past fifty years, and those incidents accounted for 29 percent of all gun-massacre fatalities. The bigger impact results from using polymer guns and high-capacity magazines. The former were employed in 34 percent of all gun massacres, yet those attacks accounted for 42 percent of all gun-massacre fatalities. That's an 8 percent differential. The latter resulted in an identical percentage differential (47 percent of all massacres and 55 percent of all fatalities), although the larger overall tallies provide reason to find the use of extended-capacity magazines even more disconcerting than the use of polymer firearms.

One of the impressions that someone might form after hearing critics fault assault weapons like the AR-15 is that these potent firearms are used fairly often to perpetrate gun massacres. The data, however, do not support such a conclusion. On the contrary, assault weapons were used in only a quarter of the gun massacres from the past fifty years (see tables 6.2 and 6.3). Even in the past ten years, they were used in only ten attacks (again roughly 25 percent of all attacks in the past decade).

The same can be said for polymer guns and extended-capacity magazines. They, too, were involved in less than half of all gun massacres from the past fifty years (see tables 6.2 and 6.3). Nonetheless, unlike assault weapons, high-capacity magazines and polymer guns stand apart in their prevalence of late. Assault weapons have only been used in roughly one-fourth of all gun massacres since 2006. Extended-capacity magazines and polymer guns, on the other hand, have been used in about two-thirds of all such gun massacres. Indeed, a comparison with the earliest and most recent ten-year periods of my data set shows that, while the use of assault weapons increased by a factor of nearly three, the use of large-capacity magazines has increased by a factor of nearly nine, and the use of polymer firearms has increased by a factor of twenty-five.

Another relationship worth investigating is the frequency and lethality of these three elements—assault weapons, extended-capacity magazines, and polymer firearms—when employed in combination. Again, across the entire fifty-year time frame, their use remains limited, but their impact lethal (see tables 6.2 and 6.3). This becomes indisputable when the different firearms are assessed by

the average number of fatalities that result when they are involved in gun massacres (see figure 6.4). In general, the average death toll since 1966 has been 8.1. When gunmen don't shoot their victims with semiautomatic firearms, this average falls 17 percent to 6.8 deaths per incident.[112] The employment of semiautomatic firearms makes the average death toll per incident rise 5 percent to 8.6. The jumps are more profound when the shootings are broken down into those involving assault weapons, extended-capacity magazines, and polymer guns. Each of these elements result in, respectively, 16 percent, 17 percent, and 22 percent increases. The largest growth in average death toll, however, results when mass shooters attack with polymer assault weapons armed with extended-capacity magazines—all three elements in one. Those instances result in an average of 10.8 deaths per attack—a 33 percent increase from the 8.1 baseline.

When the comparisons are limited to just the past decade—when gun massacres almost always involved semiautomatic firearms—the most lethal outcome again results from attacks involving all three elements: polymer assault weapons armed with extended-capacity magazines. In the past ten years, the increase from the baseline average of number deaths per incident soars from 8.9 to 12.8 (see figure 6.4). That's an enormous 39 percent upsurge in the average number of fatalities when all three elements are involved in a gun massacre—and at a time when modern medicine has drastically reduced the likelihood of dying from gunshot wounds, no less.

One final question worth addressing: Do gun massacres employing more than one firearm or involving more than one perpetrator result in higher death tolls? It makes sense that if you have more weapons, you can produce more bloodshed. And the data support such a conclusion as it pertains to high-fatality mass shootings (see table 6.4). The average death toll when a perpetrator is armed with only a single weapon is 6.9 fatalities per incident (see table 6.5). That number jumps to 9.2 fatalities per incident when a gunman is armed with multiple firearms. That's higher than the average death toll for all 111 incidents in the data set but less than the average death toll resulting from incidents involving assault weapons, extended-capacity magazines, or polymer firearms (compare tables 6.3 and 6.5). A breakdown of the data clearly establishes that, while mass shootings involving two or more guns often

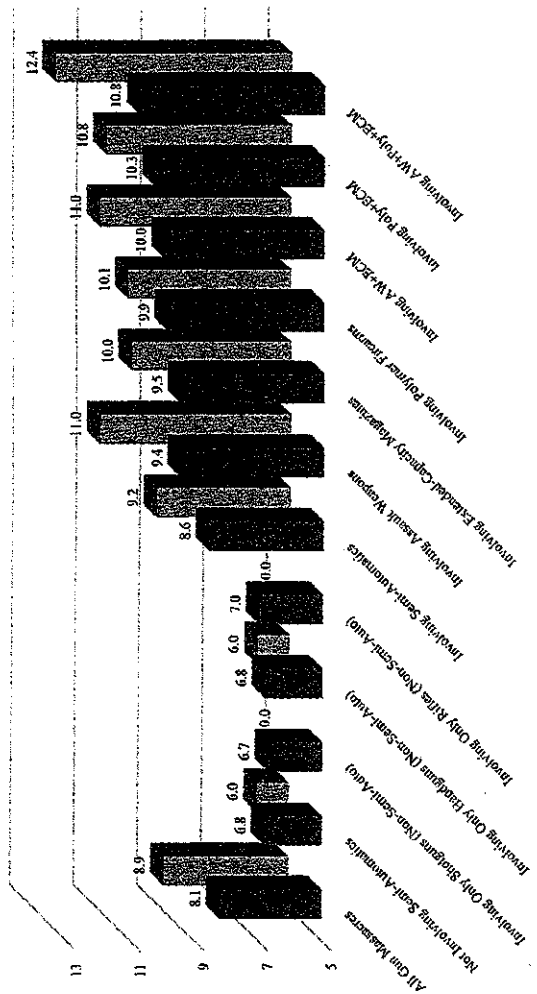


Fig. 6.4. Average Number of Fatalities per Gun Massacre by Firearm Type (1966–2015 Compared to 2006–2015).
Note: There is no separate category for polymer assault weapons without extended-capacity magazines (ECMs) as every gun massacre involving polymer assault weapons also involved ECMs.

result in increased carnage, the impact is driven more by the use of enhanced weapons (especially polymer guns equipped with extended-capacity magazines) than by the use of multiple firearms.

Table 6.4. Percentage of Gun-Massacre Incidents and Cumulative Fatalities by Number of Firearms and Shooters.

Gun Massacres between 1966 and 2015 . . .	Percentage of All Incidents (N = 111)	Percentage of All Deaths (N = 904)	Difference (in Percentage)
. . . Involving Only One Gun	47	40	–7
. . . Involving Multiple Guns	53	60	+7
. . . Involving Only One Shooter	86	86	0
. . . Involving Multiple Shooters	14	14	0

Unlike the sizeable difference that results from using multiple weapons, gun massacres involving more than one shooter don't result in significantly more fatalities (see table 6.4). When gun massacres are perpetrated by more than one gunman, the increase in fatalities per incident increases only 2 percent—from 8.1 to 8.3 fatalities per incident (see table 6.6).[113] Even more surprising, massacres involving two gunmen have produced higher average death tolls than those involving three or more gunmen. The former have claimed an average of 9.1 lives per attack, whereas the latter have claimed 6.3 lives per attack. This suggests that the number of perpetrators, per se, doesn't significantly impact the extent of the bloodshed.

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For those of you who are not data wonks, all of the statistics in the previous subsection might have left you a bit overwhelmed. The picture they paint is, nevertheless, pretty simple and straightforward. Most gun massacres involve semiautomatic firearms. The perpetrators of these murder sprees have not historically relied on assault rifles to pull off their attacks. Nor have they turned to polymer guns and large-capacity

Table 6.5. Gun-Massacre Incidents and Fatalities by Number of Firearms.

	Total
All Gun Massacres	
Incidents	111
Deaths	904
Average Death Toll	8.1
Gun Massacres Involving Only One Gun	
Incidents	52
Deaths	359
Average Death Toll	6.9
Gun Massacres Involving Multiple Guns	
Incidents	59
Deaths	545
Average Death Toll	9.2
Gun Massacres Involving Multiple Guns But Not Involving Semi-Autos	
Incidents	13
Deaths	92
Average Death Toll	7.1
Gun Massacres Involving Multiple Guns and Semi-Autos	
Incidents	46
Deaths	453
Average Death Toll	9.8
Gun Massacres Involving Multiple Guns and Assault Weapons	
Incidents	20
Deaths	204
Average Death Toll	10.2
Gun Massacres Involving Multiple Guns and ECMs	
Incidents	30
Deaths	336
Average Death Toll	11.2
Gun Massacres Involving Multiple Guns and Polymer Guns	
Incidents	22
Deaths	257
Average Death Toll	11.7
Gun Massacres Involving Multiple Guns and Assault Weapons + ECMs	
Incidents	16
Deaths	180
Average Death Toll	11.3
Gun Massacres Involving Multiple Guns and ECMs + Polymer Guns	
Incidents	19
Deaths	236
Average Death Toll	12.4
Gun Massacres Involving Multiple Guns and Polymer Assault Weapons + ECMs	
Incidents	9
Deaths	108
Average Death Toll	12.0

Note: There is no separate category for polymer assault weapons without extended-capacity magazines (ECMs) as every gun massacre involving polymer assault weapons also involved ECMs.

magazines. But—and this is a huge *but*—when they have utilized these types of guns, they have generated far greater bloodshed. The critical elements that seem to compound the carnage are, in particular, plastic weapons and large-scale ammunition-feeding devices. Assault weapons certainly contribute to the escalation of death tolls, but not quite as much as polymer guns and extended-capacity magazines do. That said, the most lethal outcomes tend to result, on average, when rampage gunmen use polymer assault weapons loaded with extended-capacity magazines. No doubt, James Holmes's decision to rely predominantly on a lightweight, ergonomically designed, high-capacity weapon made it extremely easy for him to achieve his self-professed goal of shooting "as many people as possible."[114] As it turned out, this amounted to upwards of seventy people in under three minutes.

Table 6.6. Gun-Massacre Incidents and Fatalities by Number of Shooters.

	Total
All Gun Massacres	
Incidents	111
Deaths	904
Average Death Toll	8.1
Gun Massacres Involving Only One Shooter	
Incidents	96
Deaths	779
Average Death Toll	8.1
Gun Massacres Involving Multiple Shooters (Two or More Shooters)	
Incidents	15
Deaths	125
Average Death Toll	8.3
Gun Massacres Involving Exactly Two Shooters	
Incidents	10
Deaths	91
Average Death Toll	9.1
Gun Massacres Involving More Than Two Shooters	
Incidents	5
Deaths	34
Average Death Toll	6.8

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The above vignettes illustrate that there is a preferred way of reducing threats to public safety: denying weapons to potential perpetrators. By preventing high-risk individuals from acquiring dangerous weapons or by hindering them from employing such weapons, government can keep its citizens safe.

In a way, homeland security is akin to George Orwell's *Animal Farm*. All strategies proposed by the trinity of violence are equal, but some are more equal than others. It's not that dissuasion and defense aren't valuable. They are. After all, we still criminalize bombings and erect barricades in front of important structures. But laws, on their own, often fail to dissuade homicidal and suicidal individuals. And blast barriers can't be erected everywhere. There are just too many potential perpetrators and targets for these strategies to be effective on their own. In open societies where resources are limited, securing public safety depends primarily on a strategy of denial to break the trinity of violence.

★ ★ ★

The success of the United States in countering aviation attacks and bombings by restricting access to, and use of, weapons raises an important question: If the deprivation of weapons works in these areas, couldn't it also serve as an effective strategy in reducing gun violence?

THE AMERICAN EXPERIENCE

The United States has been exemplary in safeguarding its citizenry from a host of deadly threats: accidents, environmental hazards, pandemics, hijackings, bombings, even weapons of mass destruction. Through successful regulation of hazardous products—almost all with little to no public controversy—the different levels of government all work hand in hand to keep us safe from a plethora of dangers.[26] But when it comes to protecting us from gun violence, the government's record has been abysmal.[27] In fact, the United States is

in a class all by itself. No other advanced, Western democracy experiences the magnitude of gun violence that presently afflicts American society.[28] This is particularly true when it comes to mass shootings.[29]

★ ★ ★

The United States does little to regulate firearms, especially at the federal level.[30] While it goes to great lengths to restrict access to WMDs and IEDs, the same can't be said for its efforts to keep firearms out of the hands of high-risk individuals. Indeed, the American experience with gun control nationwide is so limited that it can actually be chronicled in a few bullet points:

- The National Firearms Act of 1934: Heavily regulated machine guns, short-barrel rifles and shotguns, and silencers.
- The Federal Firearms Act of 1938: Established a federal licensing system to regulate manufacturers, importers, and dealers of firearms.
- The Omnibus Crime Control and Safe Streets Act of 1968: Prohibited anyone under twenty-one years of age from purchasing a handgun.
- The Gun Control Act of 1968: Required that all interstate firearms transfers or sales be made through a federally licensed firearms dealer and prohibited certain categories of people—felons (indicted or convicted), fugitives, drug abusers, mentally ill persons (as determined by adjudication), illegal aliens, dishonorably discharged servicemen, US-citizenship renouncers, and domestic abusers—from possessing firearms.[31]
- The Firearm Owners Protection Act of 1986: Barred the purchase or transfer of automatic weapons without government approval.
- The Undetectable Firearms Act of 1988: Required that all firearms have at least 3.7 oz. of metal that can be detected by a metal detector.
- The Gun-Free School Zones Act of 1990: Criminalized possession or discharge of a firearm in a school zone.
- The Brady Handgun Violence Prevention Act of 1993: Required

that anyone attempting to purchase a firearm from a federally licensed dealer pass a background check.[32]

- The Federal Assault Weapons Ban of 1994: Banned the sale and possession of semiautomatic assault weapons and extended-capacity magazines not grandfathered prior to the enactment of the law.[33]

Of all of these measures, the National Firearms Act of 1934 and the Assault Weapons Ban of 1994 (AWB) were the only ones instituted primarily in an effort to reduce the carnage of mass shootings. The former was passed in response to a series of bloody gangland executions, including the infamous 1929 St. Valentine's Day massacre in Chicago.[34] While there are still machine guns in circulation, the National Firearm Act, in conjunction with the Firearm Owners Protection Act of 1986, sharply cut the availability of machine guns, which likely explains the complete elimination of massacres perpetrated with such automatic-fire weapons.

Like the National Firearms Act, the AWB was introduced following several high-profile mass shootings in the early 1990s: the Luby's restaurant, 101 California Street office complex, and Long Island Railroad train car massacres.[35] Signed into law by President Bill Clinton, the AWB went into effect on September 13, 1994. At the insistence of the gun-rights lobby, however, the bill contained a ten-year sunset provision. As Congress never renewed the ban, it automatically expired on September 13, 2004.

The decade the law was in effect nonetheless resulted in a unique experiment, allowing us to discern what impact, if any, the ban had on gun violence in general and mass shootings in particular. As to the former, the academic consensus seems to be that the AWB had a minimal impact on reducing violent crime.[36] This hardly comes as a surprise. After all, most crimes don't involve assault weapons. The real test should be: Did it succeed in its intended purpose of reducing rampage violence? The answer is a resounding yes.

Let's take a closer look.

The best way to assess the impact of something is to conduct what, in social science, we commonly refer to as a time-series analysis. Basically, that's a fancy name for a before-and-after test. Figures 7.1

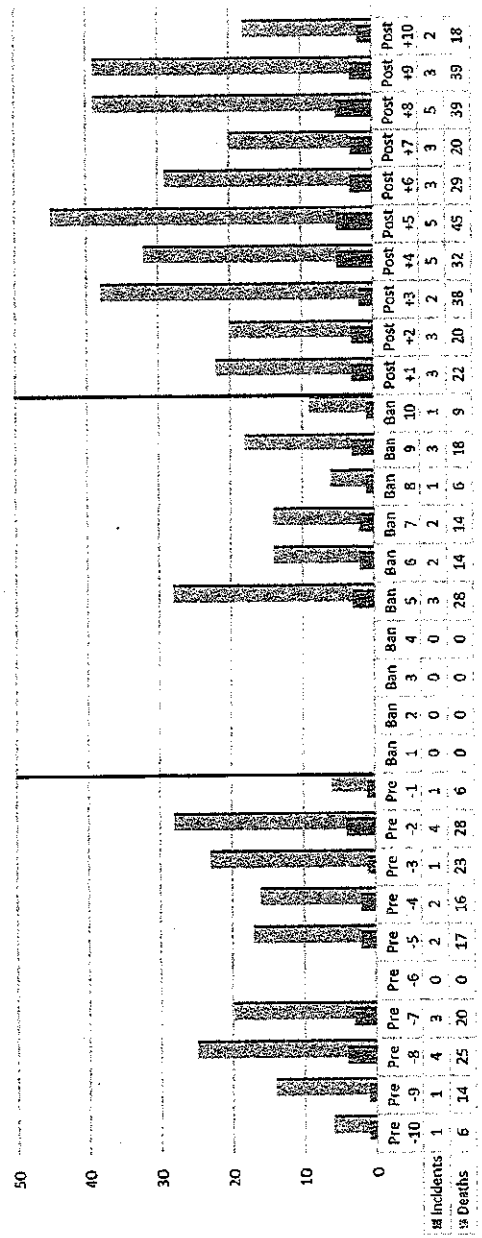

Fig. 7.1. Gun Massacres Before, During, and After the Assault Weapons Ban of 1994.
Note: The lines in the graph demarcate the start and end points of the Assault Weapons Ban, which was in effect from September 13, 1994, through September 12, 2004. The data are drawn from Table 3.2.

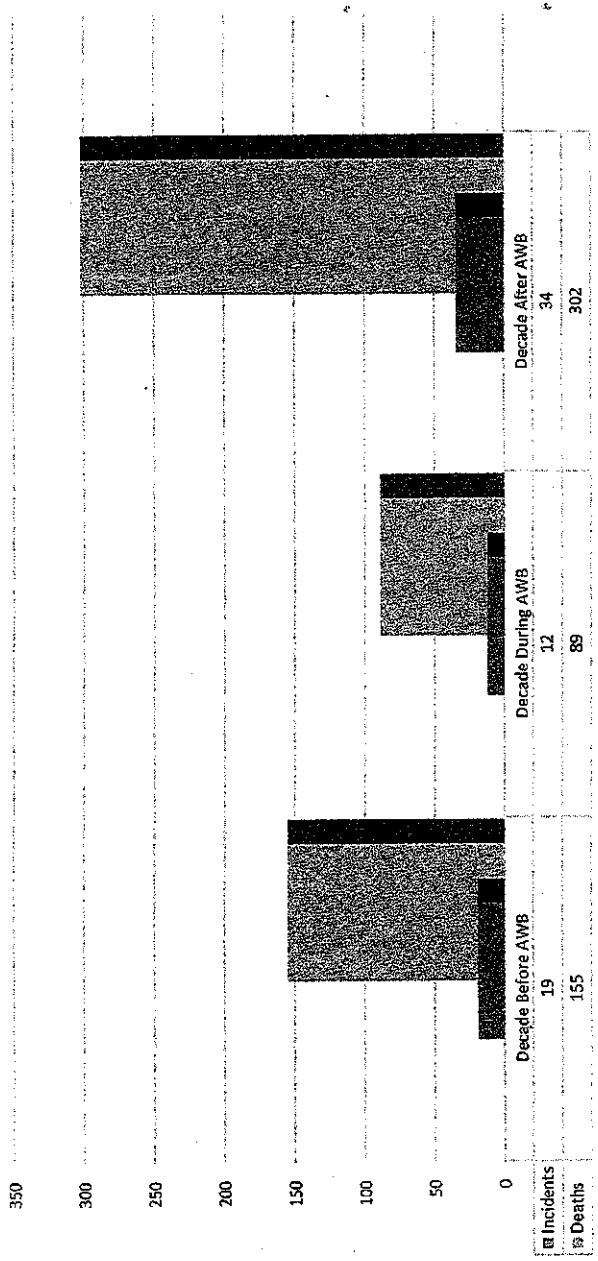

Fig. 7.2. Gun Massacres by Decade Before, During, and After the Assault Weapons Ban of 1994.
Note: The Assault Weapons Ban was in effect from September 13, 1994, through September 12, 2004.
The data are drawn from Table 3.2.

and 7.2 provide a look at the before-and-after pictures. In the decade prior to the enactment of the AWB, the United States experienced nineteen gun massacres that resulted in 155 cumulative deaths, for an average death toll of 8.2 fatalities per incident. During the ten-year period that the AWB was in effect, the numbers declined substantially, with only twelve gun massacres, resulting in eighty-nine deaths, for an average of 7.4 fatalities per incident.[37] What's particularly astounding about this time period is that during the first four and a half years of the ban, there wasn't a single gun massacre in the United States. Not one. This is unprecedented in modern American history.[38] Since 1966, the longest streaks without a gun massacre prior to era of the AWB were two instances of consecutive years (1969–1970 and 1979–1980).[39] Then, all of a sudden, from September 1994 to April 1999, the country experienced a long calm. As further evidence of the AWB's effectiveness, once it expired, rampages returned with a vengeance. In the ten years after the ban, the number of gun massacres nearly tripled to thirty-four incidents, sending the total number of deaths skyrocketing to 302, for an average of 8.9 fatalities per incident.[40] These numbers paint a clear picture: America's experiment, while short-lived, was also extremely successful.[41]

ZEROING OUT GUN MASSACRES

The biggest takeaway from America's experience with a ban on assault weapons and extended-capacity magazines is that gun-control legislation can save lives. But is there a way to get to zero? Is there a way to eliminate gun massacres once and for all? For that, we have to look overseas for insights.

One of the biggest obstacles to successful gun control is the ability to transport firearms across open, contiguous borders. In the United States, it's a problem that allows guns to flow freely from states with lax laws into states with strict laws. A common complaint frequently leveled by elected officials in places like California, Illinois, Maryland, New York, and Massachusetts is that people just need to drive across a state line and they can readily obtain firearms that they can then easily—if perhaps illegally—bring back into their jurisdictions.[42] That

If history is a guide, then it seems likely that the attack on Sandy Hook is the start of the next major reform in gun safety. What is arguably the most disturbing shooting in American history kick-started a national dialogue on firearms and it prompted President Obama's Now Is the Time initiative for reducing the carnage of rampage violence. What we don't know is what will be the subsequent tragedy that jolts Congress out of its complacency. But sadly it will likely take another gun massacre on par with Newtown before change is enacted.

As those who fought for automobile and gun safety in the past can attest, now might not be the time, but soon it will be.

THE WAY FORWARD

One of the criticisms that President Obama's Now Is the Time agenda continues to face is that, considering it was a plan occasioned by the Newtown massacre, its implementation would likely have not stopped Adam Lanza's attack.[35] Recalling the three main components of the initiative—universal background checks, an assault weapons ban, and a crackdown on illegal gun trafficking and straw purchases—opponents note that none of these would've kept Lanza from getting his hands on firearms. For starters, the guns used in the attack were all legally acquired by his mother after she passed a background check. Moreover, while an assault weapons ban might stem the manufacture of certain military-style rifles in the future, the president's current proposal (like the 1994 ban) would grandfather older models already in circulation, meaning that the AR-15 used by Lanza would have been legal. And, as the AR-15 was not straw-purchased for him, tighter enforcement of gun-trafficking laws also would have not prevented the Sandy Hook slayings.

The Obama administration's plan is a good starting point—especially for purposes of curbing gun violence in general. There are obviously scores of firearms that are employed by criminals that have been obtained without background checks or through illegal transactions.[36] In addition, while closing the gun-show loophole wouldn't have kept firearms out of Adam Lanza's hands, other rampage gunmen like the Columbine killers, who exploited this loophole, would have been prevented from acquiring weapons.[37] Wanting to prevent another circumvention of the Brady Act is certainly a wise policy position. Furthermore, going forward, a ban on assault weapons—even one with gaping loopholes—is still likely to stem some of the bloodshed of rampage violence, as the 1994 AWB did. So, no matter how you see it, the president's proposals are, overall, solid ideas.

However, if the federal government is serious about addressing mass shootings, it must do more. That means instituting gun-safety measures that will go well beyond those that form the centerpiece of the Now Is the Time initiative. Toward this end, there are eight reforms that can be powerful forces in breaking the trinity of rampage violence through weapons deprivation.

1. *Banning and buying back all extended-capacity magazines.* Some gun-control advocates might envision an America where all assault weapons—and perhaps all polymer guns—are banned. Given that there's currently at least one gun in circulation for every American in the population, this is a pipe dream.[38] But there is one measure—controversial as it may be—that, if it were to be implemented, would sharply curtail rampage violence: a ban on extended-capacity magazines. Recall from chapter 6, the factor most associated with high death tolls in gun massacres is the use of a magazine holding more than ten bullets. If such magazines were completely removed from circulation, the bloodshed would be drastically reduced. Nothing facilitates a shooter's ability to spray people with bullets more than being armed with a firearm equipped with twenty, thirty, and, in the case of James Holmes, one hundred bullets. No one needs that kind of capability. Not even for self-defense.[39]

   To do this, however, would entail more than just a ban on extended-capacity magazines. It would require a mandatory buy-back program, like Australia's, that would recoup magazines that were not retrofitted to a ten-round cap. Bans are suboptimal if prohibited items are grandfathered, allowing those already possessed by lawful owners to remain in circulation. At

usatoday.com/story/news/nation/2013/12/03/fbi-mass-killing-data-inaccurate/3666953 (accessed December 16, 2014).

62. Jason Kissner, "The Sandy Hook School Massacre and FBI Data Anomalies," *Global Research Newsletter*, September 27, 2014, http://www.globalresearch.ca/the-sandy-hook-school-massacre-and-fbi-data-anomalies/5404658 (accessed April 30, 2015).

63. From 1976 to 2011, eighty-seven gun massacres resulting in the murder of six or more victims were cataloged in the SHR data sets. Of those, twenty-three were erroneous. That means only sixty-four of the high-fatality mass shootings in the SHR data sets were verifiable. That's an error rate of 26 percent. But that speaks only to erroneous incidents entered into the system. There were also nineteen gun massacres I documented in table 3.2 that were omitted from the SHR data sets. When those missing incidents are accounted for, the error rate jumps to 40 percent. In other words, the accuracy rate for gun massacres in the SHR data sets is only 60 percent. Similarly, *USA Today*, in its own examination of mass killings since 2006, found that the SHR data sets had an accuracy rate of only 57 percent. Meghan Hoyer, "In FBI Murder Data, Mass Killings Often Go Missing," *USA Today*, September 10, 2014, http://www.usatoday.com/story/news/nation/2014/09/10/mass-killings-missing-data/12990815 (accessed December 16, 2014).

64. In all fairness, Fox has acknowledged the limitations of working with SHR data. Fox has introduced a few statistical corrections to the overall data set, but none of the techniques that he recommends for filling in the gaps can generate accurate numbers pertaining to gun massacres. James Alan Fox, "Missing Data Problems in the SHR: Imputing Offender and Relationship Characteristics," *Homicide Studies* 8 (August 2004): 214–54.

65. John Lott is certainly a polemic figure in the gun debate, often referred to as a "discredited scholar" and even accused of unethical conduct. For more on the controversies surrounding Lott, see chapter 5. Also, see Evan DeFilippis and Devin Hughes, "Shooting Down the Gun Lobby's Favorite 'Academic': A Lott of Lies," *Armed with Reason*, December 1, 2014, http://www.armedwithreason.com/shooting-down-the-gun-lobbys-favorite-academic-a-lott-of-lies (accessed December 16, 2014).

66. The argument that an increase in gun ownership results in less crime is based predominantly on John Lott, *More Guns, Less Crime: Understanding Crime and Gun Control Laws*, 3rd ed. (Chicago: University of Chicago Press, 2000).

67. Lott's report utilized the same fatality threshold as the Everytown report: a minimum of four victims shot to death. John R. Lott Jr., *The Myths about Mass Public Shootings: Analysis*, Report of the Crime Prevention Research Center, October 9, 2014, p. 4, http://crimepreventionresearchcenter.org/wp-content/uploads/2014/10/CPRC-Mass-Shooting-Analysis-Bloomberg2.pdf (accessed October 27, 2014).

68. Ibid., p. 5.

69. Ibid., p. 19.

70. Beck also cites the research of criminologist Grant Duwe, who suggests that mass shootings might have actually decreased in the recent past. As the *Los Angeles Times* noted, "The 26 public shooting massacres [Duwe] tallied between 2000 and 2009 were significantly down from the 43 cases he counted in the 1990s." Matt Pearce, "2012 Is Tragic, but Mass Shootings Not Increasing, Experts Say," *Los Angeles Times*, December 18, 2012, http://articles.latimes.com/2012/dec/18/nation/la-na-nn-mass-shootings-common-20121218 (accessed October 27, 2014). Unlike Fox, Duwe excludes certain mass shootings that were motivated by criminal enterprise or occurred in private, making his conclusions subject to some of the same limitations associated with the *Mother Jones* analysis.

71. "Findings of Fact, Conclusions of Law, and Order," *Colorado Outfitters Association et al. v. Hickenlooper*, Civil Action No. 13–cv–01300–MSK–MJW, US District Court for the District of Colorado, June 26, 2014, http://michellawyers.com/wp-content/uploads/2013/05/Cooke-v.-Hickenlooper_Findings-of-Fact-Conclusions-of-Law-and-Order.pdf (accessed November 23, 2014).

72. "Reporter's Transcript: Trial to Court—Day Three," *Colorado Outfitters Association et al. v. Hickenlooper*, Civil Action No. 13–cv–01300–MSK–MJW, US District Court for the District of Colorado, April 2, 2014, p. 529, http://michellawyers.com/wp-content/uploads/2013/05/Cooke-v.-Hickenlooper_Reporters-Transcript-Trial-to-Court-Day-Three.pdf (accessed November 23, 2014). Kleck elaborated on his reasoning for opposing a ban on magazine capacity in a *Wall Street Journal* op-ed:

> The availability of large-capacity magazines is certainly irrelevant to ordinary gun violence, which usually involves few or no shots fired, but it is even irrelevant to virtually all mass shootings, because the shooters either have multiple guns, making it easy to fire many rounds without reloading, or they have ample time and opportunity to reload because there is no one present willing to stop them while they reload. . . .
>
> When there are willing interveners, it limits how much death and injury a shooter can inflict with the initial magazine; the smaller the magazine, the fewer the victims. Unfortunately, these conditions almost never prevail in mass shootings. . . .
>
> Any restrictions that limit the availability of guns for criminal purposes

also limit their availability for self-protection. . . . Making guns unavailable for self-defense can therefore cost lives, and this cost must be taken into account when considering the possible slight benefit of measures that would prevent only the rarest of crimes.

Gary Kleck, "Mass Shootings Aren't the Real Gun Problem," *Wall Street Journal*, January 15, 2011, http://www.wsj.com/articles/SB10001424052748703959104576081918062180664 (accessed November 23, 2014).

73. Kleck has served as an expert witness in at least five other gun rights cases: *Heller v. District of Columbia*; *Fyock v. Sunnyvale*; *San Francisco Veteran Police Officers Association v. San Francisco*; *Tardy v. O'Malley*; and *Shew v. Malloy*. See "Reporter's Transcript: Trial to Court—Day Three," pp. 582–83.

74. Gary Kleck, *Targeting Guns: Firearms and Their Control* (Hawthorne, NY: Aldine de Gruyter, 1997), pp. 124–25.

75. "Reporter's Transcript: Trial to Court—Day Three," p. 529.

76. Ibid.

77. Ibid., p. 580.

78. "Reporter's Transcript: Trial to Court—Day Five," *Colorado Outfitters Association et al. v. Hickenlooper*, Civil Action No. 13–cv–01300–MSK–MJW, US District Court for the District of Colorado, April 4, 2014, p. 975 (emphasis added), http://michellawyers.com/wp-content/uploads/2013/05/Cooke-v.-Hickenlooper_Reporters-Transcript-Trial-to-Court-Day-Five.pdf (accessed November 23, 2014).

79. Ibid., pp. 977–78.

80. The forty-five-minute time frame was reported in Megan Gallegos, "Data Questioned in Gun Control Trial," *Courthouse News Service*, April 6, 2014, http://www.courthousenews.com/2014/04/06/66817.htm (accessed November 23, 2014).

81. "Reporter's Transcript: Trial to Court—Day Five," p. 993.

82. Ibid., p. 995.

83. "Findings of Fact, Conclusions of Law, and Order," p. 35. In fact, the judge's opinion upholding Colorado's law noted, "The General Assembly considered evidence that mass shootings occur with alarming frequency and often involve use of large-capacity magazines." Ibid., p. 32. In March 2016, the US Court of Appeals for the Tenth Circuit vacated the district court's ruling on the grounds that the plaintiffs lacked standing to bring their legal action. The result was the same: the lawsuit was dismissed. *Colorado Outfitters Association et al. v. Hickenlooper*, Nos. 14-1290 and 14-1292, March 22, 2016, https://www.ca10.uscourts.gov/opinions/14/14-1290.pdf (accessed April 17, 2016).

84. Because research funding was not available to me, I didn't have the resources to search out and catalog every mass shooting—at least four people shot in a single incident—that occurred in the United States since 1966. Just tracking down the mass shootings where five people were shot to death would have likely more than doubled my data set. *USA Today* found a similar pattern. Between January 1, 2006, and June 30, 2015, the newspaper identified 39 mass shootings resulting in six or more deaths. Shifting the baseline to five or more deaths increased the data set by more than double (42 additional incidents), to 81 such mass shootings. When the newspaper included shootings resulting in four or more deaths, the tally jumped by 130 incidents to 211 total mass shootings. The *USA Today* mass murder data set can be accessed at http://www.usatoday.com/story/news/nation/2013/09/16/mass-killings-data-map/2820423 (accessed December 13, 2015).

85. As figure 3.1 illustrates, there were three quasi-flatline periods when total deaths in gun massacres were accumulating at a rate of zero or close to zero (1968–1972, 1977–1980, and 1993–1998). The past decade, however, has exhibited no such pattern.

86. The ten-year period 1996–2005 was the decade with the least number of gun massacres as well as the least number of cumulative deaths resulting from such attacks. A possible explanation for this decline is offered in chapter 7.

87. By "five-plus-shooting-year," I mean a calendar year with five or more gun massacres. Similarly, by "four-plus-shooting-year," I mean a calendar year with four or more gun massacres.

88. Gary Fields and Cameron McWhirter, "In Medical Triumph, Homicides Fall Despite Soaring Gun Violence," *Wall Street Journal*, December 8, 2012, http://www.wsj.com/articles/SB10001424127887324712504578131360684277812 (accessed February 10, 2015).

89. Since 1973, the National Opinion Research Center at the University of Chicago has been surveying how many households have firearms. These gun-ownership rates are compiled roughly every two years by the General Social Survey. The data from 1973 to 2012 are available in Tom W. Smith, Faith Laken, and Jaesok Son, *Gun Ownership in the United States: Measurement Issues and Trends*, General Social Survey Methodological Report No. 123 (Chicago: National Opinion Research Center, 2014), http://publicdata.norc.org:41000/gss/documents//MTRT/MR123%20Gun%20Ownership.pdf (accessed March 17, 2015). The data for 2014 are reported in "Gun Ownership among Americans at a Record Low, Survey Finds," *Chicago Tribune*, March 10, 2015, http://www.chicagotribune.com/news/local/breaking/chi-gun-ownership-record-low-20150310-story.html (accessed March 17, 2015).

90. Since 1973, when the General Social Survey began probing household gun-ownerships rates, the number of households in the United States has nearly doubled from 68 million to 124 million. Yet the absolute number of armed

households has remained fairly constant at an average of 40 million. The lowest number of households with guns was recorded in 1973 (approximately 33 million) and the highest number was recorded in 1989 (approximately 46 million). In 2014, the number of households in the United States with firearms is again roughly 40 million. Annual data on the number of households in the United States is drawn from "Number of Households in the U.S. from 1960 to 2013," *Statista*, http://www.statista.com/statistics/183635/number-of-households-in-the-us (accessed March 17, 2015). As the data only extends to 2013, the number of households in the United States in 2014 has been estimated to be 124 million, based on a projection from previous years. The absolute number of armed households was calculated by multiplying the number of households by the percentage of households that the General Social Survey found had guns at home.

91. Todd C. Frankel, "Why the CDC Still Isn't Researching Gun Violence, Despite the Ban Being Lifted Two Years Ago," *Washington Post*, January 14, 2015, http://www.washingtonpost.com/news/storyline/wp/2015/01/14/why-the-cdc-still-isnt-researching-gun-violence-despite-the-ban-being-lifted-two-years-ago (accessed February 10, 2015).

92. The list of incidents is available online at massshootingtracker.org as well at the sub-Reddit /r/GunsAreCool. Every incident listed in the Mass Shooting Tracker contains a link to a news media account that allows for verification of the shooting. The incidents—attacks involving four or more victims shot—include the gunmen in the number of people shot. Therefore, an unknown portion of these incidents actually involved three innocent people being shot alongside the perpetrator, for a total of four killed or wounded by gunfire.

93. National Weather Service, "How Dangerous Is Lightning?" http://www.lightningsafety.noaa.gov/odds.htm (accessed February 18, 2015).

94. In a December 2015 CBS News / *New York Times* poll conducted in the immediate aftermath of the terrorist attack in San Bernardino, respondents identified terrorism as the most important problem facing the United States. In addition, 79 percent of respondents indicated that they felt there would likely be another terrorist attack on American soil within the next few months. Anthony Salvanto et al., "Poll: After San Bernardino Attacks, American Concern about Terror Threat Rises," CBS News, December 10, 2015, http://www.cbsnews.com/news/poll-after-san-bernardino-attacks-american-concern-about-terror-threat-rises (accessed December 13, 2015).

95. Klarevas, "Trends in Terrorism," p. 80.

96. In the past decade, there have been seven lethal terrorist attacks perpetrated by jihadists on American soil. These seven attacks resulted in a total of forty-two fatalities. Louis Klarevas, "Almost Every Fatal Terrorist Attack in America Since 9/11 Has Involved Guns," *Vice*, December 4, 2015, http://www.vice.com/read/almost-every-fatal-terrorist-attack-in-america-since-911-has-involved-guns-123 (accessed December 13, 2015). At a time when Americans are particularly concerned about becoming the victim of an ISIS-inspired act of terrorism, it's valuable to identify the odds of that happening. Basically, in any given year, the odds of being killed in an act of jihadist terrorism on American soil are around one in eighty million, an astronomically lesser chance than being killed in a mass shooting on American soil, which has a likelihood of about one in 700,000. These odds were calculated by dividing the current estimated population of the United States (320 million people) by the average number of people killed in the United States annually in jihadist terrorist attacks (four people) and mass shootings (433 people).

CHAPTER FOUR: UNSTABLE, ANGRY, ARMED MEN

1. Unless otherwise noted, all the information on the Virginia Tech massacre is drawn from Virginia Tech Review Panel, *Mass Shootings at Virginia Tech, April 16, 2007: Report of the Review Panel*, August 2007, http://www.washingtonpost.com/wp-srv/metro/documents/vatechreport.pdf (accessed May 2, 2015).

2. Ibid., p. 34.
3. Quoted in ibid., p. 35.
4. Quoted in ibid., p. 37.
5. Quoted in ibid., p. 42.
6. Quoted in ibid., p. 50.
7. Quoted in ibid., p. 50.
8. Quoted in ibid., p. 47.
9. Quoted in ibid., p. 48.
10. 18 USC § 922(g)(4).

11. Of the sixty-two occupants in the four classrooms Cho breached, only thirteen avoided being shot; ten of them as a result of jumping from the second-floor window and the other three presumably by playing dead.

12. Six more students were hurt as a result of jumping out of the windows in Professor's Librescu's classroom.

13. "Killer's Manifesto: 'You Forced Me into a Corner,'" CNN, April 18, 2007, http://edition.cnn.com/2007/US/04/18/vtech.shooting/index.html (accessed May 2, 2015).

14. Ibid. See also M. Alex Johnson, "Gunman Sent Package to NBC News," NBC News, April 19, 2007, http://www.nbcnews.com/id/18195423#.VdC-Mvmqqkp (accessed May 2, 2015).

86. Ibid., p. 11. See also Paul Scarlata, "Shootout! Polymer Police Pistols," *uns & Ammo Handguns*, September 24, 2010, http://www.handgunsmag.com/ views/featured_handguns_polysh_032707 (accessed July 26, 2015).
87. Barrett, *Glock*, p. 86.
88. Ibid., p. 14.
89. Ibid., p. 263.
90. Scarlata, "Shootout!"
91. Barrett, *Glock*, p. 32.
92. Ibid., pp. 56, 142–43.
93. Ibid., p. 192.
94. Ibid., p. 56.
95. Polymer has brought such distinct advantages to firearms that gun akers have begun manufacturing polymer revolvers. See Dick Metcalf, "Polymer evolution," *Shooting Times*, January 3, 2011, http://www.shootingtimes.com/ andguns/handgun_reviews_st_polymerevo_201005 (accessed July 26, 2015).
96. Typically, .38-caliber revolvers hold five or six bullets in the cylinder.
97. Massad Ayoob, "Maximizing Semi-Auto Handgun Performance," *Daily Caller*, September 23, 2014, http://dailycaller.com/2014/09/23/massad-ayoob maximizing-semi-auto-handgun-performance (accessed July 29, 2015). Ayoob akes an important point that, when calculating firing rates and reload times, e should not use best-case scenarios and world-record times. We should use easonable, average times. As he notes, "World Champion Jerry Miculek is on ecord firing six shots from his.45 revolver, reloading with a moon clip, and firing ix more in an incredible 2.99 seconds overall. There is only one Jerry Miculek. Most folks take longer to recharge a wheel gun." Ibid.
98. Stokes, "AR-15 Is More Than a Gun."
99. This subsection has benefitted from the thoughts of Kevin J. Ashton, ncluding correspondence between us on his now-defunct blog. See Kevin Ashton, The Physics of Mass Killing," January 24, 2013, archived at http://web.archive org/web/20150110031240/http://kevinjashton.com/2013/01/24/the-physics-of mass-killing (accessed July 29, 2015).
100. The details of the Tucson massacre are drawn from Gabrielle Giffords nd Mark Kelly, *Enough: Our Fight to Keep America Safe from Gun Violence* (New York: Scribner, 2014), pp. 47–74.
101. Ibid.
102. "Mark Kelly Makes Case against High-Capacity Gun Magazines," ABC News, January 30, 2013, http://abcnews.go.com/Politics/video/mark-kelly-makes case-high-capacity-gun-magazines-18356232 (accessed July 29, 2015).
103. Giffords and Kelly, *Enough*, p. 68.

104. Reload time is calculated as beginning the moment the final bullet is fired and ending the moment the first reload bullet is chambered and fired.
105. The calculations in this section are informed by Ayoob, "Maximizing Semi-Auto Handgun Performance." See also Jim Wilson, "The Revolver Speed Load," *American Rifleman*, February 10, 2012, http://www.americanrifleman.org/ articles/2012/2/10/the-revolver-speed-load (accessed July 29, 2015); and Kenan Flasowski, "Semi-Automatic Handgun Reloading," *Shooting Illustrated*, October 25, 2012, http://www.shootingillustrated.com/articles/2012/10/25/semi-automatic-handgun-reloading (accessed July 29, 2015). For an article that suggests faster rates of fire than most firearms experts seem to endorse, see Brian Palmer, "How Many Times Can You Shoot a Handgun in Seven Minutes? More Than a Thousand," *Slate*, November 9, 2009, http://www.slate.com/articles/news_and_politics/ explainer/2009/11/how_many_times_can_you_shoot_a_handgun_in_seven _minutes.html (accessed July 29, 2015).
106. Lynn Bartels, Kurtis Lee, and Joey Bunch, "Colorado Senate President John Morse, State Sen. Angela Giron Ousted," *Denver Post*, September 10, 2013, http://www.denverpost.com/breakingnews/ci_24066168/colorado-senate -president-john-morse-recalled-angela-giron (accessed July 31, 2015).
107. Eli Stokols, "Herpin Explains Why It Was a 'Good Thing' Holmes Had Large Ammo Magazine," KVDR, February 14, 2014, http://kdvr.com/2014/ 02/12/herpin-a-good-thing-that-james-holmes-had-100-round-magazine (accessed July 31, 2015). See also Kurtis Lee, "Sen. Bernie Herpin Says 'Maybe a Good Thing' Aurora Theater Gunman Had 100-Round Magazine," *Denver Post*, February 12, 2014, http://blogs.denverpost.com/thespot/2014/02/12/sen-bernie-herpin -says-maybe-good-thing-aurora-theater-gunman-100-round-magazine/105925 (accessed July 31, 2015). Herpin's repeal was defeated by the committee. Marc Stewart and Phil Tenser, "State Sen. Herpin That 'Maybe a Good Thing' That James Holmes Had a 100-Round Magazine," KMGH, February 12, 2014, http:// www.thedenverchannel.com/news/politics/state-sen-herpin-suggests-it-was-maybe -a-good-thing-that-james-holmes-had-a-100-round-magazine (accessed July 31, 2015).
108. James Holmes discussed his shooting abilities in an interview with court-appointed psychiatrist Dr. William Reid. That conversation, which was videotaped, was played for the jury during Holmes's trial. See Jordan Steffan, "Aurora Theater Shooting Trial, the Latest from Day 22," *Denver Post*, June 1, 2015 http://www .denverpost.com/theater-shooting-trial/ci_28227922/aurora-theater-shooting-trial -latest-from-day-22 (accessed July 31, 2015).
109. Shortly after his gaffe, Herpin apologized to the victims' families: "There's nothing I can say to relieve their pain; I certainly didn't intend to add to their pain." Megan Schrader, "Republican Sen. Bernie Herpin Apologizes for

'Insensitive' Gun Remark," *Gazette*, February 14, 2014, http://gazette.com/republican-sen.-bernie-herpin-apologizes-for-insensitive-gun-remark/article/1514605 (accessed July 31, 2015).

110. The use of the term *average* in this section is a reference to the mean average.

111. To the best of my knowledge, the impact of different types of firearms is rarely a topic of study. One notable exception is D. C. Reedy and C. S. Koper, "Impact of Handgun Types on Gun Assault Outcomes: A Comparison of Gun Assaults Involving Semiautomatic Pistols and Revolvers," *Injury Prevention* 9 (June 2003): 151–55. The Reedy and Koper article, while insightful, examines all types of criminal gun attacks that took place in one municipality: Jersey City, New Jersey. As such, its findings do not really apply to mass shootings.

112. The use of only revolvers produces an identical average. The use of only rifles results in an average seven deaths per incident. And the use of only shotguns results in the lowest recorded average of 6.7 deaths per incident.

113. Out of the 111 gun massacres since 1966, ninety-six were perpetrated by only one gunman and fifteen were perpetrated by multiple gunmen. Of those fifteen incidents, ten involved two shooters, one involved three shooters, three involved four shooters, and one involved more than four shooters.

114. Quoted in Steffan, "Aurora Theater Shooting Trial, the Latest from Day 22."

CHAPTER SEVEN: BREAKING THE TRINITY

1. The audio of Pacific Air Lines Flight 773's final transmission to Oakland Air Traffic Control is available at "Pacific Air Lines Flight 773 ATC Recording May 7, 1964," YouTube video, 0:35, posted by "starwarsfandude," March 29, 2013, https://www.youtube.com/watch?v=L1WY1Aeuq4w (accessed December 11, 2015).

2. Civil Aeronautics Board, *Aircraft Accident Report: Pacific Air Lines, Inc., Fairchild F-27, N2770R, Near San Ramon, California, May 7, 1964*, November 2, 1964, http://dotlibrary.specialcollection.net/Document?db=DOT-AIRPLANE ACCIDENTS&query=(select+773) (accessed December 11, 2015).

3. Ibid.

4. One of the principal investigators of the crash of Pacific Air Lines Flight 773, Darrol Davison, in a KTVU "Second Look" news segment discussed how, in 1964, security provisions didn't exist to prohibit guns from being brought aboard airplanes. The news segment is available at "Pacific Air Lines Flight 773," YouTube video, 7:07, posted by "Tom Bailey," September 20, 2012, https://www.youtube.com/watch?v=fpQu4Tjh-8Q (accessed December 11, 2015).

5. Jane Engle, "U.S. Aviation Security Timeline," *Los Angeles Times*, June 12, 2011, http://articles.latimes.com/2011/jun/12/travel/la-tr-airline-safety-timeline-20110612 (accessed December 11, 2015). See also Bryan Gardiner, "Off with Your Shoes: A Brief History of Airport Security," *Wired*, June 14, 2013, http://www.wired.com/2013/06/fa_planehijackings (accessed December 11, 2015).

6. Gun owners recall that in 1968 regulations were changed to prohibit carrying a firearm aboard an airplane, requiring that the weapon be checked in cargo-hold luggage. See, for example, "When Did Carrying Become Forbidden on Airplanes?" *High Road*, September 7, 2010, http://www.thehighroad.org/archive/index.php/t-540773.html (accessed December 11, 2015).

7. Civil Aeronautics Board, *Aircraft Accident Report*.

8. "Investigations: Death Wish," *Time*, November 6, 1964, http://content.time.com/time/magazine/article/0,9171,876374,00.html (accessed December 11, 2015)

9. Ibid.

10. Wallace Turner, "Pilot Reported Calling, 'I've Been Shot,' Before Crash that Killed 44 on Coast," *New York Times*, May 6, 1964, http://www.nytimes.com/19[illegible]4/05/09/pilot-reported-calling-ive-been-shot-before-crash-that-killed-44-on-coast.html (accessed December 11, 2015).

11. Civil Aeronautics Board, *Aircraft Accident Report*.

12. "Investigations: Death Wish."

13. Civil Aeronautics Board, *Aircraft Accident Report*.

14. For an excellent introduction to strategy, including a review of how dissuasion, defense, and disarmament relate to each other, see Thomas C. Schelling, *Arms and Influence*, rev. ed. (New Haven, CT: Yale University Press, 2008).

15. Keith B. Payne, *Deterrence in the Second Nuclear Age* (Lexington: University of Kentucky Press, 1996), p. 86. See also Michael Howard, "Lessons of the Cold War," *Survival* 36 (Winter 1994–95): 166.

16. Tom Walsh, "How's the Air up There?" *Barre Montpellier Times Argus*, October 14, 2015, http://www.timesargus.com/article/20151014/OPINION02/151019749 (accessed December 11, 2015).

17. Larry Pratt, "Strange Priorities," Gun Owners of America, October 2001, http://www.gunowners.org/op0136.htm (accessed December 11, 2015).

18. "Packing Heat on Planes," Fox News, February 8, 2007, http://www.foxnews.com/story/2007/02/08/packing-heat-on-planes.html (accessed December 11, 2015); Joe Sharkey, "Owners Argue Merits of Firearms on Airplanes," *New York Times*, January 2, 2012, http://www.nytimes.com/2012/01/03/business/arguing-the-merits-of-guns-on-airplanes.html (accessed December 11, 2015); Robert Farago, "'As a Pilot, I Don't Understand the Reason Why We Can't Have

irearms and Knives on Planes,'" Truth about Guns, February 1, 2012, http://www hetruthaboutguns.com/2012/02/robert-farago/as-a-pilot-i-don%E2%80%99t inderstand-the-reason-why-we-can%E2%80%99t-have-firearms-and-knives-on planes/ (accessed December 11, 2015); and Robert Farago, "U.S. Air Marshal ystem a Complete Disaster," Truth about Guns, August 18, 2015, http://www hetruthaboutguns.com/2015/08/robert-farago/u-s-air-marshal-system-a omplete-disaster (accessed December 11, 2015).

19. Engle, "U.S. Aviation Security Timeline."

20. Lou Michel and Dan Herbeck, *American Terrorist: Timothy McVeigh and the klahoma City Bombing* (New York: Harper, 2001).

21. John Mueller and Mark G. Stewart, *Chasing Ghosts: The Policing of Terrorism* New York: Oxford University Press, 2016), pp. 98–100.

22. National Forensic Science Technology Center, "A Simplified Guide to xplosives Analysis: Principles of Explosives Analysis," A Simplified Guide to orensic Science, 2013, http://www.forensicsciencesimplified.org/explosives/ rinciples.html (accessed December 11, 2015).

23. Louis Klarevas, "The Idiot Jihadist Next Door," *Foreign Policy*, December 1, 011, http://foreignpolicy.com/2011/12/01/the-idiot-jihadist-next-door (accessed ecember 11, 2015).

24. Jana Winter, "Anatomy of a Bomb: An Inexpensive and Deadly Mishmash f Ingredients," Fox News, May 3, 2010, http://www.foxnews.com/us/2010/ 5/03/anatomy-bomb.html (accessed December 11, 2015); "Timeline—From arking a Car Bomb to Catching a Plane," *Reuters*, May 4, 2010, http://www euters.com/article/timessquare-investigation-idUSN0411707720100504 (accessed ecember 11, 2015); and Peter Grier, "Times Square Bomb: Did Pakistan Taliban end its 'C' Team?" *Christian Science Monitor*, May 10, 2010, http://www.csmonitor om/USA/2010/0510/Times-Square-bomb-Did-Pakistan-Taliban-send-its-C-team ccessed December 11, 2015).

25. Louis Klarevas, "Bombing on the Analysis of the Times Square Bomb ot," *Huffington Post*, May 25, 2011, http://www.huffingtonpost.com/louis larevas/bombing-on-the-analysis-o_b_565428.html (accessed December 11, 015).

26. David Hemenway, *While We Were Sleeping: Success Stories in Injury and Violence evention* (Berkeley: University of California Press, 2009).

27. Daniel W. Webster and Jon S. Vernick, eds., *Reducing Gun Violence in merica: Informing Policy with Evidence and Analysis* (Baltimore, MD: Johns Hopkins niversity Press, 2013), http://home.uchicago.edu/ludwigj/papers/Impact%20 %20Brady%20Act%202013.pdf (accessed December 11, 2015).

28. Erin G. Richardson and David Hemenway, "Homicide, Suicide, and

Unintentional Firearm Fatality: Comparing the United States with Other High-Income Countries, 2003," *Journal of Trauma* 70 (January 2011): 238–43.

29. Sarah Kaplan, "American Exceptionalism and the 'Exceptionally American' Problem of Mass Shootings," *Washington Post*, August 27, 2015, https://www.washingtonpost.com/news/morning-mix/wp/2015/08/27/american -exceptionalism-and-the-exceptionally-american-problem-of-mass-shootings (accessed December 11, 2015).

30. David Hemenway, *Private Guns, Public Health* (Ann Arbor: University of Michigan Press, 2006).

31. The Gun Control Act of 1968 does not apply to "antique firearms" manufactured prior to 1899. For the statutory definition of "antique firearm," see 18 USC § 921(a)(16).

32. The Brady Handgun Violence Prevention Act of 1993 does not apply to "antique firearms" manufactured prior to 1899. For the statutory definition of "antique firearm," see 18 USC § 921(a)(16).

33. Hemenway, *Private Guns, Public Health*, pp. 209–12.

34. Bureau of Alcohol, Tobacco, Firearms, and Explosives, "National Firearms Act," ATF, November 9, 2015, https://www.atf.gov/rules-and-regulations/national -firearms-act (accessed December 11, 2015).

35. Bruce H. Kobayashi and Joseph E. Olson, "In Re: 101 California Street: A Legal and Economic Analysis of Strict Liability for the Manufacture and Sale of 'Assault Weapons,'" *Stanford Law and Policy Review* 8 (Winter 1997): 41–51.

36. Christopher S. Koper, "America's Experience with the Federal Assault Weapons Ban, 1994–2004: Key Findings and Implications," in *Reducing Gun Violence in America: Informing Policy with Evidence and Analysis*, ed. Daniel W. Webster and Jon S. Vernick (Baltimore, MD: Johns Hopkins University Press, 2013), pp. 157–71, http://home.uchicago.edu/ludwigj/papers/Impact%20of%20Brady%20Act%20 2013.pdf (accessed December 11, 2015).

37. Out of the twelve gun massacres that occurred while the AWB was in effect, three involved assault weapons and six involved extended-capacity magazines. I have been unable to uncover any evidence that any of these instruments were illegal under the AWB. In fact, most were grandfathered, meaning that they were exempted by the ban because they were legally in circulation prior to the AWB's enactment.

38. When viewed in terms of full calendar years, the massacre-free period ran five consecutive years, from 1994 to 1998, although it must be noted that the AWB was not in effect for most of 1994. There were also no gun massacres in 2001. When 2001 is combined with the four-and-a-half-year period without a high-fatality mass shooting from September 13, 1994, through April 20, 1999, we see that over half of the decade that the AWB was in effect was massacre-free.