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Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

STEVEN RUPP, et al.,

Plaintiffs,

vs.

XAVIER BECERRA, in his official
capacity as Attorney General of the State
of California,

Defendant.

Case No.: 8:17-cv-00746-JLS-JDE

**DECLARATION OF SEAN A.
BRADY IN SUPPORT OF
PLAINTIFFS' MOTION TO
EXCLUDE THE TESTIMONY OF
DEFENDANT'S EXPERT
WITNESS LUCY P. ALLEN
UNDER FEDERAL RULE OF
EVIDENCE 702**

Hearing Date: July 5, 2019
Hearing Time: 10:30 a.m.
Judge: Josephine L. Staton
Courtroom: 10A

DECLARATION OF SEAN A. BRADY

I, Sean A. Brady, am an attorney at the law firm Michel & Associates, P.C., attorneys of record for Plaintiffs in this action. I am licensed to practice law before the United States Court for the Central District of California. I have personal knowledge of the facts set forth herein and, if called and sworn as a witness, I could and would testify competently to the truth of the matters set forth herein.

1. On October 25, 2018, Defendant served Plaintiffs with the Expert Report of Lucy P. Allen. A true and correct copy of Ms. Allen's expert report, is attached hereto as **Exhibit 1**.

2. On December 14, 2018, I deposed Defendant's expert witness, Lucy P. Allen. Attached hereto as **Exhibit 2** is a true and correct copy of excerpts from the deposition transcript of Lucy P. Allen.

3. On October 25, 2018, Defendant served Plaintiffs with the Expert Report of Detective Michael Mersereau. Attached hereto as **Exhibit 3** is a true and correct copy of experts from the expert report of Mr. Mersereau.

4. On December 4, 2018, I deposed Defendant's expert witness, Michael Mersereau. Attached hereto as **Exhibit 4** is a true and correct copy of experts from the deposition transcript of Michael Mersereau.

I declare under penalty of perjury that the foregoing is true and correct.
Executed within the United States on May 28, 2019.

/s/ Sean A. Brady

Sean A. Brady
Declarant

EXHIBIT 1

XAVIER BECERRA
Attorney General of California
MARK R. BECKINGTON
Supervising Deputy Attorney General
JOHN D. ECHEVERRIA
Deputy Attorney General
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**IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION**

STEVEN RUPP; STEVEN DEMBER;
CHERYL JOHNSON; MICHAEL JONES;
CHRISTOPHER SEIFERT; ALFONSO
VALENCIA; TROY WILLIS; DOUGLAS
GRASSEY; DENNIS MARTIN; and
CALIFORNIA RIFLE & PISTOL
ASSOCIATION, INCORPORATED,

Plaintiffs,

vs.

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

Defendants.

CASE NO.: 8:17-cv-00746-JLS-JDE

**EXPERT REPORT OF
LUCY P. ALLEN**

Action Filed: April 24, 2017

I. SCOPE OF ASSIGNMENT

1. I have been asked by the Office of the Attorney General of California to analyze the use of assault weapons (as defined under California law), including assault rifles, in public mass shootings.¹ In addition, I have been asked to analyze the use of large-capacity magazines (magazines capable of holding more than ten rounds) in public mass shootings, particularly as they are used in conjunction with assault weapons in such mass shootings.

II. QUALIFICATIONS AND REMUNERATION

A. Qualifications

2. I am a Managing Director of NERA Economic Consulting (“NERA”), a member of NERA’s Securities and Finance Practice and Chair of NERA’s Product Liability and Mass Torts Practice. NERA provides practical economic advice related to highly complex business and legal issues arising from competition, regulation, public policy, strategy, finance, and litigation. NERA was established in 1961 and now employs approximately 500 people in more than 20 offices worldwide.

3. In my over 20 years at NERA, I have been engaged as an economic consultant or expert witness in numerous projects involving economic and statistical analysis. I have been qualified as an expert and testified in court on various economic and statistical issues relating to the flow of guns into the criminal market. I have testified at trials in Federal District Court, before the New York City Council Public Safety Committee, the American Arbitration Association and the Judicial Arbitration Mediation Service, as well as in depositions.

4. I have an A.B. from Stanford University, an M.B.A. from Yale University, and M.A. and M. Phil. degrees in Economics, also from Yale University. Prior to joining NERA, I was an Economist for both President George H. W. Bush’s and President Bill Clinton’s Council

¹ It is my understanding that the primary provisions of California law that are relevant to this case are: California Penal Code sections 30510 and 30515, and California Code of Regulations, title 11, section 5499. See, for example, California Department of Justice: “What is considered an assault weapon under California law?” and “What are AK and AR-15 series weapons?” <https://oag.ca.gov/firearms/regagunfaqs>, accessed October 25, 2018.

of Economic Advisers. My resume with recent publications and testifying experience is included as Appendix A.

B. Remuneration

5. NERA is being compensated for time spent by me and my team at standard billing rates and for out-of-pocket expenses at cost. NERA currently bills for my time at \$900 per hour. NERA's fees are not in any way contingent upon the outcome of this matter.

III. MATERIALS CONSIDERED

6. In preparing this report, I considered the following materials, in addition to the materials cited in attached Appendix B and Appendix C:
 - a) Third Amended Complaint for Declaratory and Injunctive Relief, filed June 27, 2018 ("Complaint");
 - b) California Department of Justice: "What is considered an assault weapon under California law?" and "What are AK and AR-15 series weapons?"
<https://oag.ca.gov/firearms/regagunfaqs>, accessed October 25, 2018;
 - c) Mother Jones: "US Mass Shootings, 1982-2018: Data From Mother Jones' Investigation," updated September 20, 2018,
<http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data>, accessed September 25, 2018; "A Guide to Mass Shootings in America," updated September 20, 2018, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>, accessed October 22, 2018; "What Exactly is a Mass Shooting," *Mother Jones*, August 14, 2012, <http://www.motherjones.com/mojo/2012/08/what-is-a-mass-shooting>. Additional details for the mass shootings obtained through Factiva and Google searches;
 - d) Citizens Crime Commission of New York City: "Mayhem Multiplied: Mass Shooters and Assault Weapons," 2016, <http://www.nycrimecommission.org/pdfs/CCC-MayhemMultiplied-June2016.pdf>; "Mass Shooting Incidents in America (1984-2012)," <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>,

accessed June 1, 2017. Additional details for the mass shootings obtained through Factiva and Google searches; and

- e) Kleck, Gary, “Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages,” 17 *Justice Research and Policy* 28 (2016).

IV. BACKGROUND

7. California law “generally prohibits” the manufacture, distribution and possession of certain firearms, defined as assault weapons (“Assault Weapons”).² According to California law, firearms qualify as Assault Weapons based on either their “make and model” or on certain “features.”³ Examples of Assault Weapons include the “UZI,” “AK series” and “Colt AR-15 series” rifles, and the “Bushmaster XM15.”⁴ A semiautomatic, centerfire rifle (without a fixed magazine) can also be considered an Assault Weapon if it includes certain features, including a “pistol grip,” a “thumbhole stock,” a “flash suppressor,” or an “adjustable” (telescoping or folding) stock.⁵ It is my understanding that Plaintiffs are challenging certain provisions of California law related to rifles that would qualify as Assault Weapons under California Penal Code sections 30510(a), 30515(a)(1)(A-C) and (E-F), and 30515(a)(3) and section 5499 of title 11 of the California Code of Regulations (“Assault Rifles”).⁶ Therefore, for the purpose of this report, the term Assault Rifles does not include pistols, shotguns, rifles with fixed magazines, or rifles that are equipped with a grenade launcher.

² Complaint, ¶¶19-21. See, also, California Department of Justice: “What is considered an assault weapon under California law?” and “What are AK and AR-15 series weapons?” <https://oag.ca.gov/firearms/regagunfaqs>, accessed October 25, 2018.

³ Complaint, ¶2.

⁴ California Penal Code section 30510 and California Code of Regulations, title 11, section 5499. See, also, Complaint, ¶¶23,24,26.

⁵ California Penal Code section 30515. See, also, Complaint, ¶7.

⁶ Complaint, ¶4.

V. FINDINGS

A. Methodology

8. We analyzed the use of Assault Weapons and large-capacity magazines in public mass shootings using two sources: Mother Jones⁷ and the Citizens Crime Commission of New York City.^{8,9} The analysis focused on public mass shootings because it is my understanding that the state of California is concerned about public mass shootings and enacted the challenged laws, in part, to address the problem of public mass shootings.

9. The definition of a mass shooting and the period covered differed somewhat for each of the sources. The Mother Jones data that we analyzed covers 104 mass shootings from 1982 to September 2018. Mother Jones includes mass shootings in which four or more people were killed in one incident in a public place and excludes crimes involving armed robbery or gang violence.¹⁰ Starting in January 2013, Mother Jones changed its definition of a mass shooting to include instances when three or more people were killed, consistent with a change in the federal definition of a mass shooting.¹¹ The Citizens Crime Commission data that we

⁷ “US Mass Shootings, 1982-2018: Data From Mother Jones’ Investigation,” *Mother Jones*, updated September 20, 2018, <http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data>, accessed September 25, 2018.

⁸ “Mayhem Multiplied: Mass Shooters and Assault Weapons,” *Citizens Crime Commission of New York City*, 2016. Additional details on the mass shootings were obtained from an earlier source by the Citizens Crime Commission. “Mass Shooting Incidents in America (1984-2012),” *Citizens Crime Commission of New York City*, <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>, accessed June 1, 2017.

⁹ I found Mother Jones and Citizens Crime Commission to maintain the most comprehensive lists of relevant mass shootings when I began research in 2013 on mass shootings in response to a challenge to New York state law. I am not aware of any other source that is more applicable (including focusing on the type of mass shootings that I understand are of concern to New York and other states/municipalities). There is substantial overlap between the mass shootings in the Mother Jones and Citizens Crime Commission datasets. In particular, the Mother Jones data contains 93% of the mass shootings in the Citizens Crime Commission data for the years covered by both data sources, 1984 to 2016. Note that I have analyzed the mass shootings identified by Dr. Gary Kleck and found similar conclusions for mass shootings that involved large-capacity magazines.

¹⁰ “A Guide to Mass Shootings in America,” *Mother Jones*, updated September 20, 2018, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>, accessed October 22, 2018. See also, “What Exactly is a Mass Shooting,” *Mother Jones*, August 14, 2012. <http://www.motherjones.com/mojournal/2012/08/what-is-a-mass-shooting>.

The Mother Jones data contains 93% of the mass shootings in the Citizens Crime Commission data for the years covered by both data sources, 1984 to 2016.

¹¹ “A Guide to Mass Shootings in America,” *Mother Jones*, updated September 20, 2018, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>, accessed October 22, 2018. Note this

analyzed covers 73 mass shootings from 1984 to June 2016. Citizens Crime Commission includes mass shootings in which four or more people were killed in a public place and was unrelated to another crime (such as robbery or domestic violence).¹² We combined the data from both sources and searched news stories on each mass shooting to obtain additional details on the types of weapons used as well as data on shots fired where available. We compared the details on the weapons used in each shooting to the list of prohibited firearms and features specified in California law to identify, based on this publicly available information, which mass shootings involved the use of Assault Weapons or more specifically Assault Rifles. In addition, we identified, based on this publicly available information, which mass shootings involved the use of large-capacity magazines. See attached Appendix B for a summary of the combined data, and Appendix C for a summary of the weapons used in each public mass shooting based on Mother Jones, Citizens Crime Commission, and news reports.

B. Use of Assault Weapons in public mass shootings

10. Based on the data, we found that Assault Weapons are often used in public mass shootings. Whether an Assault Weapon was used in a mass shooting can be determined in 104 out of the 109 incidents (95%) considered in this analysis. Out of these 104 mass shootings, 27 (or 26%) involved Assault Weapons. Even assuming the mass shootings where it is not known whether an Assault Weapon was used *all* did not involve an Assault Weapon, 27 out of 109 mass shootings, or 25%, involved Assault Weapons.

11. In addition, in 25 of the 27 mass shootings that involved an Assault Weapon (93%), the Assault Weapon used was an Assault Rifle (rather than a pistol or shotgun). In all, an Assault Rifle was used in 25 (or 23%) of the 109 public mass shootings analyzed.

12. Based on our analysis, casualties were higher in the mass shootings that involved Assault Weapons than in other mass shootings. In particular, we found an average number of fatalities or injuries of 46 per mass shooting with an Assault Weapon versus 12 for those

analysis of the Mother Jones data may not match other analyses because Mother Jones periodically updates its historical data.

¹² “Mayhem Multiplied: Mass Shooters and Assault Weapons,” *Citizens Crime Commission of New York City*, 2016. Additional details, such as the number of shots fired, were obtained from an earlier source by the Citizens Crime Commission. “Mass Shooting Incidents in America (1984-2012),” *Citizens Crime Commission of New York City*, <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>, accessed June 1, 2017.

without. Focusing on just fatalities, we found an average number of fatalities of 12 per mass shooting with an Assault Weapon versus 7 for those without. (See table below.)

13. We also found that casualties were higher in public mass shootings that involved Assault *Rifles*. In particular, we found an average number of fatalities or injuries of 48 per mass shooting that involved Assault Rifles versus 12 for those that did not involve any kind of Assault Weapon. Focusing on just fatalities, we found an average number of fatalities of 13 per mass shooting with an Assault Rifle versus 7 for those that did not involve any kind of Assault Weapon. (See table below.)

C. Use of large-capacity magazines in public mass shootings

14. Based on the data, we found that large-capacity magazines (those with a capacity to hold more than 10 rounds of ammunition) are often used in public mass shootings. Magazine capacity is known in 90 out of the 109 mass shootings (83%) considered in this analysis. We found that large-capacity magazines were used in the majority of mass shootings since 1982 regardless of how mass shootings with unknown magazine capacity are treated. In particular, of the 90 mass shootings with known magazine capacity, 59 (or 66%) involved large-capacity magazines. Even assuming the mass shootings with unknown magazine capacity *all* did not involve large-capacity magazines, the majority of mass shootings involved large capacity magazines (59 out of 109 mass shootings or 54%). (See table below.)

15. Based on our analysis of the public mass shootings data, casualties were higher in the mass shootings that involved weapons with large-capacity magazines than in other mass shootings. In particular, we found an average number of fatalities or injuries of 30 per mass shooting with a large-capacity magazine versus 10 for those without.¹³ Focusing on just fatalities, we found an average number of fatalities of 10 per mass shooting with a large-capacity magazine versus 6 for those without. (See table below.)

16. In addition, we found that casualties were higher in the mass shootings that involved both Assault Weapons *and* large-capacity magazines. In particular, we found an

¹³ An analysis of the mass shootings detailed in an article by Gary Kleck yielded similar results (21 average fatalities or injuries in mass shootings involving large-capacity magazines versus 8 for those without). The article covered 88 mass shooting incidents between 1994 and 2013. Kleck, Gary, "Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages," 17 *Justice Research and Policy* 28 (2016).

average number of fatalities or injuries of 47 per mass shooting with both an Assault Weapon and a large-capacity magazine versus 9 for those without either. Focusing on just fatalities, we found an average number of fatalities of 12 per mass shooting with both an Assault Weapon and a large-capacity magazine versus 6 for those without either. (See table below.)

17. For mass shootings that involved both Assault *Rifles* and large-capacity magazines, we found an average number of fatalities or injuries of 50 per mass shooting with both an Assault Rifle and a large-capacity magazine versus 9 for mass shootings without either. Focusing on just fatalities, we found an average number of fatalities of 13 per mass shooting with both versus 6 for those without either. (See table below.)

Numbers of Fatalities and Injuries in Public Mass Shootings				
Weapon Used	# of Incidents	Average # of		
		Fatalities	Injuries	Total
Assault Weapon	27	12	33	46
<i>Assault Rifle</i>	25	13	36	48
No Assault Weapon	77	7	5	12
Unknown	5	7	2	9
Large-Cap. Mag.	59	10	19	30
No Large-Cap. Mag.	31	6	3	10
Unknown	19	4	3	7
Assault Weapon & Large-Cap. Mag.	26	12	34	47
<i>Assault Rifle</i> & Large-Cap. Mag.	24	13	37	50
Large-Cap. Mag. only	30	9	8	17
No Assault Weapon or Large-Cap. Mag.	30	6	3	9
Unknown	23	5	3	8

D. Number of rounds fired in public mass shootings with Assault Weapons or large-capacity magazines

18. The data on public mass shootings indicates that it is common for offenders to fire more than ten rounds when using an Assault Weapon. Of the 27 mass shootings that involved an

Assault Weapon, there are 18 in which the number of shots fired is known. Shooters fired more than ten rounds in *all* 18 incidents, and the average number of shots fired was 170.

19. In addition, the data indicates that it is common for offenders to fire more than ten rounds when using a gun with a large-capacity magazine in mass shootings. Of the 59 mass shootings that involved a large-capacity magazine, there are 39 in which the number of shots fired is known. Shooters fired more than ten rounds in 37 of the 39 incidents, and the average number of shots fired was 107.

E. Percent of mass shooters' guns legally obtained

20. The data on public mass shootings indicates that the majority of guns used in these mass shootings were obtained legally.¹⁴ According to the data, shooters in at least 68% of mass shootings obtained their guns legally (at least 74 of the 109 mass shootings) and at least 73% of the guns used in these 109 mass shootings were obtained legally (at least 177 of the 242 guns).¹⁵



Lucy P. Allen

October 25, 2018

¹⁴ The determination of whether guns were obtained legally is based on Mother Jones reporting.

¹⁵ Mother Jones did not indicate whether the guns were obtained legally for 13% of mass shootings (14 out of the 104 mass shootings covered by Mother Jones).



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Appendix A

MANAGING DIRECTOR

Education

YALE UNIVERSITY

M.Phil., Economics, 1990

M.A., Economics, 1989

M.B.A., 1986

STANFORD UNIVERSITY

A.B., Human Biology, 1981

Professional Experience

- | | |
|------------------------|--|
| 1994-Present | <p>National Economic Research Associates, Inc.
<u>Managing Director</u>. Responsible for economic analysis in the areas of securities, finance and environmental and tort economics.
<u>Senior Vice President (2003-2016)</u>.
<u>Vice President (1999-2003)</u>.
<u>Senior Consultant (1994-1999)</u>.</p> |
| 1992-1993 | <p>Council of Economic Advisers, Executive Office of the President
<u>Staff Economist</u>. Provided economic analysis on regulatory and health care issues to Council Members and interagency groups. Shared responsibility for regulation and health care chapters of the <i>Economic Report of the President, 1993</i>. Working Group member of the President's National Health Care Reform Task Force.</p> |
| 1986-1988
1983-1984 | <p>Ayers, Whitmore & Company (General Management Consultants)
<u>Senior Associate</u>. Formulated marketing, organization, and overall business strategies including:
Plan to improve profitability of chemical process equipment manufacturer.
Merger analysis and integration plan of two equipment manufacturers.
Evaluation of Korean competition to a U.S. manufacturer.
Diagnostic survey for auto parts manufacturer on growth obstacles.
Marketing plan to increase international market share for major accounting firm.</p> |

Summer 1985 **WNET/Channel Thirteen, Strategic Planning Department**
Associate. Assisted in development of company's first long-term strategic plan. Analyzed relationship between programming and viewer support.

1981-1983 **Arthur Andersen & Company**
Consultant. Designed, programmed and installed management information systems. Participated in redesign/conversion of New York State's accounting system. Developed municipal bond fund management system, successfully marketed to brokers. Participated in President's Private Sector Survey on Cost Control (Grace Commission). Designed customized tracking and accounting system for shipping company.

Teaching
1989- 1992 **Teaching Fellow, Yale University**
Honors Econometrics
Intermediate Microeconomics
Competitive Strategies
Probability and Game Theory
Marketing Strategy
Economic Analysis

Publications, Speeches and Conference Papers

"Snapshot of Recent Trends in Asbestos Litigation: 2018 Update," (co-author), NERA Report, 2018.

"Trends and the Economic Effect of Asbestos Bans and Decline in Asbestos Consumption and Production Worldwide," (co-author), *International Journal of Environmental Research and Public Health*, 15(3), 531, 2018.

"Snapshot of Recent Trends in Asbestos Litigation: 2017 Update," (co-author), NERA Report, 2017.

"Asbestos: Economic Assessment of Bans and Declining Production and Consumption," World Health Organization, 2017.

"Snapshot of Recent Trends in Asbestos Litigation: 2016 Update," (co-author), NERA Report, 2016.

"Economic Dimension and Societal Costs and Benefits of Banning Asbestos," presented at the World Health Organization, Regional Office for Europe conference, Assessing the Economic Costs of the Health Impacts of Environmental and Occupational Factors: The Economic Dimension of Asbestos, Bonn, Germany, 2016.

"Snapshot of Recent Trends in Asbestos Litigation: 2015 Update," (co-author), NERA Report, 2015.

Participant in panel on “Expert Reports and Depositions” at PLI Expert Witness 2014, hosted by the Practising Law Institute, New York, New York, 2014.

“Snapshot of Recent Trends in Asbestos Litigation: 2014 Update,” (co-author), NERA Report, 2014.

“High Frequency Trading --A Primer in 1,800,000 Milliseconds” before the Litigation Group at Morrison Foerster, New York, New York, 2014.

“Snapshot of Recent Trends in Asbestos Litigation: 2013 Update,” (co-author), NERA Report, 2013.

“Asbestos Payments per Resolved Claim Increased 75% in the Past Year – Is This Increase as Dramatic as it Sounds? Snapshot of Recent Trends in Asbestos Litigation: 2012 Update,” (co-author), NERA Report, 2012.

“Snapshot of Recent Trends in Asbestos Litigation: 2011 Update,” (co-author), NERA White Paper, 2011.

Participant in panel at The Implications of Matrixx, hosted by NERA Economic Consulting, New York, New York, 2011.

“2011 & Beyond–Predicting Mass Tort Litigation: with a Focus on Pharmaceutical Torts” presented at Emerging Insurance Coverage and Allocation Issues, hosted by Perrin Conferences, New York, New York, 2011.

Presented recent trends in settlements, predicting settlement amounts, and the use of economic analysis at mediation in the “Settlement Trends & Tactics” panel at Securities Litigation & Enforcement: Current Developments & Strategies, hosted by the New York City Bar, New York, New York, 2010.

“Snapshot of Recent Trends in Asbestos Litigation: 2010 Update,” (co-author), NERA White Paper, 2010.

“Settlement Trends and Tactics” presented at Securities Litigation During the Financial Crisis: Current Development & Strategies, hosted by the New York City Bar, New York, New York, 2009.

“GM and Chrysler Bankruptcies: Potential Impact on Other Asbestos Defendants” presented at Asbestos Litigation Conference: A Comprehensive National Overview and Outlook, hosted by Perrin Conferences, San Francisco, California, 2009.

“Snapshot of Recent Trends in Asbestos Litigation,” (co-author), NERA White Paper, 2009.

“Emerging Economies and Product Recall -- Are the Claims Coming?” presented at The International Reinsurance Summit 2008, Hamilton, Bermuda, 2008.

“China Product Recalls: What’s at Stake and What’s Next,” (co-author), NERA Working Paper, 2008.

“Recent Trends in Securities Litigation” presented at Strategies, Calculations & Insurance in Complex Business Litigation, hosted by the Directors Roundtable, New York, New York, 2008.

“The Current Landscape” presented at Mealey's Product Recall Liability Conference: Made in China and Beyond, Washington, DC, 2007.

“China Product Recalls: What's at Stake and What's Next” presented at China Product Recalls, sponsored by National Economic Research Associates, New York, New York, 2007.

“Damages and Loss Causation in Shareholder Class Actions after Dura” presented at Securities Litigation: Emerging Trends in Enforcement and Winning Litigation Strategies hosted by the International Quality & Productivity Center, New York, New York, 2006.

“Forecasting Product Liability by Understanding the Driving Forces,” (co-author), The International Comparative Legal Guide to Product Liability, 2006.

“Recent Trends in Securities Class Action Litigation,” presented at The Class Action Litigation Summit Program Class Action in the Securities Industry, Washington, D.C., 2003.

“Product Liability Claims Estimation – Four Steps, Four Myths” presented at Standard & Poor’s Seminar, New York, New York, 2001.

“How Bad Can It Be? The Economics of Damages and Settlements in Shareholder Class Actions,” Balancing Disclosure and Litigation Risks for Public Companies (Or Soon-To-Be Public Companies) Seminar, sponsored by Alston & Bird LLP and RR Donnelley Financial, Nashville, Tennessee, 2000.

“Securities Litigation Reform: Problems and Progress,” Viewpoint, November 1999, Issue No. 2 (co-authored).

“Trends in Securities Litigation and the Impact of the PSLRA,” Class Actions & Derivative Suits, American Bar Association Litigation Section, Vol. 9, No. 3, Summer 1999 (co-authored).

“Random Taxes, Random Claims,” Regulation, Winter 1997, pp. 6-7 (co-authored).

“Adverse Selection in the Market for Used Construction Equipment,” presented at the NBER Conference on Research in Income and Wealth, Federal Reserve Board, June 1992.

Expert Reports, Depositions & Testimony (4 years)

Rebuttal Report and Expert Reports before the Clark County District Court of Nevada in *Round Square Company Limited v. Las Vegas Sands, Inc.*, 2018.

Supplemental Report and Expert Report before the United States District Court Middle District of Tennessee in *Zwick Partners LP and Aparna Rao v. Quorum Health Corporation, et al.*, 2018.

Declaration before the Superior Court of the State of Vermont in *Vermont Federation of Sportsmen's Club et al. v. Matthew Birmingham et al.*, 2018.

Deposition Testimony and Expert Report before the United States District Court Middle District of Tennessee in *Nikki Bollinger Grae v. Corrections Corporation of America et al.*, 2018.

Expert Report before the United States District Court Northern District of Illinois Eastern Division in *In re Allstate Corporation Securities Litigation*, 2018.

Expert Report before the Eighth Judicial District Court for the State of Nevada in *Dan Schmidt v. Liberator Medical Holdings, Inc., et al.*, 2018.

Testimony and Expert Report before the American Arbitration Association in *Arctic Glacier U.S.A, Inc. and Arctic Glacier U.S.A., Inc. Savings and Retirement Plan v. Principal Life Insurance Company*, 2018.

Deposition Testimony and Expert Report before the United States District Court Southern District of New York in *Marvin Pearlstein v. Blackberry Limited et al.*, 2018.

Deposition Testimony and Expert Report before the United States District Court Eastern District of Texas in *Alan Hall and James DePalma v. Rent-A-Center, Inc., Robert D. Davis, and Guy J. Constant*, 2018.

Deposition Testimony, Surrebuttal Report, Rebuttal Report and Expert Report before the United States District Court Southern District of Iowa in *Mahaska Bottling Company, Inc., et al. v. PepsiCo, Inc. and Bottling Group, LLC*, 2018.

Testimony, Deposition Testimony and Declaration before the United States District Court District of New Jersey in *Association of New Jersey Rifle & Pistol Clubs, Inc. et al. v. Gurbir Grewal et al.*, 2018.

Deposition Testimony, Supplemental Report and Expert Report before the Supreme Court of the State of New York in *Bernstein Liebhard, LLP v. Sentinel Insurance Company, Ltd.*, 2018.

Expert Report before the District Court for Douglas County, Nebraska in *Union Pacific Railroad Company v. L.B. Foster Company and CXT Incorporated*, 2018.

Deposition Testimony and Declarations before the United States District Court Southern District of New York in *Andrew Meyer v. Concordia International Corp., et al.*, 2018.

Deposition Testimony before the United States District Court Southern District of California in *Virginia Duncan, et al. v. Xavier Becerra, et al.*, 2018.

Expert Report and Declaration before the United States District Court Southern District of California in *Virginia Duncan, et al. v. Xavier Becerra, et al.*, 2017.

Deposition Testimony and Expert Report before the United States District Court for the Western District of Texas, Austin Division in *City of Pontiac General Employees' Retirement System v. Dell, Inc., et al.*, 2017.

Deposition Testimony and Expert Report before the United States District Court for the Southern District of Texas, Houston Division in *In re Willbros Group, Inc. Securities Litigation*, 2017.

Declaration before the United States District Court Eastern District of California in *William Wiese, et al. v. Xavier Becerra, et al.*, 2017.

Deposition Testimony and Expert Report before the United States District Court for the Southern District of Texas, Houston Division in *In re Cobalt International Energy Inc. Securities Litigation.*, 2017.

Testimony, Deposition Testimony and Expert Report before the United States District Court for the Northern District of Texas, Dallas Division in *DEKA Investment GmbH, et al. v. Santander Consumer USA Holdings, Inc., et al.*, 2017.

Deposition Testimony before the Superior Court of the State of North Carolina for Mecklenburg County in *Next Advisor, Inc. v. LendingTree, Inc.*, 2017

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Deposition Testimony and Expert Report before the United States District Court for the Northern District of Texas, Dallas Division in *The Archdiocese of Milwaukee Supporting Fund, Inc., et al. v. Halliburton Company, et al.*, 2016.

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Appendix B

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1982 – September 2018

Case	Location	Date	Source	Large			Fatalities ^c	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired	Gun(s) Obtained Legally? ^d	Offenders' Number of Guns
				Cap. Mag.? ^a	Assault Weapon? ^b	Assault Rifle? ^b						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Rite Aid Warehouse	Perryman, MD	9/20/2018	MJ	-	No	No	3	3	6	-	Yes	1
2. T&T Trucking	Bakersfield, CA	9/12/2018	MJ	No	No	No	5	0	5	-	-	1
3. Fifth Third Center	Cincinnati, OH	9/6/2018	MJ	-	No	No	3	2	5	-	-	1
4. Capital Gazette	Annapolis, MD	6/28/2018	MJ	-	No	No	5	2	7	-	Yes	1
5. Santa Fe High School	Santa Fe, TX	5/18/2018	MJ	No	No	No	10	13	23	-	-	2
6. Waffle House	Nashville, TN	4/22/2018	MJ	Yes	Yes	Yes	4	4	8	-	Yes	1
7. Yountville Veterans Home	Yountville, CA	3/9/2018	MJ	-	-	-	3	0	3	-	Yes	2
8. Stoneman Douglas HS	Parkland, FL	2/14/2018	MJ	Yes	No	No	17	14	31	-	Yes	1
9. Pennsylvania Carwash	Melcroft, PA	1/28/2018	MJ	Yes	-	-	4	1	5	-	-	3 ^e
10. Rancho Tehama	Rancho Tehama, CA	11/14/2017	MJ	Yes	Yes	Yes	5	10	15	30 ^f	No	2
11. Texas First Baptist Church	Sutherland Springs, TX	11/5/2017	MJ	Yes	Yes	Yes	26	20	46	450 ^g	Yes	1
12. Suburban Denver Walmart	Thornton, CO	11/1/2017	MJ	-	No	No	3	0	3	30 ^h	-	1
13. Edgewood Business Park	Edgewood, MD	10/18/2017	MJ	-	No	No	3	3	6	-	No	1
14. Las Vegas Strip	Las Vegas, NV	10/1/2017	MJ	Yes	Yes	Yes	58	546	604	1100 ⁱ	Yes	23
15. San Francisco UPS	San Francisco, CA	6/14/2017	MJ	Yes	Yes	No	3	2	5	-	No	2
16. Pennsylvania Supermarket	Tunkhannock, PA	6/7/2017	MJ	No	No	No	3	0	3	59 ^j	-	2
17. Fiamma Workplace	Orlando, FL	6/5/2017	MJ	-	No	No	5	0	5	-	-	1
18. Ohio Nursing Home	Kirkersville, OH	5/12/2017	MJ	-	No	No	3	0	3	-	-	2
19. Fresno Downtown	Fresno, CA	4/18/2017	MJ	No	No	No	3	0	3	16 ^k	-	1
20. Fort Lauderdale Airport	Fort Lauderdale, FL	1/6/2017	MJ	-	No	No	5	6	11	15 ^l	Yes	1
21. Cascade Mall	Burlington, WA	9/23/2016	MJ	-	No	No	5	0	5	-	-	1
22. Baton Rouge Police	Baton Rouge, LA	7/17/2016	MJ	Yes	Yes	Yes	3	3	6	43 ^m	-	3
23. Dallas Police	Dallas, TX	7/7/2016	MJ	Yes	Yes	Yes	5	11	16	-	Yes	3
24. Orlando Nightclub	Orlando, FL	6/12/2016	MJ/CC	Yes	Yes	Yes	49/50	53	102/103	110 ⁿ	Yes	2
25. Excel Industries	Hesston, KS	2/25/2016	MJ	Yes	Yes	Yes	3	14	17	-	Yes	2
26. Kalamazoo	Kalamazoo County, MI	2/20/2016	MJ	-	No	No	6	2	8	-	Yes	1
27. San Bernardino	San Bernardino, CA	12/2/2015	MJ/CC	Yes	Yes	Yes	14/16	21	35/37	150 ^o	Yes	4
28. Planned Parenthood Clinic	Colorado Springs, CO	11/27/2015	MJ	-	Yes	Yes	3	9	12	-	-	1
29. Colorado Springs	Colorado Springs, CO	10/31/2015	MJ	Yes	Yes	Yes	3	0	3	-	Yes	3

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				Cap. Mag.? ^a	Assault Weapon? ^b	Assault Rifle? ^b						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
30. Umpqua Community College	Roseburg, OR	10/1/2015	MJ/CC	Yes	No	No	9/10	9	18/19	-	Yes	6
31. Chattanooga Military Center	Chattanooga, TN	7/16/2015	MJ/CC	Yes	Yes	Yes	5/6	2/3	7/9	-	Yes	3
32. Charleston Church	Charleston, SC	6/17/2015	MJ/CC	Yes	No	No	9	1	10	-	Yes	1
33. Trestle Trail Bridge	Menasha, WI	6/11/2015	MJ	-	No	No	3	1	4	-	Yes	2
34. Marysville High School	Marysville, WA	10/24/2014	MJ/CC	Yes	No	No	5	1	6	-	Stolen	1
35. Isla Vista	Santa Barbara, CA	5/23/2014	MJ	Yes	No	No	6	13	19	50 ^p	Yes	3
36. Fort Hood	Fort Hood, TX	4/3/2014	MJ	-	No	No	3	12	15	-	Yes	1
37. Alturas Tribal	Alturas, CA	2/20/2014	MJ	-	No	No	4	2	6	-	-	2
38. Washington Navy Yard	Washington, D.C.	9/16/2013	MJ/CC	No	No	No	12/13	8/7	20	-	Yes	2
39. Hialeah	Hialeah, FL	7/26/2013	MJ/CC	Yes	No	No	7	0	7	10 ^q	Yes	1
40. Santa Monica	Santa Monica, CA	6/7/2013	MJ/CC	Yes	Yes	Yes	6	3/4	9/10	70 ^r	Yes	2
41. Federal Way	Federal Way, WA	4/21/2013	MJ	-	No	No	5	0	5	-	Yes	2
42. Upstate New York	Herkimer County, NY	3/13/2013	MJ	-	No	No	5	2	7	-	Yes	1
43. Newtown School	Newtown, CT	12/14/2012	MJ/CC	Yes	Yes	Yes	28	2	30	154	Stolen	4/3
44. Accent Signage Systems	Minneapolis, MN	9/27/2012	MJ/CC	Yes	No	No	7	1/2	8/9	46	Yes	1
45. Sikh Temple	Oak Creek, WI	8/5/2012	MJ/CC	Yes	No	No	7	3	10	-	Yes	1
46. Aurora Movie Theater	Aurora, CO	7/20/2012	MJ/CC	Yes	Yes	Yes	12	70	82	80	Yes	4
47. Seattle Café	Seattle, WA	5/30/2012	MJ/CC	No	No	No	6	1	7	-	Yes	2
48. Oikos University	Oakland, CA	4/2/2012	MJ/CC	No	No	No	7	3	10	-	Yes	1
49. Su Jung Health Sauna	Norcross, GA	2/22/2012	MJ	-	No	No	5	0	5	-	Yes	1
50. Seal Beach	Seal Beach, CA	10/14/2011	MJ/CC	No	No	No	8	1	9	-	Yes	3
51. IHOP	Carson City, NV	9/6/2011	MJ/CC	Yes	Yes	Yes	5	7	12	-	Yes	3
52. Grand Rapids	Grand Rapids, MI	7/7/2011	CC	Yes	No	No	8	2	10	10	-	1
53. Tucson	Tucson, AZ	1/8/2011	MJ/CC	Yes	No	No	6	13	19	33	Yes	1
54. Hartford Beer Distributor	Manchester, CT	8/3/2010	MJ/CC	Yes	No	No	9	2	11	11	Yes	2
55. Yoyito Café	Hialeah, FL	6/6/2010	CC	No	No	No	5	3	8	9 ^s	-	-
56. Coffee Shop Police	Parkland, WA	11/29/2009	MJ/CC	No	No	No	4/5	1/0	5	-	Stolen	2
57. Fort Hood	Fort Hood, TX	11/5/2009	MJ/CC	Yes	No	No	13	30/32	43/45	214	Yes	1
58. Binghamton	Binghamton, NY	4/3/2009	MJ/CC	Yes	No	No	14	4	18	99	Yes	2

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Case	Location	Date	Source	Large	Assault Weapon? ^b	Assault	Fatalities ^c	Injuries ^c	Total	Shots Fired	Gun(s)	Offenders' Number of Guns
				Cap. Mag.? ^a		Rifle? ^b			Fatalities & Injuries ^c		Obtained Legally? ^d	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
59. Carthage Nursing Home	Carthage, NC	3/29/2009	MJ/CC	No	No	No	8	3/2	11/10	-	Yes	2
60. Atlantis Plastics	Henderson, KY	6/25/2008	MJ/CC	No	No	No	6	1	7	-	Yes	1
61. Northern Illinois University	DeKalb, IL	2/14/2008	MJ/CC	Yes	No	No	5/6	21	26/27	54	Yes	4
62. Kirkwood City Council	Kirkwood, MO	2/7/2008	MJ/CC	No	No	No	6	2	8	-	Stolen	2
63. Westroads Mall	Omaha, NE	12/5/2007	MJ/CC	Yes	Yes	Yes	9	4/5	13/14	14	Stolen	1
64. Crandon	Crandon, WI	10/7/2007	MJ/CC	Yes	-	-	6/7	1	7/8	30 ^t	Yes	1
65. Virginia Tech	Blacksburg, VA	4/16/2007	MJ/CC	Yes	No	No	32/33	23/17	55/50	176	Yes	2
66. Trolley Square	Salt Lake City, UT	2/12/2007	MJ/CC	No	No	No	6	4	10	-	No	2
67. Amish School	Lancaster County, PA	10/2/2006	MJ/CC	No	No	No	6	5	11	-	Yes	3
68. Capitol Hill	Seattle, WA	3/25/2006	MJ/CC	Yes	Yes	Yes	7	2	9	-	Yes	4
69. Goleta Postal	Goleta, CA	1/30/2006	MJ/CC	Yes	No	No	8	0	8	-	Yes	1
70. Red Lake	Red Lake, MN	3/21/2005	MJ/CC	No	No	No	10	5/6	15/16	-	Stolen	3
71. Living Church of God	Brookfield, WI	3/12/2005	MJ/CC	Yes	No	No	7/8	4	11/12	-	Yes	1
72. Damageplan Show	Columbus, OH	12/8/2004	MJ/CC	No	No	No	5	7/3	12/8	15 ^u	Yes	1
73. Hunting Camp	Meteor, WI	11/21/2004	CC	Yes	Yes	Yes	6	3	9	20	-	1
74. Windy City Warehouse	Chicago, IL	8/27/2003	CC	No	No	No	7	0	7	-	-	-
75. Lockheed Martin	Meridian, MS	7/8/2003	MJ/CC	Yes	No	No	7	8	15	-	Yes	5
76. Navistar	Melrose Park, IL	2/5/2001	MJ/CC	Yes	No	No	5	4	9	-	Yes	4
77. Wakefield	Wakefield, MA	12/26/2000	MJ/CC	Yes	-	-	7	0	7	37	Yes	3
78. Hotel	Tampa, FL	12/30/1999	MJ/CC	No	No	No	5	3	8	-	Yes	2
79. Xerox	Honolulu, HI	11/2/1999	MJ/CC	Yes	No	No	7	0	7	28	Yes	1
80. Wedgwood Baptist Church	Fort Worth, TX	9/15/1999	MJ/CC	Yes	No	No	8	7	15	30	Yes	2
81. Atlanta Day Trading	Atlanta, GA	7/29/1999	MJ	-	No	No	9	13	22	-	Yes	4
82. Columbine High School	Littleton, CO	4/20/1999	MJ/CC	Yes	Yes	Yes	13/15	24	37/39	188	No	4
83. Thurston High School	Springfield, OR	5/21/1998	MJ/CC	Yes	No	No	4	25	29	50	No	3
84. Westside Middle School	Jonesboro, AR	3/24/1998	MJ/CC	Yes	No	No	5	10	15	26	Stolen	9/10
85. Connecticut Lottery	Newington, CT	3/6/1998	MJ/CC	Yes	No	No	5	1/0	6/5	5	Yes	1
86. Caltrans Maintenance Yard	Orange, CA	12/18/1997	MJ/CC	Yes	Yes	Yes	5	2	7	144	Yes	1
87. R.E. Phelon Company	Aiken, SC	9/15/1997	MJ/CC	No	No	No	4	3	7	-	No	1

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**Combined Public Mass Shootings Data
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Case	Location	Date	Source	Large			Fatalities ^c	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired	Gun(s) Obtained Legally? ^d	Offenders' Number of Guns
				Cap. Mag.? ^a	Assault Weapon? ^b	Assault Rifle? ^b						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
88. Fort Lauderdale	Fort Lauderdale, FL	2/9/1996	MJ/CC	No	No	No	6	1	7	14 ^v	Yes	2
89. Piper Technical Center	Los Angeles, CA	7/19/1995	CC	Yes	No	No	4	0	4	-	-	-
90. Walter Rossler Company	Corpus Christi, TX	4/3/1995	MJ/CC	No	No	No	6	0	6	-	Yes	2
91. Air Force Base	Fairchild Base, WA	6/20/1994	MJ/CC	Yes	Yes	Yes	5/6	23	28/29	50 ^w	Yes	1
92. Chuck E. Cheese	Aurora, CO	12/14/1993	MJ/CC	No	No	No	4	1	5	-	-	1
93. Long Island Railroad	Garden City, NY	12/7/1993	MJ/CC	Yes	No	No	6	19	25	30	Yes	1
94. Luigi's Restaurant	Fayetteville, NC	8/6/1993	MJ/CC	No	No	No	4	8	12	-	Yes	3
95. 101 California Street	San Francisco, CA	7/1/1993	MJ/CC	Yes	Yes	No	9	6	15	75	No	3
96. Watkins Glen	Watkins Glen, NY	10/15/1992	MJ/CC	No	No	No	5	0	5	-	Yes	1
97. Lindhurst High School	Olivehurst, CA	5/1/1992	MJ/CC	No	No	No	4	10	14	-	Yes	2
98. Royal Oak Postal	Royal Oak, MI	11/14/1991	MJ/CC	No	No	No	5	5/4	10/9	-	Yes	1
99. University of Iowa	Iowa City, IA	11/1/1991	MJ/CC	No	No	No	6	1	7	-	Yes	1
100. Luby's Cafeteria	Killeen, TX	10/16/1991	MJ/CC	Yes	No	No	24	20	44	100	Yes	2
101. GMAC	Jacksonville, FL	6/18/1990	MJ/CC	Yes	No	No	10	4	14	14	Yes	2
102. Standard Gravure Corporation	Louisville, KY	9/14/1989	MJ/CC	Yes	Yes	Yes	9	12	21	21	Yes	5
103. Stockton Schoolyard	Stockton, CA	1/17/1989	MJ/CC	Yes	Yes	Yes	6	29/30	35/36	106	Yes	2
104. ESL	Sunnyvale, CA	2/16/1988	MJ/CC	No	No	No	7	4	11	-	Yes	7
105. Shopping Centers	Palm Bay, FL	4/23/1987	MJ/CC	Yes	No	No	6	14/10	20/16	40 ^x	Yes	3
106. United States Postal Service	Edmond, OK	8/20/1986	MJ/CC	No	-	No	15	6	21	-	Yes	3
107. San Ysidro McDonald's	San Ysidro, CA	7/18/1984	MJ/CC	Yes	Yes	Yes	22	19	41	257	Yes	3
108. Dallas Nightclub	Dallas, TX	6/29/1984	MJ/CC	Yes	No	No	6	1	7	-	No	1
109. Welding Shop	Miami, FL	8/20/1982	MJ	No	No	No	8	3	11	-	Yes	1
Assault Weapon Average							12.1	33.4	45.5	170.1		
Non-Assault Weapon Average							6.8	5.1	11.9	45.5		
Large-Capacity Magazine Average							10.3	19.4	29.7	106.5		
Non-Large Capacity Magazine Average							6.4	3.2	9.5	22.6		

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Case	Location	Date	Source	Large			Fatalities ^c	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired	Gun(s) Obtained Legally? ^d	Offenders' Number of Guns
				Cap. Mag.? ^a	Assault Weapon? ^b	Assault Rifle? ^b						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

Notes and Sources:

Data from Mother Jones ("US Mass Shootings, 1982-2018: Data from Mother Jones' Investigation," accessed September 25, 2018) and the Citizens Crime Commission of New York City ("Mayhem Multiplied: Mass Shooters and Assault Weapons," 2016, and "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017). MJ indicates Mother Jones data. CC indicates Citizens Crime Commission of New York City data. If sources differ on data, "/" is added between values. In these instances, values from MJ are listed first. Except where noted, all data on shots fired obtained from CC.

^a Large capacity magazines are those with a capacity to hold more than 10 rounds of ammunition.

^b See Appendix C for details.

^c Offender(s) included in counts of fatalities and injuries.

^d The determination of whether guns were obtained legally is based on Mother Jones reporting.

^e Number of guns from: "Suspect in quadruple killing at car wash dies," CNN, January 30, 2018.

^f Shots fired from: "California gunman fired 30 rounds at elementary school, left when he couldn't get inside," *ABC News*, November 15, 2017.

^g Shots fired from: "'Be quiet! It's him!' Survivors say shooter walked pew by pew looking for people to shoot," *CNN*, November 9, 2017.

^h Shots fired from: "Three dead after 'around 30' shots fired at Walmart supermarket in Thornton," *Evening Standard*, November 2, 2017.

ⁱ Shots fired from: "Sheriff Says More than 1,100 Rounds Fired in Las Vegas," *Las Vegas Review Journal*, November 22, 2017

^j Shots fired from: "Killer in Supermarket Shooting Posted Chilling Videos Online, Lauding Columbine Massacre," *Washington Post*, June 9, 2017.

^k Shots fired from: "Hate Crime is Suspected After Gunman Kills 3 White Men in Downtown Fresno," *Los Angeles Times*, April 19, 2017.

^l Shots fired from: "Fort Lauderdale Shooting Suspect Appears in Court, Ordered Held Without Bond," *Washington Post*, January 9, 2017.

^m Shots fired from: "Baton Rouge Cop Killer Left Note, Fired At Least 43 Rounds," *CNN*, July 9, 2017.

ⁿ Shots fired from: "'We Thought It Was Part of the Music': How the Pulse Nightclub Massacre Unfolded in Orlando," *The Telegraph*, June 13, 2016.

^o Shots fired from: "San Bernardino Suspects Left Trail of Clues, but No Clear Motive," *New York Times*, December 3, 2015.

^p Shots fired from: "Sheriff: Elliot Rodger Fired 50-plus Times in Isle Vista Rampage," *Los Angeles Times*, June 4, 2014.

^q Shots fired from: "Shooter Set \$10,000 on Fire in Hialeah Shooting Rampage," *NBC News*, July 28, 2013.

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Case	Location	Date	Source	Large			Fatalities ^c	Injuries ^c	Total	Shots Fired	Gun(s)	Offenders'
				Cap. Mag.? ^a	Assault Weapon? ^b	Assault Rifle? ^b			Fatalities & Injuries ^c		Obtained Legally? ^d	Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

^r Shots fired from: "Police Call Santa Monica Gunman 'Ready for Battle,'" *New York Times*, June 8, 2013.

^s Shots fired from: "Hialeah Gunman's Rage Over Estranged Wife Leaved 5 Dead," *Sun-Sentinel*, June 7, 2010.

^t Shots fired from: "Small Town Grieves for 6, and the Killer," *Los Angeles Times*, October 9, 2007.

^u Shots fired from: "National Briefing | Midwest: Ohio: Shooter At Club May Have Reloaded," *New York Times*, January 15, 2005.

^v Shots fired from: "5 Beach Workers in Florida are Slain by Ex-Colleague," *New York Times*, February 10, 1996.

^w Shots fired from: "Man Bent On Revenge Kills 4, Hurts 23 -- Psychiatrist Is First Slain In Rampage At Fairchild Air Force Base," *The Seattle Times*, June 21, 1994.

^x Shots fired from: "6 Dead in Florida Sniper Siege; Police Seize Suspect in Massacre," *Chicago Tribune*, April 25, 1987.

Appendix C

List of Firearms Used in Public Mass Shootings 1982 – September 2018

Case (1)	Location (2)	Date (3)	Weapon Description From		Assault Weapon? ^c (6)	Assault Rifle? ^d (7)
			CCC ^a (4)	Mother Jones ^b (5)		
1. Rite Aid Warehouse	Perryman, MD	9/20/2018	-	Glock 9 mm	No	No
2. T&T Trucking	Bakersfield, CA	9/12/2018	-	-	No ^e	No ^e
3. Fifth Third Center	Cincinnati, OH	9/6/2018	-	9mm handgun	No	No
4. Capital Gazette	Annapolis, MD	6/28/2018	-	12-gauge pump-action shotgun	No	No
5. Santa Fe High School	Santa Fe, TX	5/18/2018	-	shotgun; .38 revolver	No	No
6. Waffle House	Nashville, TN	4/22/2018	-	AR-15	Yes ^f	Yes ^f
7. Yountville Veterans Home	Yountville, CA	3/9/2018	-	semiautomatic rifle; shotgun	- ^g	- ^g
8. Stoneman Douglas HS	Parkland, FL	2/14/2018	-	AR-15	No ^h	No ^h
9. Pennsylvania Carwash	Melcroft, PA	1/28/2018	-	semiautomatic rifle and semiautomatic handgun	- ⁱ	- ⁱ
10. Rancho Tehama	Rancho Tehama, CA	11/14/2017	-	Two illegally modified rifles	Yes ^j	Yes ^j
11. Texas First Baptist Church	Sutherland Springs, TX	11/5/2017	-	Ruger AR-556 ; Kelley also possessed semiautomatic handguns	Yes ^k	Yes ^k
12. Suburban Denver Walmart	Thornton, CO	11/1/2017	-	semiautomatic handgun	No	No
13. Edgewood Business Park	Edgewood, MD	10/18/2017	-	.380-caliber; make unclear	No ^l	No ^l
14. Las Vegas Strip	Las Vegas, NV	10/1/2017	-	AR-15-style and AK-47-style rifles and "a large cache of ammunition"; four Daniel Defense DDM4 rifles , three FN-15s and other rifles made by Sig Sauer .	Yes ^m	Yes ^m
15. San Francisco UPS	San Francisco, CA	6/14/2017	-	MAC-10-style "assault pistol" ; 30-round magazine. An additional box of ammunition.	Yes ⁿ	No ⁿ
16. Pennsylvania Supermarket	Tunkhannock, PA	6/7/2017	-	shotguns	No ^o	No ^o
17. Fiamma Workplace	Orlando, FL	6/5/2017	-	semiautomatic handgun	No	No
18. Ohio Nursing Home	Kirkersville, OH	5/12/2017	-	handgun, shotgun	No	No

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Case (1)	Location (2)	Date (3)	Weapon Description From		Assault Weapon? ^c (6)	Assault Rifle? ^d (7)
			CCC ^a (4)	Mother Jones ^b (5)		
19. Fresno Downtown	Fresno, CA	4/18/2017	-	.357 revolver	No	No
20. Fort Lauderdale Airport	Fort Lauderdale, FL	1/6/2017	-	Walther 9mm semi-automatic pistol	No	No
21. Cascade Mall	Burlington, WA	9/23/2016	-	Ruger .22-caliber	No ^p	No ^p
22. Baton Rouge Police	Baton Rouge, LA	7/17/2016	-	IWI Tavor SAR 5.56 caliber rifle , Springfield XD 9, 9mm	Yes ^q	Yes ^q
23. Dallas Police	Dallas, TX	7/7/2016	-	Izhmash-Saiga 5.45mm (AK-style) semiautomatic rifle with large capacity magazines; Glock 9mm handgun, .25-caliber semiautomatic handgun	Yes ^r	Yes ^r
24. Orlando Nightclub	Orlando, FL	6/12/2016	-	Sig Sauer MCX rifle , Glock 17 9mm; high-capacity magazines (30 rounds)	Yes ^s	Yes ^s
25. Excel Industries	Hesston, KS	2/25/2016	-	Zastava Serbia AK-47-style rifle , Glock Model 22 .40-caliber handgun; high-capacity magazines (30 rounds)	Yes ^t	Yes ^t
26. Kalamazoo	Kalamazoo County, MI	2/20/2016	-	9 mm handgun (ammo used unclear)	No	No
27. San Bernardino	San Bernardino, CA	12/2/2015	-	Two semiautomatic AR-15-style rifles—one a DPMS A-15, the other a Smith & Wesson M&P15 , both with .223 calibre ammunition. Two 9mm semiautomatic handguns. High capacity magazines.	Yes ^u	Yes ^u
28. Planned Parenthood Clinic	Colorado Springs, CO	11/27/2015	-	Reportedly an AK-47 style semiautomatic rifle and others. Authorities had not released details on Dear's weapons as of April 2016.	Yes ^v	Yes ^v
29. Colorado Springs	Colorado Springs, CO	10/31/2015	-	AR-15 rifle , a 9 mm pistol, and a .357 revolver	Yes ^w	Yes ^w

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Case (1)	Location (2)	Date (3)	Weapon Description From		Assault Weapon? ^c (6)	Assault Rifle? ^d (7)
			CCC ^a (4)	Mother Jones ^b (5)		
30. Umpqua Community College	Roseburg, OR	10/1/2015	-	9 mm Glock pistol, .40 caliber Smith & Wesson, .40 caliber Taurus pistol, .556 caliber Del-Ton; (ammo details unclear)	No ^x	No ^x
31. Chattanooga Military Center	Chattanooga, TN	7/16/2015	-	AK-47 , AR-15, and 30-round magazines; 9mm handgun	Yes ^y	Yes ^y
32. Charleston Church	Charleston, SC	6/17/2015	-	.45-caliber Glock (model 41, with 13-round capacity magazine)	No	No
33. Trestle Trail Bridge	Menasha, WI	6/11/2015	-	Two handguns; Details unclear, but after the shooting, police found eight guns in total in Valencia del Toro's home, including handguns, shotguns, and rifles, plus and more than 1,000 rounds of ammunition. He took two weapons and ammunition to the bridge.	No	No
34. Marysville High School	Marysville, WA	10/24/2014	-	Beretta .40-caliber handgun	No	No
35. Isla Vista	Santa Barbara, CA	5/23/2014	-	Two Sig Sauer P226 semiautomatic pistols and Glock 34 pistol, and hundreds of rounds of ammo. A 6- inchand 8-inch “SRK” and “Boar Hunter” hunting knives.	No	No
36. Fort Hood	Fort Hood, TX	4/3/2014	-	.45-caliber Smith & Wesson handgun	No	No
37. Alturas Tribal	Alturas, CA	2/20/2014	-	9mm semi-automatic handgun	No	No
38. Washington Navy Yard	Washington, D.C.	9/16/2013	-	Remington 870 Express 12-gauge shotgun; Beretta handgun	No	No
39. Hialeah	Hialeah, FL	7/26/2013	-	Glock 17	No	No

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
40. Santa Monica	Santa Monica, CA	6/7/2013	-	.223-caliber semi-automatic assault rifle , about 40 high capacity magazines, "black powder" handgun (likely antique)	Yes ^z	Yes ^z
41. Federal Way	Federal Way, WA	4/21/2013	-	.40 caliber semi-automatic handgun, pistol grip shotgun	No ^{aa}	No ^{aa}
42. Upstate New York	Herkimer County, NY	3/13/2013	-	Unknown	No ^{ab}	No ^{ab}
43. Newtown School	Newtown, CT	12/14/2012	An unknown make and model .22-caliber rifle, a Bushmaster XM15 .223-caliber semiautomatic assault rifle equipped with a 30-round large capacity ammunition magazine, and a GLOCK 10mm handgun were used. According to the Danbury State's Attorney, police also recovered in Lanza's possession a SIG SAUER P226 9mm handgun and three loaded 30-round large capacity ammunition magazines for the Bushmaster. Six additional 30-round large capacity ammunition magazines were recovered at the scene. A loaded unknown make and model 12-gauge shotgun was found in the passenger compartment of the car (later moved to the trunk by police). All of the guns used in the shooting were purchased by Lanza's mother.	10mm Glock, 9mm SIG Sauer P226 semiautomatic handguns; .223 Bushmaster XM15-E2S semiautomatic rifle ; Izhmash Saiga-12 12-gauge semiautomatic shotgun	Yes ^{ac}	Yes ^{ac}
44. Accent Signage Systems	Minneapolis, MN	9/27/2012	GLOCK 19 9mm semiautomatic pistol equipped with a 15-round large capacity ammunition magazine. Engeldinger purchased the firearm one year before the shooting at KGS Guns and Ammo in Minneapolis after passing a background check and obtaining a permit to purchase. Police reportedly found packaging for 10,000 rounds of ammunition and another handgun in Engeldinger's home.	9mm Glock semiautomatic handgun	No	No

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
45. Sikh Temple	Oak Creek, WI	8/5/2012	Springfield Armory XD(M) 9mm semiautomatic handgun equipped with a 19-round large capacity ammunition magazine. Weeks before the shooting, Wade legally purchased the handgun and three 19-round large capacity ammunition magazines from a federal firearms licensed dealer in nearby West Allis, WI. According to media reports, Wade served in the U.S. Army from 1992 until 1998, when he was given an other-than-honorable discharge or general discharge. In 1994, while stationed at Fort Bliss in Texas, he was arrested by El Paso police, and pled guilty to a misdemeanor charge of criminal mischief. Federal law does not prohibit persons with convictions for misdemeanors other than domestic violence misdemeanors or persons who have been discharged from the military for reasons other than "dishonorably" from purchasing firearms.	9mm Springfield Armory XDM semiautomatic handgun	No	No
46. Aurora Movie Theater	Aurora, CO	7/20/2012	A Smith & Wesson M&P15 assault rifle equipped with a 100-round drum large capacity ammunition magazine, a Remington Model 870 12-gauge pump shotgun, and two GLOCK .40 caliber handguns, were recovered at the scene by police. In the months leading to the shooting, Holmes purchased the weapons and 6,000-rounds of ammunition at gun shops and over the Internet. In addition to the weapons used in the shooting, Holmes booby-trapped his apartment, rigging trip wire to detonate 30 plastic shells stuffed with gunpowder, several glass jars filled with gasoline and gunpowder, and 10 gallons of gasoline in canisters.	Two .40-caliber Glock semiautomatic handguns; .223-caliber Smith & Wesson M&P15 semiautomatic rifle ; 12-gauge Remington 870 pump-action shotgun	Yes ^{ad}	Yes ^{ad}
47. Seattle Café	Seattle, WA	5/30/2012	-	Two .45-caliber semiautomatic handguns	No	No
48. Oikos University	Oakland, CA	4/2/2012	-	.45-caliber semiautomatic handgun	No	No
49. Su Jung Health Sauna	Norcross, GA	2/22/2012	-	.45-caliber semiautomatic handgun	No	No
50. Seal Beach	Seal Beach, CA	10/14/2011	-	.45-caliber Heckler & Koch, 9mm Springfield semiautomatic handguns; .44 Magnum Smith & Wesson revolver	No	No

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
51. IHOP	Carson City, NV	9/6/2011	AK-47 type assault rifle equipped with a 30-round large capacity ammunition magazine. Two additional guns and two more magazines were found in his vehicle.	AK-47 Norinco Arms variant, AK-47 Romarm Cugir variant rifles ; .38-caliber Colt revolver	Yes ^{ae}	Yes ^{ae}
52. Grand Rapids	Grand Rapids, MI	7/7/2011	GLOCK 9mm semiautomatic pistol (unknown model) equipped with a 30-round large capacity ammunition magazine.	-	No	No
53. Tucson	Tucson, AZ	1/8/2011	GLOCK 19 9mm semiautomatic pistol equipped with a 33-round large capacity ammunition magazine. Loughner was also carrying two 15-round large capacity ammunition magazines, and a knife. The ATF determined Loughner legally purchased the GLOCK pistol with an extended magazine and one box of Winchester ammunition on November 30, 2010, from Sportsman's Warehouse in Tucson.	9mm Glock 19 semiautomatic handgun	No	No
54. Hartford Beer Distributor	Manchester, CT	8/3/2010	Two Ruger SR9 9mm semiautomatic pistols equipped with 17-round magazines. Thornton purchased both firearms legally from an East Windsor, CT gun dealer.	Two 9mm Ruger SR9 semiautomatic handguns	No	No
55. Yoyito Café	Hialeah, FL	6/6/2010	-	-	No ^{af}	No ^{af}
56. Coffee Shop Police	Parkland, WA	11/29/2009	-	9mm Glock 17 semiautomatic handgun; .38-caliber Smith & Wesson revolver	No	No
57. Fort Hood	Fort Hood, TX	11/5/2009	FN Herstal 5.7 Tactical Pistol equipped with 20-round large capacity ammunition magazine. When Hasan was apprehended, investigators found in his possession 177-rounds in 30-round and 20-round large capacity ammunition magazines, another handgun, a revolver, and two gunsights (for different lighting conditions). Hasan purchased the FN Herstal 5.7 Tactical Pistol legally at Guns Galore, a shop in Killeen, TX	FN Five-seven semiautomatic handgun	No	No
58. Binghamton	Binghamton, NY	4/3/2009	Beretta .45-caliber semiautomatic pistol, Beretta 9mm semiautomatic pistol (models unknown), and two 30-round large capacity ammunition magazines and two 15-round large capacity ammunition magazines.	9mm Beretta, .45-caliber Springfield semiautomatic handguns	No	No

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
59. Carthage Nursing Home	Carthage, NC	3/29/2009	-	Winchester 1300 pump-action shotgun; .357 Magnum revolver	No	No
60. Atlantis Plastics	Henderson, KY	6/25/2008	-	.45-caliber Hi-Point semiautomatic handgun	No	No
61. Northern Illinois University	DeKalb, IL	2/14/2008	SIG SAUER Kurz 9mm semiautomatic pistol, Hi-Point CF380 .380 caliber semiautomatic pistol, GLOCK 19 9mm semiautomatic pistol, Remington Sportsman 48 12-gauge shotgun, and 33-round and 15-round large capacity ammunition magazines. Kazmierczak purchased all four weapons from Tony's Gun & Ammo in Champaign, IL between August 3, 2007 and February 9, 2008. Kazmierczak also purchased gun accessories from a website operated by TGSCOM, Inc., the same company patronized by the VA Tech shooter.	9mm Glock 19, Hi-Point CF380, 9mm Kurz SIG Sauer P232 semiautomatic handguns; 12-gauge Remington Sportsman 48 sawed-off shotgun	No ^{ag}	No ^{ag}
62. Kirkwood City Council	Kirkwood, MO	2/7/2008	-	.40-caliber Smith & Wesson semiautomatic handgun; .44 Magnum Smith & Wesson Model 29 revolver	No	No
63. Westroads Mall	Omaha, NE	12/5/2007	WASR-10 semiautomatic assault rifle and two 30-round large capacity ammunition magazines.	WASR-10 Century Arms semiautomatic rifle	Yes ^{ah}	Yes ^{ah}
64. Crandon	Crandon, WI	10/7/2007	-	AR-15 SWAT semiautomatic rifle	- ^{ai}	- ^{ai}

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
65. Virginia Tech	Blacksburg, VA	4/16/2007	GLOCK 19 9mm semiautomatic pistol and Walther P22 .22-caliber semiautomatic pistol. Investigators found a total of 17 empty magazines at the scene of the shooting, a mix of several 15-round, and 10-round magazines loaded with hollow-point rounds (bullets with the tip hollowed out, designed to expand upon impact). He possessed over 400 rounds of ammunition. Cho ordered the Walther P22 from a website operated by TGSCOM, Inc. Kazmierczak patronized the same company before the NIU shooting. On February 9, 2007, Cho picked up the pistol from J-N-D Pawn-brokers, located across the street from the VA Tech campus. In compliance with the state law limiting handgun purchases to one every 30 days, Cho purchased the GLOCK 19 on March 13, 2007. He also purchased five 10-round magazines from eBay in March. Cho's purchase of these firearms was in violation of federal law; he was disqualified from purchasing or possessing a firearm and ammunition, because a special justice of the Montgomery County General District Court had found him to be a danger to himself on December 14, 2005.	9mm Glock 19, .22-caliber Walther P22 semiautomatic handguns	No	No
66. Trolley Square	Salt Lake City, UT	2/12/2007	-	Mossberg Maverick 88 Field shotgun; .38-caliber Smith & Wesson M36 revolver	No	No
67. Amish School	Lancaster County, PA	10/2/2006	-	Springfield semiautomatic handgun; .30-06 Ruger bolt-action rifle; 12-gauge Browning pump-action shotgun	No ^{aj}	No ^{aj}
68. Capitol Hill	Seattle, WA	3/25/2006	-	.40-caliber Ruger, one other semiautomatic handgun; Bushmaster XM15 E2S semiautomatic rifle ; 12-gauge Winchester Defender pump-action shotgun with extended tube and pistol grip	Yes ^{ak}	Yes ^{ak}
69. Goleta Postal	Goleta, CA	1/30/2006	Smith & Wesson 915 9mm semiautomatic handgun equipped with a 15-round large capacity ammunition magazine. San Marco purchased the firearm at a pawn shop in New Mexico in August 2005.	9mm Smith & Wesson 915 semiautomatic handgun	No	No

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
70. Red Lake	Red Lake, MN	3/21/2005	-	.40-caliber Glock 23, .22-caliber Ruger semiautomatic handguns; 12-gauge Remington 870 shotgun	No	No
71. Living Church of God	Brookfield, WI	3/12/2005	-	9mm Beretta semiautomatic handgun	No	No
72. Damageplan Show	Columbus, OH	12/8/2004	-	9mm Beretta 92FS semiautomatic handgun	No	No
73. Hunting Camp	Meteor, WI	11/21/2004	SKS 7.62mm semiautomatic assault rifle equipped with a 20-round large capacity ammunition magazine.	-	Yes ^{al}	Yes ^{al}
74. Windy City Warehouse	Chicago, IL	8/27/2003	-	-	No ^{am}	No ^{am}
75. Lockheed Martin	Meridian, MS	7/8/2003	-	.45-caliber Ruger P90 semiautomatic handgun; .22-caliber rifle with scope, .223-caliber Ruger Mini-14 rifle; 12-gauge Winchester 1300 shotgun; .22 Magnum derringer	No ^{an}	No ^{an}
76. Navistar	Melrose Park, IL	2/5/2001	-	SKS 1954R, .30-caliber Winchester rifles; 12-gauge Remington pump-action shotgun; .38-caliber revolver	No ^{ao}	No ^{ao}
77. Wakefield	Wakefield, MA	12/26/2000	AK-47-type semiautomatic assault rifle , unknown make and model 12-gauge shotgun, unknown make and model .32-caliber semiautomatic pistol, and 60-round large capacity ammunition magazine.	.32-caliber Retolaza semiautomatic handgun; AK-47 variant semiautomatic rifle ; 12-gauge Winchester 1300 pump-action shotgun	- ^{ap}	- ^{ap}
78. Hotel	Tampa, FL	12/30/1999	-	9mm Lorcin semiautomatic handgun; .38-caliber Charter Arms revolver	No	No

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			CCC ^a (4)	Mother Jones ^b (5)		
79. Xerox	Honolulu, HI	11/2/1999	GLOCK 17 9mm semiautomatic pistol and three 17-round large capacity ammunition magazines, loaded with hollow point bullets (bullets with the tip hollowed out, designed to expand upon impact). Uyesugi legally purchased the GLOCK in 1989.	9mm Glock 17 semiautomatic handgun	No	No
80. Wedgwood Baptist Church	Fort Worth, TX	9/15/1999	Ruger P85 9mm semiautomatic pistol, unknown make and model .380 caliber semiautomatic pistol, and three 15-round large capacity ammunition magazines. Ashbrook legally acquired both weapons from federally licensed firearms dealers in 1992.	.380-caliber, 9mm Ruger P85 semiautomatic handguns	No	No
81. Atlanta Day Trading	Atlanta, GA	7/29/1999	-	.45-caliber Colt 1911-A1, 9mm Glock 17, .25-caliber Raven Arms MP-25 semiautomatic handguns; .22-caliber Harrington & Richardson revolver	No	No
82. Columbine High School	Littleton, CO	4/20/1999	Savage Springfield 67H 12-gauge pump-action shotgun, Savage Stevens 311D 12-gauge sawedoff shotgun, Hi-Point 995 9mm semiautomatic rifle , INTRATEC TEC-DC9 9mm semiautomatic pistol, and thirteen 10-round magazines, one 52-, one 32-, one 28-round large capacity ammunition magazines. Harris and Klebold illegally acquired the shotguns and Hi- Point rifle through a "straw purchase" (a transaction in which a legal buyer makes a purchase for someone who cannot legally purchase the firearm). Their friend, Robyn Anderson, purchased the three firearms at the Tanner Gun Show from unlicensed sellers in December of 1998. A pizza shop employee, Mark Manes, illegally sold them the INTRATEC TEC-DC9.	9mm Intratec DC-9 semiautomatic handgun; 9mm Hi-Point 995 carbine rifle ; 12-gauge sawed-off Savage Stevens 311D, 12-gauge sawed-off Savage Springfield 67H pump-action shotguns	Yes ^{aq}	Yes ^{aq}
83. Thurston High School	Springfield, OR	5/21/1998	GLOCK 19 9mm semiautomatic pistol, Ruger (unknown model) .22-caliber semiautomatic pistol, Ruger (unknown model) .22-caliber rifle, and a 50-round large capacity ammunition magazine. The GLOCK and rifle were legally purchased by Kinkel's father.	9mm Glock, .22-caliber Ruger semiautomatic handguns, .22-caliber Ruger rifle	No ^{ar}	No ^{ar}

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
84. Westside Middle School	Jonesboro, AR	3/24/1998	Universal M1 Carbine .30-caliber replica, Davis Industries .38-caliber two-shot derringer, Double Deuce Buddie .22-caliber two-shot derringer, Charter Arms .38-caliber revolver, Star .380-caliber pistol, FIE .380-caliber pistol, Ruger Security Six .357-caliber revolver, Ruger .44 magnum rifle, Smith & Wesson .38-caliber revolver, Remington 742 .30-06-caliber rifle, 15-round large capacity ammunition magazines, three 30-round large capacity ammunition magazines, and over 150-rounds of ammunition.	FIE 380, .380-caliber Star semiautomatic handguns; .44 Magnum Ruger, .30-06 Remington 742, .30-caliber Universal M-1 carbine replica rifles; .38-caliber Charter Arms, .357-caliber Ruger Security Six, .38-caliber Smith & Wesson revolvers; .22-caliber Double Deuce Buddie two-shot, .38-caliber Davis Industries two-shot derringers	No as	No as
85. Connecticut Lottery	Newington, CT	3/6/1998	GLOCK model unknown 9mm semiautomatic pistol equipped with a 19-round large capacity ammunition magazine. Beck had a permit for the 9mm pistol used in the shooting.	9mm semiautomatic handgun	No	No
86. Caltrans Maintenance Yard	Orange, CA	12/18/1997	Chinese-made AK-47-type 7.62mm semiautomatic assault rifle and five 30-round large capacity ammunition magazines. Torres legally purchased the rifle on April 30, 1988, from B&B Gun Sales in Orange County, CA.	7.62mm AK-47 Chinese variant semiautomatic rifle	Yes	Yes
87. R.E. Phelon Company	Aiken, SC	9/15/1997	-	9mm semiautomatic handgun	No	No
88. Fort Lauderdale	Fort Lauderdale, FL	2/9/1996	-	9mm Glock semiautomatic handgun; .32-caliber revolver	No	No
89. Piper Technical Center	Los Angeles, CA	7/19/1995	-	-	No at	No at
90. Walter Rossler Company	Corpus Christi, TX	4/3/1995	-	9mm Ruger semiautomatic handgun; .32-caliber revolver	No	No
91. Air Force Base	Fairchild Base, WA	6/20/1994	Chinese-made Mak-90 semiautomatic assault rifle equipped with a 75-round drum large capacity ammunition magazine. He purchased the assault rifle on June 15, 1994, five days before the shooting, and the following day purchased 80 rounds of 7.62x39mm ammunition and a 75-round drum large capacity ammunition magazine.	MAK-90 semiautomatic rifle	Yes au	Yes au

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			CCC ^a (4)	Mother Jones ^b (5)		
92. Chuck E. Cheese	Aurora, CO	12/14/1993	-	.25-caliber semiautomatic handgun	No	No
93. Long Island Railroad	Garden City, NY	12/7/1993	Ruger P89 9mm semiautomatic pistol and four 15-round large capacity ammunition magazines. Ferguson legally acquired the weapon in California at an outlet of Turner's Outdoorsman.	9mm Ruger P89 semiautomatic handgun	No	No
94. Luigi's Restaurant	Fayetteville, NC	8/6/1993	-	.22-caliber rifle; two 12-gauge shotguns	No ^{av}	No ^{av}
95. 101 California Street	San Francisco, CA	7/1/1993	Two INTRATEC TEC-DC9 semiautomatic pistols , Colt (unknown model) .45-caliber semiautomatic pistol, and 40-round and 50-round large capacity ammunition magazines loaded with a mix of Black Talon and standard ammunition. According to the Las Vegas Metropolitan Police Department, Ferri purchased the pistols from two stores in Las Vegas: Super Pawn and Pacific Tactical Weapons.	Two Intratec DC-9 , .45-caliber Colt semiautomatic handguns	Yes ^{aw}	No ^{aw}
96. Watkins Glen	Watkins Glen, NY	10/15/1992	-	9mm Llama semiautomatic handgun	No	No
97. Lindhurst High School	Olivehurst, CA	5/1/1992	-	.22-caliber sawed-off rifle; 12-gauge pump-action shotgun	No ^{ax}	No ^{ax}
98. Royal Oak Postal	Royal Oak, MI	11/14/1991	-	.22-caliber Ruger sawed-off semiautomatic rifle	No ^{ay}	No ^{ay}
99. University of Iowa	Iowa City, IA	11/1/1991	-	.38-caliber Taurus revolver	No	No
100. Luby's Cafeteria	Killeen, TX	10/16/1991	GLOCK 17 9mm semiautomatic pistol, Ruger P89 semiautomatic pistol, and 17-round and 15- round large capacity ammunition magazines. Hennard legally purchased the weapons from Mike's Gun Shop in Henderson, NV, in February and March of 1991.	9mm Glock 17, 9mm Ruger P89 semiautomatic handguns	No	No
101. GMAC	Jacksonville, FL	6/18/1990	Universal M1 .30-caliber semiautomatic assault rifle, unknown make and model .38-caliber revolver, and a 30-round large capacity ammunition magazine.	.30-caliber Universal M1 carbine rifle; .38-caliber revolver	No ^{az}	No ^{az}

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			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
102. Standard Gravure Corporation	Louisville, KY	9/14/1989	Chinese-made AK-47-type semiautomatic assault rifle, two INTRATEC MAC-11 semiautomatic assault pistols, SIG SAUER unknown model 9mm semiautomatic pistol, unknown make and model .38-caliber revolver, and 30-round large capacity ammunition magazines. Wesbecker legally purchased the AK-47-type assault rifle from Tilford's Gun Sales in Louisville.	Two Intratec MAC-11, 9mm SIG Sauer semiautomatic handguns; AK-47 Chinese variant semiautomatic rifle ; .38-caliber revolver	Yes	Yes
103. Stockton Schoolyard	Stockton, CA	1/17/1989	Chinese-made AK-47-type semiautomatic assault rifle, Taurus unknown model 9mm semiautomatic pistol, a 75-round large capacity ammunition drum magazine, a 75-round large capacity ammunition rotary magazine, and four 35-round large capacity ammunition banana magazines. Purdy legally purchased the AK-47-type rifle at Sandy Trading Post, in Sandy, OR on August 3, 1988, and the Taurus 9mm pistol at Hunter Loan and Jewelry Co. in Stockton, CA on December 28, 1988.	9mm Taurus semiautomatic handgun; AK-47 Chinese variant semiautomatic rifle	Yes	Yes
104. ESL	Sunnyvale, CA	2/16/1988	-	.380 ACP Browning, 9mm Smith & Wesson semiautomatic handguns; Ruger M-77 .22-250 bolt-action rifle with scope; Mossberg 12-gauge pump-action, 12-gauge Benelli semiautomatic shotguns; .357 Magnum Smith & Wesson, .22 Sentinel WMR revolvers	No	ba
105. Shopping Centers	Palm Bay, FL	4/23/1987	Strum, Ruger Mini-14 semiautomatic assault rifle equipped with a 30-round large capacity ammunition magazine, five 30-round large capacity ammunition magazines, 180 rounds of ammunition, a shotgun (unknown make and model), and a pistol (unknown make and model). Cruse ordered the assault rifle on March 21, 1987. On April 17, 1987, he purchased 100-rounds of ammunition and six 30-round large capacity ammunition magazines.	Sturm, Ruger Mini-14 semiautomatic rifle; 20-gauge Winchester pump-action shotgun; .357 Ruger Blackhawk revolver	No	bb
106. United States Postal Service	Edmond, OK	8/20/1986	-	.22-caliber, two .45-caliber Colt Model 1911-A1 semiautomatic handguns	-	bc

Appendix C

List of Firearms Used in Public Mass Shootings 1982 – September 2018

Case	Location	Date	Weapon Description From		Assault Weapon? ^c	Assault Rifle? ^d
			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
107. San Ysidro McDonald's	San Ysidro, CA	7/18/1984	-	9mm Browning P35 Hi-Power semiautomatic handgun; 9mm Israeli Military Industries Uzi Model A carbine semiautomatic rifle ; 12-gauge Winchester 1200 pump-action shotgun	Yes	Yes
108. Dallas Nightclub	Dallas, TX	6/29/1984	-	9mm Smith & Wesson 459 semiautomatic handgun	No ^{bd}	No ^{bd}
109. Welding Shop	Miami, FL	8/20/1982	-	Mossberg 500 Persuader pump-action shotgun with pistol grip	No	No

Notes and Sources:

Public Mass Shootings from Mother Jones ("US Mass Shootings, 1982-2018: Data from Mother Jones' Investigation," accessed September 25, 2018) and the Citizens Crime Commission of New York City ("Mayhem Multiplied: Mass Shooters and Assault Weapons," 2016, and "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017). Identified Assault Weapons are in bold.

^a Description of weapons from "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017.

^b Description of weapons from Mother Jones ("US Mass Shootings, 1982-2017: Data from Mother Jones' Investigation," accessed September 25, 2018).

^c California Penal Code sections 30510 and 30515 and California Code of Regulations, title 11, section 5499.

^d California Penal Code sections 30510(a), 30515(a)(1)(A-C) and (E-F), and 30515(a)(3) and California Code of Regulations, title 11, section 5499. See, also, Complaint ¶4.

^e "Bakersfield mass shooting 'very calculated,' came after ugly divorce, officials say," *Los Angeles Times*, September 14, 2018; "Model S&W500," *Smith & Wesson*, <https://www.smith-wesson.com/firearms/model-sw500-0>, accessed September 25, 2018.

^f "Authorities seized Waffle House shooting suspect's AR-15 after arrest, dad gave them back," *The Mercury News*, April 23, 2018; "Family of murder victim sues Waffle House suspect and his father for \$100 million," *CBSWJTV* July 11, 2018; "Family of Waffle House victim in Nashville sues accused shooter's father," *Reuters*, May 15, 2018.

^g "Gunman, 3 Hostages Found Dead at Yountville Veterans Home," *KQED News*, March 9, 2018.

^h "Florida shooting suspect bought gun legally, authorities say," *USA Today*, February 15, 2018; "Florida school shooter's AR-15 may have jammed, saving lives, report says," *Miami Herald*, February 27, 2018.

ⁱ "Suspect in quadruple killing at car wash dies," *CNN*, January 30, 2018.

^j "California mass shooter made his own rifles," *NBC News*, November 16, 2017; "California shooter built his own illegal guns, officials say," *USA Today*, November 15, 2017.

^k "What we know about the rifle used in the Texas church massacre," *CNN*, November 6, 2017; "The Latest: 2 men who pursued gunman attend shooting vigil," *The Associated Press*, November 6, 2017; "Ruger AR-556," *Ruger*,

Appendix C

List of Firearms Used in Public Mass Shootings 1982 – September 2018

Case	Location	Date	Weapon Description From		Assault	Assault
			CCC ^a	Mother Jones ^b	Weapon? ^c	Rifle? ^d
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			https://ruger.com/products/ar556/specSheets/8500.html, accessed October 22, 2018.			
^l			"Suspected gunman Radee Prince, who killed co-workers, gathered them together in office," <i>NZ Herald</i> , October 20, 2017.			
^m			"List: Guns and evidence from Las Vegas shooter Stephen Paddock," <i>KTNV</i> , January 19, 2018; "47 guns, loaded high-capacity magazines found in Vegas shooter's hotel suite and Nevada home," <i>ABC News</i> , October 4, 2017;			
			"The 'tricked out' guns Las Vegas shooter used in massacre," <i>New York Post</i> , October 3, 2017.			
ⁿ			"Police: UPS Shooter in San Francisco Armed With Stolen Guns," <i>U.S. News</i> , June 23, 2017.			
^o			"Supermarket killer outlined plan before attack at Tunkhannock market," <i>Press & Sun-Bulletin</i> , June 8, 2017; "Pennsylvania supermarket shooter left chilling online trail," <i>Associated Press</i> , June 8, 2017.			
^p			"Washington shooting victims ranged in age from 16 to 95, coroners say," <i>CNN</i> , September 27, 2016; Brown, Jason, "What You Should Know About .22 Rimfire," <i>NRA</i> , August 16, 2017; Ruger Homepage,			
			https://ruger.com/, accessed October 24, 2018.			
^q			"Tavor SAR- 5.56 NATO 16.5" Barrel," <i>IWI</i> , https://iwi.us/product/tavor-sar-556-w16-barrel/, accessed September 26, 2018; "Civilians carrying 'ultimate weapon' Gavin Long used in Baton Rouge would be regarded			
			worldwide as insane," <i>The Advocate</i> , August 10, 2016.			
^r			"Exclusive: Photo of the Saiga AK-74 Rifle Used at Dallas Shooting," <i>Law Officer</i> , July 10, 2016.			
^s			"Sig MCX Owners Manual: Handling & Safety Instructions," <i>Sig Sauer</i> , https://www.sigsauer.com/wp-content/uploads/2016/07/MCX.pdf, accessed October 23, 2018; <i>Sig Sauer website</i> ,			
			https://www.sigsauer.com/products/firearms/rifles/?state_compliant=1103, accessed October 24, 2018.			
^t			"Ex-Girlfriend Charged With Providing Guns to Kansas Shooter Cedric Ford," <i>NBC News</i> , February 26, 2016.			
^u			"San Bernardino Guns Originally Bought Legally, Later Modified," <i>The Wall Street Journal</i> , December 4, 2015.			
^v			"Robert Dear: No remorse for shootout at Colorado Springs Planned Parenthood clinic," <i>Colorado Springs Gazette</i> , February 26, 2016.			
^w			"Family sought help shortly before Halloween attack," <i>9News.com</i> , June 28, 2016; "Investigative Report from 10/31/2015 Incident Pursuant to C.R.S. §§16-2.5-301 and 20-1-114," <i>4th Judicial District Attorney's Office</i> ;			
^x			"Umpqua Community College 2015 shooting report: What we've learned," <i>The Oregonian</i> , September 8, 2017.			
^y			"Chattanooga Shooting Reignites Gun Control Debate After Mohammad Youssef Abdulazez Used AK-47 Assault Weapon To Kill Marines," <i>International Business Times</i> , July 17, 2015; "Purple Hearts just approved			
			for Marines and sailor targeted in Chattanooga attack," <i>The Washington Post</i> , December 17, 2015.			
^z			"John Zawahri, suspected gunman in deadly Santa Monica shooting, left farewell note, police say," <i>CBS News</i> , June 14, 2013.			
^{aa}			"Names of victims emerge after deadly Federal Way shooting," <i>Federal Way Mirror</i> , April 24, 2013.			
^{ab}			"Upstate New York Shooting Update: Kurt Myers, suspected gunman, killed by police in shootout," <i>CBS News</i> , March 14, 2013.			

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List of Firearms Used in Public Mass Shootings 1982 – September 2018

Case	Location	Date	Weapon Description From		Assault Weapon? ^c	Assault Rifle? ^d
			CCC ^a	Mother Jones ^b		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ac			"Fate of Sandy Hook lawsuit against gun maker could be decided by a slingshot," <i>NBC News</i> , November 14, 2017; "Embargo firing a run on Russian-made guns: Added restrictions put arms in short supply," <i>San Antonio Express-News</i> , August 11, 2014.			
ad			"Aurora Gunman's Arsenal: Shotgun, Semiautomatic Rifle and, at the End, a Pistol," <i>New York Times</i> , July 24, 2012; "M&P15 Centerfire Rifles Safety & Instruction Manual," <i>Smith & Wesson</i> , https://www.smith-wesson.com/sites/default/files/owners-manuals/M%26P15_CF_Rifle_Manual_10-20-15.pdf , accessed October 25, 2018.			
ae			"IHOP gunman used illegally altered AK-47, sheriff says," <i>Las Vegas Review-Journal</i> , October 5, 2011.			
af			"Hialeah: Only the Latest Mass Shooting by a Concealed Carry Killer," <i>Huffington Post</i> , July 30, 2013; "Hialeah gunman's rage over estranged wife leaves 5 dead," <i>Sun Sentinel</i> , June 7, 2010.			
ag			"Instructions for Operation and Care of the Remington Model 11-48, Sportsman-48 Autoloading Shotguns," https://www.remington.com/sites/default/files/Model%2011-48.pdf , accessed October 24, 2018.			
ah			"Images, suicide note released in mall massacre," <i>Nation World News</i> , December 7, 2007; "Romanian Kalashnikov Rifles," <i>guns.net</i> , accessed at http://www.gunsnet.net/Linx310/model.htm on July 28, 2005 via the Internet Archive WayBack Machine (accessed September 26, 2018).			
ai			"What happened in Crandon on Oct. 7," <i>Los Angeles Times</i> , June 8, 2008.			
aj			"Firearms Tutorial: Terminology," https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html , accessed October 24, 2018.			
ak			"Police: Seattle shooter said 'plenty for everyone'," <i>NBC News</i> , March 27, 2006.			
al			"Both sides cite anger, hostility in killings; Hearings begin with law officers' testimony, grisly images," <i>Pioneer Press</i> , September 11, 2005.			
am			"Seven die in Chicago warehouse shooting," <i>CNN</i> , August 27, 2003.			
an			"Man Kills 5 Co-Works at Plant and Himself," <i>New York Times</i> , July 9, 2013; "Instruction Manuals & Product History," <i>Ruger</i> , https://ruger.com/service/productHistory.html , accessed October 23, 2018; Ruger Mini-14 manuals https://ruger-docs.s3.amazonaws.com/_manuals/mini14-180.pdf , https://ruger-docs.s3.amazonaws.com/_manuals/mini14-181-186.pdf , https://ruger-docs.s3.amazonaws.com/_manuals/mini14-580.pdf , accessed October 23, 2018; "What You Should Know About .22 Rimfire," <i>NRA</i> , August 16, 2017; Ruger Homepage, https://ruger.com/ , accessed October 24, 2018.			
ao			"Workplace Deaths Leave No One Untouched," <i>Chicago Tribune</i> , February 7, 2001; "Update 1-Source of guns used in US factory shootings sought," <i>Associated Press</i> , February 6, 2011; "SKS Rifle: Simonov Type 56," <i>Department of the Army</i> , October 1969, http://pdf.textfiles.com/manuals/FIREARMS/sks_56.pdf , accessed October 24, 2018; "Why .30-30 Winchester Will Never Die," <i>NRA</i> , February 2, 2016; "Firearms Tutorial: Terminology," https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html , accessed October 24, 2018.			
ap			"Man Charged in Killings Evaded Strict Gun Laws," <i>New York Times</i> , December 28, 2000.			
aq			"How they were equipped that day," <i>Jefferson County Sheriff</i> , http://www.cnn.com/SPECIALS/2000/columbine.cd/Pages/EQUIPMENT_TEXT.htm , accessed September 26, 2018.			
ar			"What You Should Know About .22 Rimfire," <i>NRA</i> , August 16, 2017, <i>Kipland Philip Kinkel v. Rob Persson</i> , 13C13698;A155449 (2018); Ruger Homepage, https://ruger.com/ , accessed October 24, 2018.			

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List of Firearms Used in Public Mass Shootings 1982 – September 2018

Case	Location	Date	Weapon Description From		Assault Weapon? ^c	Assault Rifle? ^d
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(1)	(2)	(3)	(4)	(5)	(6)	(7)

^{as} "Powerful, semiautomatic rifles in Jonesboro killers' arsenal," *Associated Press*, April 3, 1998; "Post WWII Commercially Manufactured M1 Carbines," *Universal Firearms*, http://www.m1carbinesinc.com/carbine_universal.html, accessed September 26, 2018; "77-Series Ruger 77/44," *Ruger*, <https://ruger.com/products/77Series7744/models.html>, accessed October 24, 2018; "Model 742," *Remington*, <https://www.remington.com/sites/default/files/Model742.pdf>, accessed October 24, 2018.

^{at} "High-Capacity Ammunition Magazines are the Common Thread Running Through Most Mass Shootings in the United States," *Violence Policy Center*, accessed September 9, 2018.

^{au} "An Airman's Revenge: 5 Minutes of Terror," *The New York Times*, June 22, 1994.

^{av} "Soldier from Pasco held in N.C. killings," *St. Petersburg Times*, August 8, 1993; "What You Should Know About .22 Rimfire," *NRA*, August 16, 2017.

^{aw} "San Francisco massacre prompts families' suits," *The Las Vegas Review-Journal*, May 19, 1994; "Death Over the Counter," *The Washington Post*, July 27, 1993; "TEC-DC9 Manual," *Intratec Firearms*, http://pdf.textfiles.com/manuals/FIREARMS/intratec_tec_dc9.pdf, accessed October 22, 2018.

^{ax} "Gunman may have blamed teacher who flunked him," *Houston Chronicle*, May 3, 1992; "What You Should Know About .22 Rimfire," *NRA*, August 16, 2017.

^{ay} "3 Killed, 8 Injured in Shooting Rampage at Post Office Crime," *Los Angeles Times*, November 15, 1991; "A 'Primer' About Rimfire Vs. Centerfire Ammunition," *NRA*, November 21, 2017; Ruger Homepage, <https://ruger.com/>, accessed October 24, 2018.

^{az} "Post WWII Commercially Manufactured M1 Carbines," *Universal Firearms*, http://www.m1carbinesinc.com/carbine_universal.html, accessed September 26, 2018.

^{ba} "Firearms Tutorial: Terminology," <https://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNTERM.html>, accessed October 24, 2018.

^{bb} "Sales Of Exotic Weapons Are Mostly Cash And Carry," *Orlando Sentinel*, May 18, 1987; "Instruction Manuals & Product History," *Ruger*, <https://ruger.com/service/productHistory.html>, accessed October 23, 2018; and Ruger Mini-14 manuals, https://ruger-docs.s3.amazonaws.com/_manuals/mini14-180.pdf, https://ruger-docs.s3.amazonaws.com/_manuals/mini14-181-186.pdf; https://ruger-docs.s3.amazonaws.com/_manuals/mini14-580.pdf, accessed October 23, 2018.

^{bc} "Authorities Piece Together Tragedy Gunman at Edmond Post Office 'Knew Where to Shoot People'," *The Oklahoman*, August 22, 1986.

^{bd} "6 Die in Dallas Club as Enraged Man Fires Wildly," *New York Times*, June 30, 1984.

EXHIBIT 2

1 UNITED STATES DISTRICT COURT
2 CENTRAL DISTRICT OF CALIFORNIA
3 SOUTHERN DIVISION

-----x
4 STEVEN RUPP, et al.,
5 Plaintiffs,
6 vs. Case No.
7 8:17-cv-00746-JLS-JDE
8

9 XAVIER BECERRA, in his
10 official capacity as Attorney
11 General of the State of
12 California,
13 Defendants.
14 -----x

15 DATE: Friday, December 14, 2018
16 TIME: 10:30 a.m.

17 Video deposition of the Defendant's Expert,
18 LUCY P. ALLEN, taken by Plaintiff, pursuant to
19 notice, held at the offices of NERA ECONOMIC
20 CONSULTANTS, 1166 Sixth Avenue, New York, New
21 York 10036, before Elizabeth Willeski,
22 RPR, of Veritext Legal Solutions, a Notary Public
23 in and of the State of New York.
24

25 Job No. 3135717
Pages: 1-119

1 A P P E A R A N C E S:

2 On behalf of Plaintiffs:

SEAN A. BRADY, ESQ.

3 MICHEL & ASSOCIATES, P.C.

180 E. Ocean Boulevard, Suite 200

4 Long Beach, California 90802

(526)216-4444

5

On behalf of Defendant:

6 JOHN D. ECHEVERRIA, Deputy Attorney General

STATE OF CALIFORNIA DEPARTMENT OF JUSTICE

7 300 S. Spring Street, Suite 1702

Los Angeles, California 90013

8 (213)897-4902

9

10 Also present: Deverell White, Videographer

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1 scope of assignment from your report? 10:35

2 A Yes. 10:35

3 Q Okay. So it's fair to say what is 10:35

4 written there as your scope of assignment is the 10:35

5 parameters of your assignment? 10:35

6 A I intended to put the scope of my 10:35

7 assignment under the heading, yes. 10:35

8 Q So you didn't do anything other than 10:35

9 what is described in your scope of assignment for 10:35

10 the purposes of this case? 10:35

11 A I believe that's correct. 10:35

12 Q Okay. And as an expert witness, what 10:35

13 expertise do you have that helps you with this 10:35

14 particular assignment? 10:36

15 A I have analyzed these particular issues, 10:36

16 or a number of these issues, a number of times 10:36

17 before. I have worked on gun-related data for -- 10:36

18 starting probably 20 years ago at NERA, I worked 10:36

19 on a number of matters. The particular sorts of 10:36

20 data that I have been looking at here, which 10:36

21 involve mass shootings, I have been analyzing that 10:36

22 data. I have done it -- I think maybe the first 10:36

23 time I particularly looked at mass shootings was 10:36

24 in one of the cases that I believe might be listed 10:37

25 in my CV. Perhaps it was before then, but anyway, 10:37

1 it was maybe six years ago. So I have been 10:37
2 updating some of this type of data over a number 10:37
3 of years for a number of different matters. 10:37

4 Q Okay. My question is more about your 10:37
5 special knowledge. What expertise do you have 10:37
6 that allows you to do that analysis? 10:37

7 A Well, analyzing data is, and this sort 10:37
8 of analysis, is something I have been trained to 10:38
9 do and something that I have spent a large part of 10:38
10 my career doing. 10:38

11 Q What sort of training did you receive to 10:38
12 do this sort of analysis? 10:38

13 A I have an undergraduate degree from 10:38
14 Stanford and graduate degrees from Yale 10:38
15 University, and in the course of that education, I 10:38
16 have taken numerous courses and been a teaching 10:38
17 fellow in numerous courses that involve analysis 10:38
18 of data, quantitative analysis, sorts of methods 10:38
19 that are used in what I have done here. 10:38

20 Q So is it fair to say that your expertise 10:38
21 is of the general evaluation of data? 10:38

22 A I think I have expertise in data 10:39
23 analysis, yes. I think I have worked on a number 10:39
24 of matters involving the sorts of data, the 10:39
25 specific pieces of data and types of data that I 10:39

1 A I don't believe so, no. I mean, I have 10:41
2 taken some account at the shooting range and had 10:41
3 some training, and I believe that involved some 10:41
4 identification of firearms, but I wouldn't say 10:41
5 I've had that -- that's one type of training in 10:41
6 firearms that I recall. 10:41

7 Q How many times have you been to a 10:41
8 shooting range, more or less? 10:41

9 A I can recall about six times where I 10:42
10 have had some training in shooting. 10:42

11 Q Other than those six times, have you 10:42
12 shot a firearm? 10:42

13 A I'm recalling approximately six times, 10:42
14 but not -- that's what I'm recalling. 10:42

15 Q And that's six times that you have shot 10:42
16 a firearm; is that fair to say? I just want to 10:42
17 determine whether we're talking about the amount 10:42
18 of times you have shot generally or the amount of 10:42
19 times you have received instruction. If that 10:43
20 makes sense. 10:43

21 A The times that I'm recalling I was 10:43
22 receiving instruction as well as shooting. I'm 10:43
23 not sure if I recall times I was shooting without 10:43
24 receiving instruction. 10:43

25 Q Understood. So then it's fair to say 10:43

1 that six times is more or less your experience 10:43
2 with shooting a firearm? 10:43
3 A That's what I recall as I sit here right 10:43
4 now. 10:43
5 Q Okay. Do you recall what types of 10:43
6 firearms you were shooting? 10:43
7 A I don't. 10:43
8 Q Do you recall whether they were handguns 10:43
9 or long guns? 10:43
10 A I believe most of them were long guns. 10:43
11 That's my recollection. 10:43
12 Q Were you indoor or outdoor, do you 10:43
13 recall? 10:44
14 A The times I'm recalling, I was outdoor. 10:44
15 Q So long guns, do you recall whether they 10:44
16 were rifles or shotguns? 10:44
17 A I don't recall. 10:44
18 Q Do you recall whether you were shooting 10:44
19 little clay targets out of the air or if you were 10:44
20 shooting long distances? 10:44
21 MR. ECHEVERRIA: Objection. Vague. 10:44
22 A I had gone clay shooting, which was 10:44
23 shooting clay targets out of the air. I have also 10:44
24 gone shooting with targets that were further away 10:44
25 or I believe were further away than the clay 10:45

1 Q So they would know what the definition 11:23
2 of center fire is? 11:23
3 A Yes, I believe so. 11:23
4 Q Do you know what the definition of 11:23
5 center fire is? 11:23
6 A Well, as distinguished from rim fire, 11:23
7 and I believe center fire is -- I mean, it is 11:23
8 something that they have both looked at and I have 11:23
9 looked at and we have -- the center fire, the 11:23
10 bullet is shot through the center and rim fire 11:23
11 it's more crushed from the rim would be I think a 11:23
12 more layman way of explaining it. 11:23
13 Q Would you be able to tell whether a 11:23
14 firearm was center fire or rim fire based on 11:24
15 looking at it? 11:24
16 A I don't know if I would be able to do 11:24
17 that. I think that how we have coded this has, 11:24
18 and which particular weapons we have coded, is 11:24
19 something that we have turned over the detail. We 11:24
20 have turned over the analysis and you have an 11:24
21 expert that is responding to me, so that is my 11:24
22 understanding of how this sort of litigation . 11:24
23 works. Everything that we have done and how we 11:24
24 have done it is certainly up for review and 11:24
25 criticism. And we have had two people doing that, 11:24

1 three or more killed. So I think with that 11:38
2 distinction, they otherwise have very similar 11:38
3 definitions of a mass shooting. 11:38

4 Q And to be clear, their definitions that 11:38
5 they're using here are for public mass shootings, 11:38
6 right, not just mass shootings? 11:38

7 A They call them mass shootings, and it is 11:38
8 a term that the press and others use as a mass 11:38
9 shooting. They do not include incidents in the 11:38
10 home. So I think you could call them public mass 11:38
11 shootings. 11:38

12 Q So there are incidents in which three or 11:38
13 more people were murdered at a single time, but it 11:38
14 would not be considered a mass shooting under 11:39
15 Mother Jones standards; is that correct? 11:39

16 A That's correct. 11:39

17 Q Do you know whether the majority of 11:39
18 incidents in which three or more people are 11:39
19 murdered are in public places or private places? 11:39

20 A I don't know. I am analyzing the type 11:39
21 of mass shooting that I have previously analyzed 11:39
22 and that has been particularly at issue and that 11:39
23 the states and the laws are concerned with and is 11:39
24 the type of mass shooting that Mother Jones and 11:40
25 Citizens Crime Commission focus on. They not only 11:40

C E R T I F I C A T E

STATE OF NEW YORK)

) ss.

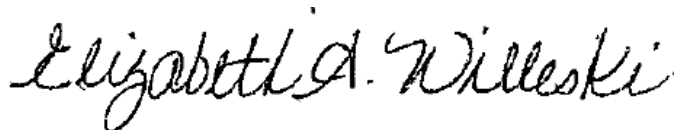
COUNTY OF NEW YORK)

I, ELIZABETH WILLESKI, a Registered
Professional Reporter and Notary Public within and
for the State of New York, do hereby certify:

That LUCY P. ALLEN the witness whose
deposition is hereinbefore set forth, was duly
sworn by me and that such deposition is a true
record of the testimony given by such witness.

I further certify that I am not related
to any of the parties to this action by blood or
marriage and that I am in no way interested in the
outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set
my hand this 14th day of December 2018.



ELIZABETH A. WILLESKI, COURT REPORTER
My Commission Expires: May 31, 2020

EXHIBIT 3

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

STEVEN RUPP; et al.,

Plaintiffs,

v.

**XAVIER BECERRA, in his official
capacity as Attorney General of the
State of California et al.,**

Defendants.

8:17-cv-00746-JLS-JDE

**EXPERT REPORT AND
DECLARATION OF DETECTIVE
MICHAEL MERSEREAU OF THE
LOS ANGELES POLICE
DEPARTMENT**

I, Michael Mersereau, declare and state as follows:

1. I am a Detective employed by the Los Angeles Police Department (the "LAPD") as a sworn officer for approximately 22 years. I have personal knowledge of the facts set forth below except those stated on information and belief. As to those facts, I believe them to be true and if called as a witness, could and would testify competently thereto.

2. I am currently assigned to the LAPD Gun Unit and have been for approximately 15 years. The LAPD Gun Unit is involved exclusively in the enforcement of the California Dangerous Weapons Control Act and the Municipal Code of the City of Los Angeles as it pertains to firearms. Prior to this assignment, I worked uniform patrol, uniformed gangs, and divisional gang detectives. In these assignments, I have encountered a wide variety of firearms and firearms accessories, including assault rifles, and I have made numerous arrests for firearms violations.

Year	Total Number of Firearms Booked Citywide
2013	5130
2014	5529
2015	6151
2016	5908
2017 (as of 9/6/17)	4513

6. Statistics regarding assault weapons and machine guns (as define in the California Penal Code) are provided because these guns typically use large-capacity magazines. The LAPD does not keep statistics on the number of assault weapons and machine guns recovered citywide due to the expertise needed to determine whether a weapon is actually an assault weapon or a machine gun. The below statistics represent Assault Weapons / Machine Guns recovered by the Gun Unit only. Citywide numbers are likely higher.

Year	Number of Assault Rifles/Machine Guns recovered by the Gun Unit
2013	123
2014	113
2015	145
2016	89
2017	125

7. With respect to large-capacity magazines specifically, the statistics provided below represent only the seizure of large capacity magazines by the Gun Unit. As with assault rifles, the LAPD does not keep statistics on the number of large-capacity magazines recovered citywide.

Michael Mersereau
MICHAEL MERSEREAU

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EXHIBIT 4

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

STEVEN RUPP; et al.,

Plaintiff,

vs.

XAVIER BECERRA, in his
official capacity as Attorney
General of the State of
California et al.,

Defendants.

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) No. 8:17-cv-00746-JLS-JDE

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DEPOSITION OF MICHAEL MERSEREAU

Long Beach, California

Tuesday, December 4, 2018

Volume I

Reported by:

KATY BONNETT

CSR No. 13315

Job No. 3135706

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1 APPEARANCES:

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1 training to know how to determine whether a gun is an
2 assault weapon?

3 A You have to have some level of knowledge, and
4 whether that's full training or your own self-training,
5 there are plenty of patrol officers out there that are
6 capable of identifying a firearm as an assault weapon,
7 but there's also a lot of them out there that don't have
8 that training. That's why we try to get out to the
9 divisions on a regular basis -- regular schedule and
10 present them with that information.

11 But, of course, personnel is constantly changing,
12 shifting, new officers coming in, et cetera. So
13 consequently you -- you can't know in this raw numbers
14 whether they're rifles, shotguns, assault weapons, et
15 cetera, machine guns. You really have to go and look at
16 each report.

17 Q And you didn't do that for those guns --

18 A No.

19 Q -- in the top table --

20 A No.

21 Q -- for this report, right?

22 A No.

23 Q I'm sorry. Let me just ask the question so we
24 have a clean record. I'm sorry. I know you're being
25 conversational.

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby certify:

3 That the foregoing proceedings were taken
4 before me at the time and place herein set forth; that
5 any witnesses in the foregoing proceedings, prior to
6 testifying, were administered an oath; that a record of
7 the proceedings was made by me using machine shorthand
8 which was thereafter transcribed under my direction;
9 that the foregoing transcript is a true record of the
10 testimony given.

Further, that if the foregoing pertains to the
11 original transcript of a deposition in a Federal Case,
12 before completion of the proceedings, review of the
13 transcript [] was [] was not requested.

14 I further certify I am neither financially
15 interested in the action nor a relative or employee
16 of any attorney or any party to this action.

17 IN WITNESS WHEREOF, I have this date subscribed
18 my name.

19 Dated: December 19, 2018
20
21

22 
23

24 KATY BONNETT

25 CSR No. 13315

CERTIFICATE OF SERVICE
IN THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

Case Name: *Rupp, et al. v. Becerra*
Case No.: 8:17-cv-00746-JLS-JDE

IT IS HEREBY CERTIFIED THAT:

I, the undersigned, am a citizen of the United States and am at least eighteen years of age. My business address is 180 East Ocean Boulevard, Suite 200, Long Beach, California 90802.

I am not a party to the above-entitled action. I have caused service of:

**DECLARATION OF SEAN A. BRADY IN SUPPORT OF PLAINTIFFS'
MOTION TO EXCLUDE THE TESTIMONY OF DEFENDANT'S EXPERT
WITNESS LUCY P. ALLEN UNDER FEDERAL RULE OF EVIDENCE 702**

on the following party by electronically filing the foregoing with the Clerk of the District Court using its ECF System, which electronically notifies them.

Xavier Becerra
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I declare under penalty of perjury that the foregoing is true and correct.

Executed May 28, 2019.

/s/ Laura Palmerin
Laura Palmerin