. 1	XAVIER BECERRA	
2	Attorney General of California State Bar No. 118517	
3	MARK R. BECKINGTON Supervising Deputy Attorney General	
	State Bar No. 126009 Anthony P. O'Brien	
4	Deputy Attorney General	
5	State Bar No. 232650 JOHN D. ECHEVERRIA	
6	Deputy Attorney General State Bar No. 268843	
7	300 South Spring Street, Suite 1702 Los Angeles, CA 90013 Telephone: (213) 269-6249 Fax: (213) 897-5775	
8	Telephone: (213) 269-6249 Fax: (213) 897-5775	•
9	E-mail: John.Echeverria@doj.ca.gov Attorneys for Defendant Attorney General	1
10	Xavier Becerra	•
11	IN THE UNITED STAT	TES DISTRICT COURT
12	FOR THE SOUTHERN DI	STRICT OF CALIFORNIA
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15	AND CINIA DUNICANI DICITADO	1.015 PENT IT D
16	VIRGINIA DUNCAN, RICHARD LEWIS, PATRICK LOVETTE, DAVID MARGUGLIO,	17-cv-1017-BEN-JLB
17	CHRISTOPHER WADDELL, and	DECLARATION OF JOHN D. ECHEVERRIA IN SUPPORT OF
18	CALIFORNIA RIFLE & PISTOL ASSOCIATION, INC., a California	DEFENDANT'S OPPOSITION TO PLAINTIFFS' MOTION FOR
19	corporation,	SUMMARY JUDGMENT OR, ALTERNATIVELY, PARTIAL
20	Plaintiffs,	SUMMARY JUDGMENT; EXHIBITS 1-3
21	V.	Date: April 30, 2018
22.	XAVIER BECERRA, in his official	Time: 10:30 a.m. Judge: Hon. Roger T. Benitez
23	capacity as Attorney General of the State of California; and DOES 1-10,	Courtroom: 5A Action Filed: May 17, 2017
	Defendant.	Action Fried. Way 17, 2017
24	Defendant.	
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	D I at CII D D I 1 1 1 C 1 C	Defendant's Opposition to Plaintiffs' Motion for

DECLARATION OF JOHN D. ECHEVERRIA

I, John D. Echeverria, declare:

- 1. I am a Deputy Attorney General with the California Department of Justice and serve as counsel to Defendant Xavier Becerra, Attorney General of the State of California ("Defendant"), in the above-captioned matter.
- 2. Except as otherwise stated, I have personal knowledge of the facts set forth in this declaration, and if called upon as a witness I could testify competently as to those facts. I make this declaration in support of Defendant's Opposition to Plaintiffs' Motion for Summary Judgment or, Alternatively, Partial Summary Judgment.
- 3. On October 6, 2017, Defendant served Plaintiffs with the Expert Report of Lucy P. Allen. A true and correct copy of the Expert Report of Lucy P. Allen is attached as **Exhibit 1**.
- 4. On November 3, 2017, Defendant served Plaintiffs with the Expert Rebuttal Report of John J. Donohue. A true and correct copy of the Expert Rebuttal Report of John J. Donohue is attached as **Exhibit 2**.
- 5. On January 9, 2018, Defendant served Plaintiffs with the Revised Expert Report of Dr. Louis J. Klarevas. A true and correct copy of the Revised Expert Report of Dr. Louis J. Klarevas is attached as **Exhibit 3**.
- 6. On October 6, 2017, Defendant served Plaintiffs with the Expert Report of Christopher S. Koper. A true and correct copy of the Expert Report of Christopher S. Koper is attached as **Exhibit 4**.
- 7. On December 18, 2017, Defendant deposed Plaintiffs' expert, Stephen Helsley. A true and correct copy of relevant excerpts of the Reporter's Transcript of the Deposition of Stephen Helsley is attached as **Exhibit 5**.
- 8. On December 19, 2017, Plaintiffs deposed Defendant's witness, Blake Graham. A true and correct copy of relevant excerpts of the Reporter's Transcript of the Deposition of Blake Graham is attached as **Exhibit 6**.

Summary Judgment or, Alternatively, Partial Summary Judgment (17-cy-1017-BEN-JLB)

- 33. A true and correct copy of Brady Center to Prevent Gun Violence, Assault Weapons: 'Mass Produced Mayhem' (2008) is attached as **Exhibit 31**.
- 34. A true and correct copy of the Testimony of Brian J. Siebel, Senior Attorney, Brady Center to Prevent Gun Violence, Before the Council of the District of Columbia (Oct. 1, 2008) is attached as **Exhibit 32**.
- 35. A true and correct copy of Christopher S. Koper et al., *Gunshot Victimisations Resulting from High-Volume Gunfire Incidents in Minneapolis: Findings and Policy Implications*, Injury Prevention, Feb. 24, 2018, http://injuryprevention.bmj.com/content/early/2018/02/24/injuryprev-2017-042635, is attached as **Exhibit 33**.
- 36. A true and correct copy of Nat. Law Enforcement P'ship to Prevent Gun Violence, Protecting Communities from Assault Weapons and High-capacity Ammunition Magazines (2017) is attached as **Exhibit 34**.
- 37. A true and correct copy of the Declaration of San Francisco Police Department Officer Joseph Emanuel in Support of Plantiff's Ex Parte Application for Order to Show Cause Re: Preliminary Injunction, *People v. Badger Mountain Supply, et al.*, No. CGC-17-557010 (S.F. Super. Feb. 21, 2017), is attached as **Exhibit 35**. This declaration was submitted as Appendix B to the brief of Amici Curiae City and County of San Francisco, the City of Los Angeles, and the City of Sunnyvale in *Duncan v. Becerra*, 9th Cir. No. 17-56081 (9th Cir. Oct. 19, 2017) (ECF No. 29).
- 38. A true and correct copy of the Declaration of Detective Michael Mersereau of the Los Angeles Police Department in Support of Amici Curiae the City and County of San Francisco, the City of Los Angeles, and the City of Sunnyvale, *Duncan v. Becerra*, 9th Cir. No. 17-56081 (9th Cir. Oct. 19, 2017), is attached as **Exhibit 36**. This declaration was submitted as Appendix K to the brief of Amici Curiae City and County of San Francisco, the City of Los Angeles, and

https://www.nytimes.com/interactive/2015/10/03/us/how-mass-shooters-got-their-guns.html, is attached as Exhibit 43. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on April 9, 2018, at Los Angeles, California. /s/ John D. Echeverria John D. Echeverria - 19

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5	2	Expert Rebuttal Report of John J. Donohue	00034-00072
6	3	Revised Expert Report of Louis J. Klarevas	00073-00120
7	4	Expert Report of Christopher S. Koper	00121-00433
8 9	5	Transcript of Deposition of Stephen Helsley (Excerpts)	00434-00456
0	6	Transcript of Deposition of Blake Graham, (Excerpts)	00457-00463
1 2	7	Transcript of Deposition of Carlisle Moody (Excerpts)	00464-00480
.3	8	Transcript of Deposition of Gary Kleck (Excerpts)	00481-00492
4 5	9	Transcript of Deposition of Christopher S. Koper (Excerpts)	00493-00501
6	10	Transcript of Deposition of Lucy P. Allen (Excerpts & Ex. 7)	00502-00518
7 8	11	Transcript of Deposition of Louis J. Klarevas (Excerpts)	00519-00533
9	12	Dep't of the Treasury, Bureau of Alcohol, Tobacco, and Firearms (ATF), Recommendation on the Importability of Certain Semiautomatic Rifles (1989)	00534-00553
1 2	13	Dep't of the Treasury, Bureau of Alcohol, Tobacco, and Firearms (ATF), Study on the Sporting Suitability of Modified Semiautomatic	00554-00680
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6		Constitution, Civil Rights and Human Rights, S. Comm. on the Judiciary (Feb. 12, 2013) Rights,	
7		Proposals to Reduce Gun Violence: Protecting Our Communities While Respecting the Second	
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9	16	Mark Follman, et al., U.S. Mass Shootings, 1982-	00722-00736
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11	17.	Mayors Against Illegal Guns, Analysis of Recent	00737-00772
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16		(June 5, 2017) (Dkt. No. 15)	
17	19	Larry Buchanan, et al., Nine Rounds a Second: How the Las Vegas Gunman Outfitted a Rifle to	00793-00797
18		Fire Faster, N.Y. Times, Oct. 5 2017	
19	-20	Violence Policy Center, High-Capacity	00798-00807
20		Ammunition Magazines are the Common Thread Running Through Most Mass Shootings in the	
21		United States (2018)	
22	21	Alex Yablon, Bans on High-Capacity Magazines,	00808-00811
23	·	Not Assault Rifles, Most Likely to Limit Shooting Carnage, The Trace, June 13, 2016	
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25	22	State of Connecticut, Division of Criminal Justice, Report of the State's Attorney for the Judicial	00812-00860
26		District of Danbury on the Shootings at Sandy	
27		Hook Elementary School (2013)	
28		9	
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23	Mark Follman, More Guns, More Mass	00861-00867
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24	Louis Klarevas, Rampage Nation: Securing	00868-00898
	America from Mass Shootings (2016) (Excerpts)	
25	Robert J. Spitzer, Gun Law History in the United	00899-00904
	States and Second Amendment Rights, 80 Law & Contemporary Problems 55 (2017)	
26	H.R. Rep. No. 103-489 (1994)	00905-00981
27	The Safety for All Act of 2016, 2016 Cal. Legis. Serv. Proposition 63 (West)	00982-01011
28	Sandy Hook Advisory Comm'n, Final Report of	01012-01289
	the Sandy Hook Advisory Commission (2015)	01012-012,89
29	J	
	Magazines, NBC So. Cal., Mar. 2, 2011	
30	C. S. Koper & D. C. Reedy, Impact of Handgun Types on Gun Assault Outcomes: A Comparison of	
	Gun Assaults Involving Semiautomatic Pistols and Revolvers, 9 Injury Prevention 151 (2003)	
31	Brady Center to Prevent Gun Violence, Assault	01301-01364
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32	Testimony of Brian J. Siebel, Senior Attorney, Brady Center to Prevent Gun Violence, Before the	01365-01372
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33	Christopher S. Koper et al., Gunshot	01373-01377
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2 3 4	34	Nat. Law Enforcement P'ship to Prevent Gun Violence, Protecting Communities from Assault Weapons and High-capacity Ammunition Magazines (2017)	01378-01382
5 6 7 8	35	Declaration of San Francisco Police Department Officer Joseph Emanuel in Support of Plantiff's Ex Parte Application for Order to Show Cause Re: Preliminary Injunction, <i>People v. Badger</i> <i>Mountain Supply, et al.</i> , No. CGC-17-557010 (S.F. Super. Feb. 21, 2017)	01383-01402
10 11 12 13	36	Declaration of Detective Michael Mersereau of the Los Angeles Police Department in Support of Amici Curiae the City and County of San Francisco, the City of Los Angeles, and the City of Sunnyvale, <i>Duncan v. Becerra</i> , 9th Cir. No. 17-56081 (9th Cir. Oct. 19, 2017)	01403-01412
141516	37	Mark Follman, et al., <i>A Guide to Mass Shootings in America</i> , Mother Jones (last updated Mar. 10, 2018, 9:00 AM)	01413-01417
17 18	38	David S. Fallis & James V. Grimaldi, Va. Data Show Drop in Criminal Firepower During Assault Gun Ban, Wash. Post, Jan. 23, 2011	01418-01422
192021	39	David S. Fallis, <i>Data Indicate Drop in High-Capacity Magazines During Federal Gun Ban</i> , Wash. Post, Jan. 10, 2013	01423-01427
22 23	40	Gary Kleck, Point Blank: Guns and Violence in America (1991) (Excerpts)	01428-01437
242526	41	Claude Werner, The Armed Citizen - Analysis of Five Years of Armed Encounters, GunsSaveLives.com (Mar. 12, 2012)	001438-01445
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2 3 4	42	California Voter Information Guide, Firearms. Ammunition Sales. Initiative Statute. California Proposition 63 (2016)	01446-01469
5	4,3	Larry Buchanan, et al., How They Got Their Guns,	01470-01478
5		N.Y. Times, Nov. 5, 2017)	
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Exhibit 1

Attorney General of California
TAMAR PACHTER
Supervising Deputy Attorney General
NELSON R. RICHARDS
ANTHONY P. O'BRIEN
Deputy Attorneys General
ALEXANDRA ROBERT GORDON
Deputy Attorney General
State Bar No. 207650
455 Golden Gate Avenue, Suite 11000
San Francisco, CA 94102-7004
Telephone: (415) 703-5509
Fax: (415) 703-5480
E-mail: Alexandra.RobertGordon@doj.ca.gov
Attorneys for Defendant
Attorney General Xavier Becerra

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

VIRGINIA DUNCAN, RICHARD LEWIS, PATRICK LOVETTE, DAVID MARGUGLIO, CHRISTOPHER WADDELL, and CALIFORNIA RIFLE & PISTOL ASSOCIATION, INCORPORATED, a California corporation,

Plaintiffs,

VS.

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

Defendants.

17-cv-1017-BEN-JLB

EXPERT REPORT OF LUCY P. ALLEN

Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017

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I. SCOPE OF ASSIGNMENT

1. I have been asked by the Office of the Attorney General of California to address the following issues: (a) the number of rounds of ammunition fired by individuals using a gun in self-defense; (b) weapons used in mass shootings; and (c) the rate at which firearms are used in California for self-defense in a home.

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 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 \$850 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:
- a) Complaint for Declaratory and Injunctive Relief, dated May 17, 2017 ("Complaint");
- b) Memorandum of Points and Authorities in Support of Plaintiffs' Motion for Preliminary Injunction, dated May 26, 2017;
- Attorney General's Opposition to Plaintiffs' Motion for Preliminary Injunction, dated June 5, 2017;
- d) Plaintiffs' Objections to Defendant's Evidence in Support of Opposition to Motion for Preliminary Injunction, dated June 9, 2017;
- e) Order Granting Preliminary Injunction, dated June 29, 2017;
- f) Declaration of Massad Ayoob in Support of Plaintiffs' Motion for Preliminary Injunction, dated May 26, 2017;
- g) Declaration of Stephen Helsley in Support of Plaintiffs' Motion for Preliminary Injunction, dated May 26, 2017;
- h) Declaration of Gary Kleck in Support of Plaintiffs' Motion for Preliminary Injunction, dated May 26, 2017;
- Supplemental Declaration of Gary Kleck in Support of Plaintiffs' Motion for Preliminary Injunction, dated June 9, 2017;
- j) Declaration of Professor John J. Donohue in Support of Defendant Xavier Becerra's Opposition to Plaintiffs' Motion for Preliminary Injunction, dated June 5, 2017;

- k) Declaration of Professor Blake Graham in Support of Defendant Xavier Becerra's Opposition to Plaintiffs' Motion for Preliminary Injunction, dated June 5, 2017;
- Declaration of Professor Daniel W. Webster in Support of Defendant Xavier Becerra's Opposition to Plaintiffs' Motion for Preliminary Injunction, dated June 5, 2017;
- m) NRA Institute for Legislative Action, Armed Citizen Stories,

 https://www.nraila.org/gun-laws/armed-citizen.aspx, last accessed May 28, 2017, and supporting news stories for the incidents obtained through Factiva and Google searches;
- n) Claude Werner, "The Armed Citizen A Five Year Analysis,"

 http://gunssaveslives.net/self-defense/analysis-of-five-years-of-armed-encounters-with-data-tables, accessed January 10, 2014;
- o) News stories on incidents of self-defense with a firearm in the home from Factiva between January 2011 and May 2017;
- p) Freedman, David A., and David H. Kaye, "Reference Guide on Statistics," *Reference Manual on Scientific Evidence* (Washington, D.C.: The National Academies Press, 3rd ed., 2011), pp. 211-302;
- q) Fisher, Franklin M., "Multiple Regression in Legal Proceedings," 80 Columbia Law Review 702 (1980);
- r) Mother Jones: "US Mass Shootings, 1982-2017: Data From Mother Jones' Investigation," updated October 2, 2017,

 http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data, accessed October 2, 2017; "A Guide to Mass Shootings in America," updated October 2, 2017, http://www.motherjones.com/politics/2012/07/mass-shootings-map, accessed October 2, 2017; "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;

- s) 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;
- t) Kleck, Gary, "Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages," 17 Justice Research and Policy 28 (2016);
- u) "Analysis of Recent Mass Shootings," Mayors Against Illegal Guns, September 2013;
- v) "Crime in California 2016," California Department of Justice: Criminal Justice Statistics Center;
- w) "Firearm Violence, 1993-2011," U.S. Department of Justice: Bureau of Justice Statistics, May 2013;
- x) Federal Emergency Management Agency (FEMA): U.S. Fire Administration, Residential and nonresidential building fire and fire loss estimates by property use and cause (2003-2015), https://www.usfa.fema.gov/data/statistics/, accessed September 28, 2017;
- y) U.S. Census Bureau, State Population Totals Tables: 2010-2016, https://www.census.gov/data/tables/2016/demo/popest/state-total.html, accessed September 28, 2017;
- z) Centers for Disease Control and Prevention (CDC): National Center for Health Statistics, *Injury Mortality: United States*, https://data.cdc.gov/NCHS/NCHS-Injury-Mortality-United-States/nt65-c7a7, accessed September 28, 2017;
- aa) National Weather Service, How Dangerous is Lightning?
 http://www.lightningsafety.noaa.gov/odds.shtml, accessed September 28, 2017.

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IV. FINDINGS

A. Number of rounds fired by individuals in self-defense

- 7. Plaintiffs claim the banned "large-capacity magazines" (which are magazines capable of holding more than ten rounds) are commonly used in the home for self-defense. In particular, the Complaint claims, "There is little dispute that magazines having a capacity over 10 rounds are popular for self-defense purposes. [...] Each available round is an additional opportunity to end a threat. That is precisely why millions of Americans choose magazines over ten rounds for self-defense, including in the home."
- 8. Analysis of data from the NRA Institute for Legislative Action, as well as my own study of news reports on incidents of self-defense with a firearm, indicates that it is rare for a person, when using a firearm in self-defense, to fire more than ten rounds. The NRA maintains a database of "Armed Citizen" stories describing private citizens who have successfully defended themselves, or others, using a firearm ("NRA Armed Citizen database"). According to the NRA, the "Armed Citizen" stories "highlight accounts of law-abiding gun owners in America" using their Second Amendment rights to defend self, home and family."² Although the methodology used to compile the NRA Armed Citizen database of stories is not explicitly detailed by the NRA, and the database itself is not readily replicable, the NRA Armed Citizen database was the largest collection of accounts of citizen self-defense compiled by others that I was able to find. In light of the positions taken by the entity compiling the data, I would expect that any selection bias would be in favor of stories that put use of guns in self-defense in the best possible light. In addition to analyzing incidents in the NRA Armed Citizen database (2011 through May 2017), I performed my own systematic, scientific study of news reports on incidents of self-defense with a firearm in the home, covering the same time period.
- 9. My team and I performed an analysis of incidents in the NRA Armed Citizen database that occurred between January 2011 and May 2017. For each incident, the city/county, state, venue (whether the incident occurred on the street, in the home, or elsewhere) and the

Complaint at 47.

NRA Institute for Legislative Action, Armed Citizens, https://www.nraila.org/gun-laws/armed-citizen/, last accessed May 28, 2017.

number of shots fired were tabulated.³ The information was gathered for each incident from both the NRA synopsis and, where available, an additional news story. An additional news story was found for over 95% of the incidents in the NRA Armed Citizen database.

10. According to this analysis of incidents in the NRA Armed Citizen database, defenders fired 2.2 shots on average. Out of 736 incidents, there were two incidents (0.3% of all incidents), in which the defender was reported to have fired more than 10 bullets. In 18.2% of incidents, the defender did not fire any shots, and simply threatened the offender with a gun. For incidents occurring in the home (56% of total), defenders fired an average of 2.1 shots, and fired no shots in 16.1% of incidents.⁴ The table below summarizes these findings:

The following incidents were excluded from the analysis: (1) duplicate incidents, (2) wild animal attacks, and (3) one incident where the supposed victim later pleaded guilty to covering up a murder. When the exact number of shots fired was not specified, we used the average for the most relevant incidents with known number of shots. For example, if the story stated that "shots were fired" this would indicate that at least two shots were fired and thus we used the average number of shots fired in all incidents in which two or more shots were fired and the number of shots was specified.

A separate study of incidents in the NRA Armed Citizen database for an earlier period (the five year period from 1997 through 2001) found similar results. Specifically, this study found that, on average, 2.2 shots were fired by defenders and that in 28% of incidents of armed citizens defending themselves the individuals fired no shots at all. See Claude Werner, "The Armed Citizen — A Five Year Analysis," http://gunssaveslives.net/self-defense/analysis-of-five-years-of-armed-encounters-with-data-tables, accessed January 10, 2014.

Number of Shots Fired in Self-Defense Based on NRA Armed Citizen Incidents in the United States January 2011 - May 2017

Shots Fired by Individual in Self-Defense

	Overall	Incidents in Home
Average Number of Shots Fired	2.2	2.1
Number of Incidents with No Shots Fired	134	66
Percent of Incidents with No Shots Fired	18.2%	16.1%
Number of Incidents with >10 Shots Fired	2	2
Percent of Incidents with >10 Shots Fired	0.3%	0.5%

Notes and Sources:

Data from NRA Armed Citizen database covering 736 incidents (of which 411 were in the home) from January 2011 through May 2017. Excludes duplicate incidents, wild animal attacks and one incident where the supposed victim later pleaded guilty to covering up a murder.

11. We also performed the same analysis of the NRA Armed Citizen database limited to incidents that occurred in the state of California. According to this analysis, defenders in California fired 2.0 shots on average. Out of 47 incidents, there were no incidents in which the defender was reported to have fired more than 10 bullets. In 27.7% of incidents, the defender did not fire any shots, and simply threatened the offender with a gun. For incidents occurring in the home (60% of total), defenders fired an average of 1.9 shots, and fired no shots in 32.1% of incidents. The table below summarizes these findings for California:

Number of Shots Fired in Self-Defense Based on NRA Armed Citizen Incidents in California January 2011 - May 2017

Shots Fired by Individual in Self-Defense

-		
· -	Overall	Incidents in Home
Average Number of Shots Fired	2.0	1.9
Number of Incidents with No Shots Fired	13	9
Percent of Incidents with No Shots Fired	27.7%	32.1%
Number of Incidents with >10 Shots Fired	0	0
Percent of Incidents with >10 Shots Fired	0.0%	0.0%

Notes and Sources:

Data from NRA Armed Citizen database covering 47 incidents in California (of which 28 were in the home) January 2011 through May 2017. Excludes duplicate incidents and wild animal attacks.

- 12. In addition to our analysis of incidents in the NRA Armed Citizen database, we performed a systematic, scientific study of news reports on incidents of self-defense with a firearm in the home, covering the same time period used in our analysis of the NRA Armed Citizen database.
- 13. To identify relevant news stories to include in our analysis, we performed a comprehensive search of published news stories using Factiva, an online news reporting service and archive owned by Dow Jones, Inc. that aggregates news content from nearly 33,000 sources. The search covered the same period used in our analysis of incidents in the NRA Armed Citizen database (January 2011 to May 2017). The search identified all stories that contained the following keywords in the headline or lead paragraph: one or more words from "gun," "shot," "shoot," "fire," or "arm" (including variations on these keywords, such as "shooting" or "armed"), plus one or more words from "broke in," "break in," "broken into," "breaking into," "burglar," "intruder," or "invader" (including variations on these keywords) and one or more

words from "home," "apartment," or "property" (including variations on these keywords).⁵ The region for the Factiva search was set to "United States." The search returned approximately 35,000 stories for the period January 2011 to May 2017.⁶

- 14. Using a random number generator, a random sample of 200 stories was selected for each calendar year, yielding 1,400 stories in total. These 1,400 stories were reviewed to identify those stories that were relevant to the analysis, *i.e.*, incidents of self-defense with a firearm in or near the home. This methodology yielded a random selection of 200 news stories describing incidents of self-defense with a firearm in the home out of a population of approximately 4,800 relevant stories. Thus, we found that out of the over 70 million news stories aggregated by Factiva between January 2011 and May 2017, approximately 4,800 news stories were on incidents of self-defense with a firearm in the home. We analyzed a random selection of 200 of these stories.
- 15. For each news story, the city/county, state and number of shots fired were tabulated. When tabulating the number of shots fired, we used the same methodology as that used to analyze stories in the NRA Armed Citizen database. We then identified other stories describing the same incident on Factiva based on the date, location and other identifying information, and recorded the number of times that each incident was covered by Factiva news stories.
- 16. According to our study of a random selection from approximately 4,800 relevant stories on Factiva describing incidents of self-defense with a firearm in the home, the average number of shots fired per story was 2.61. This is not a measure of the average shots fired *per*

The precise search string used was: (gun* or shot* or shoot* or fire* or arm*) and ("broke in" or "break in" or "broken into" or "breaking into" or burglar* or intrud* or inva*) and (home* or "apartment" or "property"). An asterisk denotes a wildcard, meaning the search includes words which have any letters in place of the asterisk. For example, a search for shoot* would return results including "shoots," "shooter" and "shooting." The search excluded duplicate stories classified as "similar" on Factiva.

We compared a sample of stories in the NRA Armed Citizen database to the Factiva search and found that the Factiva search contained all of the NRA stories with the exception of those published by sources not tracked by Factiva.

⁷ The random numbers were generated by sampling with replacement.

When the exact number of shots fired was not specified, we used the average for the most relevant incidents with known number of shots. For example, if the story stated that "shots were fired" this would indicate that at least two shots were fired and thus we used the average number of shots fired in all incidents in which two or more shots were fired and the number of shots was specified.

incident, however, because the number of stories covering an incident varies, and the variation is not independent of the number of shots fired. We found that there was a statistically significant relationship between the number of shots fired in an incident and the number of news stories covering an incident. We found that on average the more shots fired in a defensive gun use incident, the greater the number of stories covering an incident. For example, as shown in the table below, we found that incidents in Factiva news stories with zero shots fired were covered on average by 1.8 news stories, while incidents with six or more shots fired were covered on average by 10.4 different news stories.

Average Number of News Stories by Number of Shots Fired In Factiva Stories on Incidents of Self-Defense with a Firearm January 2011 - May 2017

Number of Shots Fired By Defender	Average Number of News Stories	
0	1.8	
1 to 2	2.8	
3 to 5	3.8	
6 or more	10.4	

Notes and Sources:

Based on news stories describing defensive gun use in a random selection of Factiva stories between 2011 and May 2017 using the search string: (gun* or shot* or shoot* or fire* or arm*) and ("broke in" or "break in" or "broken into" or "breaking into" or burglar* or intrud* or inva*) and (home* or "apartment" or "property"), with region set to "United States" and excluding duplicate stories classified as "similar" on Factiva. Methodology for tabulation of shots fired as per footnote 8.

Based on a linear regression of the number of news stories as a function of the number of shots fired, the results were statistically significant at the 1% level (more stringent than the 5% level commonly used by academics and accepted by courts. See for example, Freedman, David A., and David H. Kaye, "Reference Guide on Statistics," Reference Manual on Scientific Evidence (Washington, D.C.: The National Academies Press, 3rd ed., 2011), pp. 211-302, and Fisher, Franklin M., "Multiple Regression in Legal Proceedings," 80 Columbia Law Review 702 (1980).)

- 17. After adjusting for this disparity in news coverage, we find that the average number of shots fired per incident covered is 2.34. Note that this adjustment does not take into account the fact that some defensive gun use incidents may not be picked up by *any* news story. Given the observed relationship that there are more news stories when there are more shots fired, one would expect that the incidents that are not written about would on average have fewer shots than those with news stories. Therefore, the expectation is that these results, even after the adjustment, are biased upward (*i.e.*, estimating too high an average number of shots and underestimating the percent of incidents in which no shots were fired).
- 18. As shown in the table below, according to the study of Factiva news stories, in 11.6% of incidents the defender did not fire any shots, and simply threatened the offender with a gun. In 97.3% of incidents the defender fired 5 or fewer shots. There were no incidents where the defender was reported to have fired more than 10 bullets.

$$\frac{\sum_{i=1}^{n} \left(Shots \ Fired_i \times \frac{R_i}{C_i} \right)}{\sum_{i=1}^{n} \left(\frac{R_i}{C_i} \right)}$$

where:

n = random selection of news stories on incidents of self-defense with a firearm in the home

 R_t = number of search results on Factiva in the calendar year of incident t

 C_i = number of news stories covering incident i

The adjustment reflects the probability that a news story on a particular incident would be selected at random from the total population of news stories on incidents of self-defense with a firearm in the home. The formula used for the adjustment is:

Number of Shots Fired in Self-Defense in the Home Based on Random Selection of News Stories in Factiva January 2011 - May 2017

Estimated population of news reports in Factiva on self-defense with a firearm in the home	4,841
Random selection of news reports	200
Average Number of Shots Fired Median Number of Shots Fired	2.34 2.03
Number of Incidents with No Shots Fired	23
Percent of Incidents with No Shots Fired	11.6%
Number of Incidents with ≤5 Shots Fired	195
Percent of Incidents with ≤5 Shots Fired	97.3%
Number of Incidents with >10 Shots Fired	. 0
Percent of Incidents with >10 Shots Fired	0.0%

Notes and Sources:

Based on news stories describing defensive gun use in a random selection of Factiva stories between 2011 and May 2017 using the search string: (gun* or shot* or shoot* or fire* or arm*) and ("broke in" or "break in" or "broken into" or "breaking into" or burglar* or intrud* or inva*) and (home* or "apartment" or "property"), with region set to "United States" and excluding duplicate stories classified as "similar" on Factiva. Methodology for tabulation of shots fired as per footnote 8. Number of incidents probability-weighted as per footnote 10.

19. In sum, an analysis of incidents in the NRA Armed Citizen database, as well as our own study of a random sample from approximately 4,800 news stories describing incidents of self-defense with a firearm, indicates that it is rare for a person, when using a firearm in self-defense, to fire more than ten rounds.

B. Mass shootings

- 1. Use of large-capacity magazines in mass shootings.
- 20. We analyzed two sources detailing historical mass shootings: 1) Mother Jones, "US Mass Shootings, 1982-2017: Data From Mother Jones' Investigation," and 2) the Citizens Crime Commission of New York City, "Mayhem Multiplied: Mass Shooters and Assault Weapons" and "Mass Shooting Incidents in America (1984-2012)."
- 21. 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 91 mass shootings from 1982 to October 2017. Mother Jones includes mass shootings in which a shooter killed four or more people in one incident in a public place and excludes crimes involving armed robbery or gang violence. Starting in January 2013, Mother Jones changed its definition of a mass shooting to include instances when a shooter killed three or more people, consistent with a change in the federal definition of a mass shooting. The Citizens Crime Commission data that we analyzed covers 73 mass shootings from 1984 to June 2016. Citizens Crime Commission includes mass shootings in which a shooter killed four or more people in a public place and was unrelated to another crime (such as robbery or domestic violence). We combined the data from

[&]quot;US Mass Shootings, 1982-2017: Data From Mother Jones' Investigation," *Mother Jones*, updated October 2, 2017, http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data, accessed October 2, 2017.

[&]quot;Mayhem Multiplied: Mass Shooters and Assault Weapons," Citizens Crime Commission of New York City, 2016.

[&]quot;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.

[&]quot;A Guide to Mass Shootings in America," Mother Jones, updated October 2, 2017, http://www.motherjones.com/politics/2012/07/mass-shootings-map. See also, "What Exactly is a Mass Shooting," Mother Jones, August 14, 2012. http://www.motherjones.com/mojo/2012/08/what-is-a-mass-shooting.

[&]quot;A Guide to Mass Shootings in America," *Mother Jones*, updated October 2, 2017, http://www.motherjones.com/politics/2012/07/mass-shootings-map. Note this analysis of the Mother Jones data may not match other analyses because Mother Jones periodically updates its historical data.

The Mother Jones data includes three incidents involving two shooters (Columbine High School, San Bernardino and Westside Middle School).

Note that the Citizens Crime Commission data are obtained from two sources. The first source covers 72 mass shootings from 1984 to 2016, in which a shooter killed four or more people in a public place and was unrelated

both sources and searched news stories on each mass shooting to obtain data on shots fired where available.¹⁷ See attached Appendix B for a summary of the combined data.

- 22. Based on the combined data we found that large-capacity magazines (those with a capacity to hold more than 10 rounds of ammunition) are often used in mass shootings. Magazine capacity is known in 83 out of the 96 mass shootings (86%) 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, out of 83 mass shootings with known magazine capacity, 54 involved large-capacity magazines or 65% of mass shootings with known magazine capacity. Even assuming the mass shootings with unknown magazine capacity magazines, the majority of mass shootings involved large capacity magazines (*i.e.*, 54 out of 96 mass shootings or 56%).
- 23. The combined data on mass shootings 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. In particular, in mass shootings that involved use of large-capacity magazine guns, the average number of shots fired was 72.¹⁸
 - 2. Casualties in mass shootings with large-capacity magazine guns compared with other mass shootings
- 24. Based on our analysis of the combined mass shootings data in the past 35 years, casualties were higher in the mass shootings that involved large-capacity magazine guns than in

to another crime (such as robbery or domestic violence). See "Mayhem Multiplied: Mass Shooters and Assault Weapons," Citizens Crime Commission of New York City, 2016.

The second source covers 33 mass shootings from 1984 to 2012, in which a shooter killed four or more people and the gun used by the shooter had a magazine capacity greater than ten. All but one of the mass shooting incidents in the second source are covered by the first, but the combination of the two sources provides additional detail, such as the number of shots fired. See "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.

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The October 1, 2017 Las Vegas Strip mass shooting occurred a few days before the filing of this report and thus, any information or statistics on this mass shooting are preliminary.

There were 36 mass shootings in which the magazine used was known to be a large capacity magazine and the number of shots fired were known. The October 1, 2017 Las Vegas Strip mass shooting occurred a few days before the filing of this report. Details on the number of shots fired are still preliminary and thus are not included in this analysis. (News stories indicate hundreds of shots were fired.)

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 9 for those without.¹⁹

3. Percent of mass shooters' guns legally obtained

25. The combined data on mass shootings indicates that the majority of guns used in mass shootings were obtained legally.²⁰ According to the data, shooters in at least 71% of mass shootings in the past 35 years obtained their guns legally (at least 68 of the 96 mass shootings) and at least 76% of the guns used in these 96 mass shootings were obtained legally (at least 170 of the 224 guns).²¹

C. Rate in California that victims use a firearm in self-defense in the home

- 26. Plaintiffs claim the banned large-capacity magazines are commonly used in the home for self-defense.²² We estimated how common it is in California for a person in their home to defend themselves with a gun against an armed robber.
- 27. Using California-specific crime data collected by the California Department of Justice, ²³ we estimated the number of residential robberies committed with a firearm. This estimate was based on the average annual rate for the six-year period between 2011-2016 using

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An analysis of the mass shootings detailed in an article by Plaintiffs' expert 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. See Kleck, Gary, "Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages," 17 Justice Research and Policy 28 (2016).

A 2013 study by Mayors Against Illegal Guns found that when mass shootings involved assault weapons or high capacity magazines, the number of deaths was higher. The study was based on data from the FBI and media reports covering the period January 2009 through January 2013. The study found that mass shootings where assault weapons or high-capacity magazines were used resulted in an average of 14.4 people shot and 7.8 deaths versus other mass shootings that resulted in 5.7 people shot and 4.8 deaths. See "Analysis of Recent Mass Shootings," Mayors Against Illegal Guns, September 2013.

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

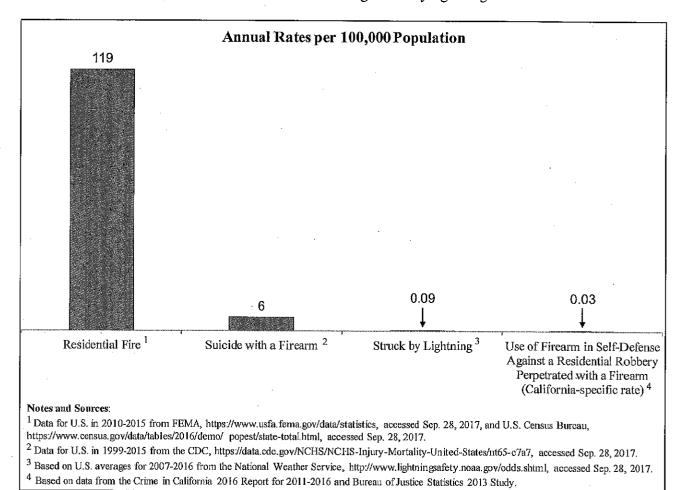
Mother Jones did not indicate whether the guns were obtained legally for 10% of mass shootings (9 out of the 91 mass shootings covered by Mother Jones).

²² Complaint at 47.

²³ "Crime in California 2016," California Department of Justice: Criminal Justice Statistics Center.

California annual data on the number of residential robberies adjusted for the percentage of robberies committed with a firearm in California.

- 28. To this California estimate, the national rate from the Bureau of Justice Statistics at which victims in nonfatal violent crimes used a firearm in self-defense was applied to determine an annual rate that victims use a firearm in self-defense in a residential robbery perpetrated with a firearm.²⁴ We estimated an annual rate of 0.03 instances per 100,000 persons in California in which a victim used a firearm in self-defense in a residential robbery perpetrated with a firearm (0.3 incidents per million people or less than one in a million).
- 29. The chart below illustrates how this rate compares with annual rates of other events: residential fires, suicide with a firearm and being struck by lightning.



²⁴ This rate is obtained from "Firearm Violence, 1993-2011," U.S. Department of Justice: Bureau of Justice Statistics, May 2013, p. 12, Table 11.

The chart shows that the annual rate of a person being struck by lightning is around one in a million. The rate in California of a victim using a firearm in self-defense in an armed residential robbery is three times less than being struck by lightning. Further, the chart shows when comparing a person in California's odds of using a firearm in self-defense in an armed residential robbery to other risks, the person is over 200 times more likely to commit suicide with a firearm, and almost 4,000 times more likely to have a fire in their home.

Respectfully submitted,

Lucy P. Allen

October 6, 2017

New York, NY

NERA ECONOMIC CONSULTING

Lucy P. Allen Managing Director

NERA Economic Consulting 1166 Avenue of the Americas New York, New York 10036 Tel: +1 212 345 5913 Fax: +1 212 345 4650 lucy.allen@nera.com www.nera.com

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

National Economic Research Associates, Inc.

<u>Managing Director</u>. Responsible for economic analysis in the areas of securities, finance and environmental and tort economics.

Senior Vice President (2003-2016).

Vice President (1999-2003).

Senior Consultant (1994-1999).

1992-1993

Council of Economic Advisers, Executive Office of the President

Staff Economist. 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 *Economic Report of the President*, 1993. Working Group member of the President's

National Health Care Reform Task Force.

1986-1988 1983-1984

Ayers, Whitmore & Company (General Management Consultants)

Senior Associate. 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.

Lucy P. Allen

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: 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.

Lucy P. Allen

"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)

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. and Virginia Duncan, 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. Lending Tree, Inc.*, 2017

Deposition Testimony and Expert Report before the Supreme Court of the State of New York, County of New York in *Iroquois Master Fund Ltd.*, et al. v. Hyperdynamics Corporation, 2016.

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.

Expert Report before the United States District Court for the Northern District of Georgia, Atlanta Division, in *In re Suntrust Banks, Inc. ERISA Litigation*, 2016.

Deposition Testimony and Expert Report before the Superior Court of New Jersey, Union County, in *Syngenta Crop Protection, Inc. v. Insurance Company of North America et al.*, 2015.

Declaration before the United States District Court Northern District of Georgia, in John Noble, et al. v. Premiere Global Services, Inc., et al., 2015.

Deposition Testimony and Expert Report before the United States District Court Central District of California, in *Amanda Sateriale, et al. v. RJ Reynolds Tobacco Co. et al.*, 2015.

Rebuttal Report and Expert Report in the United States of America before the Securities and Exchange Commission in *Houston American Energy Corp.*, et al., 2014.

Testimony, 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.*, 2014.

Deposition Testimony and Expert Report before the United States District Court for the Eastern District of Pennsylvania in *Power Restoration International, Inc. v. PepsiCo, Inc., Bottling Group, LLC, and Frito-Lay Trading Company (Europe), Gmbh*, 2014.

Deposition Testimony and Expert Reports before the United States District Court Southern District of New York in *In re Lower Manhattan Disaster Site Litigation*, 2014.

Deposition Testimony and Expert Report before the United States District Court Southern District of Florida in Atul Kumar Sood, et al. v. Catalyst Pharmaceutical Partners Inc., et al., 2014.

Declaration before the Superior Court of Gwinnett County State of Georgia in City of Riviera Beach General Employees Retirement System, et al. v. Aaron's Inc., et al., Norfolk County Retirement System, et al. v. Aaron's Inc., et al., 2014.

Deposition Testimony, Surrebuttal Report and Expert Report before the United States District Court Middle District of Tennessee Nashville Division in Garden City Employees' Retirement System and Central States, Southeast and Southwest Areas Pension Fund, et al. v. Psychiatric Solutions, Inc., et al., 2014.

Declaration before the United States District Court Northern District of California San Jose Division in Fyock, et al. v. The City of Sunnyvale, et al., 2014.

Deposition Testimony and Expert Report before the United States District Court for the District of Maryland (Northern Division) in Kolbe, et al. v. O'Malley, et al., 2014.

Declaration before the United States District Court Northern District of California in San Francisco Veteran Police Officers Association, et al. v. The City and County of San Francisco, et al., 2014.

Testimony and Declaration before the United States Bankruptcy Court Southern District of New York in *In re Residential Capital, LLC, et al.*, 2013.

Deposition Testimony and Expert Report before the United States District Court for the Eastern District of Michigan Southern Division in *Timothy Hennigan, Aaron McHenry, and Christopher Cocks, et al. v. General Electric Company*, 2013.

Declaration before the United States District Court for the Western District of New York in New York State Rifle and Pistol Association, Inc., et al. v. Cuomo, et al., 2013.

Expert Report before the United States District Court for the District of New Jersey in Charles Stanziale, Jr. v. PepsiCo, Inc., et al., 2013.

Deposition Testimony before the United States District Court for the Southern District of New York, *In re Winstar Communications Securities Litigation*, 2013.

Supplemental Report before the United States District Court for the District of New Jersey in *Howmedica Osteonics Corp. v. Zimmer, Inc., et al.*, 2013.

Expert Report before the United States District Court of New Jersey in *Boris Goldenberg, et al. v. Indel, Inc., et al.*, 2013.

Deposition Testimony and Expert Report before the United States Court of Federal Claims in Starr International Company, Inc. v. the United States of America, 2013.

Expert Report before the Circuit Court for the County of Fairfax in *John DeGroote as liquidating trustee for and on behalf of the BearingPoint, Inc. Liquidating Trust v. F. Edwin Harbach, et al.*, 2013.

Combined Mass Shootings Data 1982 - October 2017 Appendix B

				-	Large			Total		Gun(s)	Offenders
					Cap.	,	•	Fatalities &	Shots	Obtained	Number o
'	Case	Location	Date	Source	Mag.?	Fatalities b	Injuries	b Injuries	Fired	Legally?	Guns
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	6	(10)	(11)
ï	Las Vegas Strip	Las Vegas, NV	10/1/2017	MJ	Yes	p 65	527 d	286 d	P	Yes d	23 d
2.	San Francisco UPS	San Francisco, CA	6/14/2017	MJ	Yes	m	. 2	5	: : :	No	2
3.	Pennsylvania Supermarket	Tunkhannock, PA	6/7/2017	MU	No	m	0	် က ်	59 e	•	2
4.	Fiamma Workplace	Orlando, FL	6/5/2017	MI		'n	O	\$. d		
νή.	Ohio Nursing Home	Kirkersville, OH	5/12/2017	MJ	•	. m	0	(C)	: 1 : 1 : .	t	2
9	Fresno Downtown	Fresno, CA	4/18/2017	MJ	, oN	m	. 0	m :	16 f	. 1	₩.
7.	Fort Lauderdale Aurport	Fort Lauderdale, FL	1/6/2017	MJ	•	S	9		15 8	Yes	-
∞.	Cascade Mall	Burlington, WA	9/23/2016	WI		: vo	. •	S			н
6	Baton Rouge Police	Baton Rouge, LA	7/17/2016	MI	Yes	်က က	m	9	43 h		ĸ
10.	Dallas Police	Dallas, TX	7/7/2016.	MJ	Yes	'n	11	16	ī	Yes	ო
111.	Orlando Nightclub	Orlando, FL	6/12/2016	MJ/CC	Yes	49/50	53	102/103	110^{-1}	Yes	. 7
12.	Excel Industries	Hesston, KS	2/25/2016	MJ	Yes	m	4	17		Yes	- 61
13.	Kalamazoo	Kalamazoo County, MI	2/20/2016	MJ	1	9	7	∞	1 1	Yes	. ===
14.	San Bernardino	San Bernardino, CA	12/2/2015	MJ/CC	Yes	14/16	21	35/37	$150^{\hat{j}}$	Yes	4
15.	Planned Parenthood Clinic	Colorado Springs, CO	11/27/2015	M	•	m	6	12	. 1		н
16.	Colorado Springs	Colorado Springs, CO	10/31/2015	MJ	Yes	ſΩ	0	en.	ı	Yes	m
17.	Umpqua Community College	Roseburg, OR	10/1/2015	MJ/CC	Yes	9/10	6	18/19	•	Yes	9
18.	Chattanooga Military Center	Chattanooga, TN	7/16/2015	MJ/CC	Yes	9/5	2/3	6/L	ı	Yes	tn ,
. 19.	Charleston Church	Charleston, SC	6/17/2015	MJ/CC	Yes	6	, · .	10	J.	Yes	T.
20.	Trestle Trail Bridge	Menasha, WI	6/11/2015	MJ		. m		4	1	Yes	. 7
21.	Marysville High School	Marysville, WA	10/24/2014	MJ/CC	Yes	ે જ	. 	9		Stolen	
22.	Isla Vista	Santa Barbara, CA	5/23/2014	MJ	Yes	9	13	19	50 k	Yes	en
23.	Fort Hood	Fort Hood, TX	4/3/2014	M		m	12	15		Yes	.
24.	Alturas Tribal	Alturas, CA	2/20/2014	MJ	1	4	7	. 9			2
25.	Washington Navy Yard	Washington, D.C.	9/16/2013	MJ/CC	׎	12/13	2/8	20	. 1	Yes	7
17-cv-	17-cv-1017-BEN-JLB			С	Page 1 of 5				, , o	Exhibit 1	
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Combined Mass Shootings Data 1982 - October 2017 Appendix B

				Large			Total		Gun(s)	Offender
				Cap.	æ	2-	Fatalities &	Shots	Obtained	Number (
Case	Location	Date	Source	Mag.?	Fatalities	Injuries	Injuries	Fired	Legally?	Gnus
(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(11)
26. Hialeah	Hialeah, FL	7/26/2013	MJ/CC	Yes	7		7	101	Yes	
27. Santa Monica	Santa Monica, CA	6/7/2013	MI/CC	Yes	9	3/4	9/10	70 m	Yes	. 5
28. Federal Way	Federal Way, WA	4/21/2013	MJ	· •	ν.	, 0	: •		Yes	2
29. Upstate New York	Herkimer County, NY	3/13/2013	MJ		. ' C	7		•	Yes	I
30. Newtown School	Newtown, CT	12/14/2012	MJ/CC	Yes	28	2	30	154	Stolen	4/3
31. Accent Signage Systems	Minneapolis, MN	9/27/2012	MJ/CC	Yes	7	1/2	6/8	46	Yes	
32. Sikh Temple	Oak Creek, WI	8/5/2012	MJ/CC	Yes		m	10	•	Yes	
33. Aurora Movie Theater	Aurora, CO	7/20/2012	MJ/CC	Yes	12	20,	85 85 87	08	Yes	4
34. Seattle Café	Seattle, WA	5/30/2012	MJ/CC	No	· · · · ·		7	. I	Yes	7
35. Oikos University	Oakland, CA	4/2/2012	MJ/CC	No No	7	m	10		Yes	
36. Su Jung Health Sauna	Norcross, GA	2/22/2012	MJ	1	S	0	'		Yes	1
37. Seal Beach	Seal Beach, CA	10/14/2011	MJ/CC	No	∞	.	6		Yes	. m
38. IHOP	Carson City, NV	9/6/2011	MJ/CC	Yes	50	7	12	· .	Yes	m
39. Grand Rapids	Grand Rapids, MI	7/7/2011		Yes	∞	7	10	10		· — .
40. Tucson	Tucson, AZ	1/8/2011	MJ/CC	Yes	9	13	19	33	Yes	. =
41. Hartford Beer Distributor	Manchester, CT	8/3/2010	MJ/CC	Yes	6	7	11	11	Yes	7
42. Yoyito Café	Hialeah, FL	6/6/2010	: : : 8	S N	. v	ເຕ :	. 60	ц 6	:	
43. Coffee Shop Police	Parkland, WA	11/29/2009	MJ/CC	No	4/5	1/0	ν ο .		Stolen	2
44. Fort Hood	Fort Hood, TX	11/5/2009	MJ/CC	Yes	13	30/32	43/45	214	Yes	
45. Binghamton	Binghamton, NY	4/3/2009	MJ/CC	Yes	14	4	18	66	Yes	7
46. Carthage Nursing Home	Carthage, NC	3/29/2009	MJ/CC	No	: ∞	3/2	11/10	•	Yes	. 7
47. Atlantis Plastics	Henderson, KY	6/25/2008	MJ/CC	S S	9	-	7		Yes	
48. Northern Illinois University	DeKalb, IL	2/14/2008	MJ/CC.	Yes	9/9	21	26/27	54	Yes	4
49. Kirkwood City Council	Kirkwood, MO	2/7/2008	MI/CC	Š	9	2	∞	. 1	Stolen	. 7
50. Westroads Mall	Omaha, NE	12/5/2007	MJ/CC	Yes	6	4/5	13/14	14	Stolen	.
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Appendix B
Combined Mass Shootings Data
1982 – October 2017

				Large			Total		Gun(s)	Offenders
Case	Location	Date	Source	Cap. Mag.?	^b Fatalities	b Injuries	Fatalities & Injuries	Shots Fired	Obtained Legally? ^c	Number of Guns
(1)	(2)	(3)	4	(S)	(9)	6	(8)	6	(10)	(11)
51. Crandon	Crandon, WI	10/7/2007	MJ/CC	Yes	<i>L</i> /9	H	2//8	30 0	Yes	-
52. Virginia Tech	Blacksburg, VA	4/16/2007	MJ/CC	Yes.	32/33	23/17	55/50	176	Yes	2
53. Trolley Square	Salt Lake City, UT	2/12/2007	MJ/CC	°Z	9	4	10	. I	No	2
54. Amish School	Lancaster County, PA	10/2/2006	MJ/CC	N	9		11		Yes	် က
55. Capitol Hill	Seattle, WA	3/25/2006	MJ/CC	Yes	7	7	6		Yes	4
56. Goleta Postal	Goleta, CA	1/30/2006	MJ/CC	Yes	∞	0	∞	. r	Yes	.
57. Red Lake .	Red Lake, MN	3/21/2005	MJ/CC	% N	10	9/9	15/16		Stolen	
58. Living Church of God	Brookfield, WI	3/12/2005	MJ/CC	Yes	2//8	4	11/12		Yes	
59. Damageplan Show	Columbus, OH	12/8/2004	MJ/CC	No	5	7/3	12/8	15 p	Yes	
60. Hunting Camp	Meteor, WI	11/21/2004	22	Yes	9	en en	6	70		
61. Windy City Warehouse	Chicago, IL	8/27/2003	ည	No	_		7	•		-1
62. Lockheed Martin	Meridian, MS	7/8/2003	MJ/CC	Yes	_	∞	15		Yes	· 10
63. Navistar	Melrose Park, IL	2/5/2001	MJ/CC	Yes	ν.	4	6	i	Yes	4
64. Wakefield	Wakefield, MA	12/26/2000	MJ/CC	Yes	7	0	7	37	Yes	3
65. Hotel	Tampa, FL	12/30/1999	MJ/CC	No	· ທ	m	∞	•	Yes	
66. Xerox	Honolulu, HI	11/2/1999	MJ/CC	Yes	7	0	7	28	Yes	H
67. Wedgwood Baptist Church	Fort Worth, TX	6/12/16	MJ/CC	Yes.	∞	7	15	30	Yes	2
68. Atlanta Day Trading	Atlanta, GA	7/29/1999	MJ		6	13	. 22		Yes	4
69. Columbine High School	Littleton, CO	4/20/1999	MI/CC	Yes	13/15	24	37/39	188	No	4
70. Thurston High School	Springfield, OR	5/21/1998	MJ/CC	Yes	4	25	29	. 50	No	ю
71. Westside Middle School	Jonesboro, AR	3/24/1998	MJ/CC	Yes	Ŋ	10	15	. 56	Stolen	9/10
72. Connecticut Lottery	Newington, CT	3/6/1998	MJ/CC	Yes	· · · ·	1/0	9/9	'va	Yes	H
73. Caltrans Maintenance Yard	Orange, CA	12/18/1997	MJ/CC	Yes	Ś	7	7	144	. Yes	
74. R.E. Phelon Company	Aiken, SC	9/15/1997	MJ/CC	No	4	m	7	•	No	
75. Fort Lauderdale	Fort Lauderdale, FL	2/9/1996	MJ/CC	S N	9	7	7	14 9	Yes	2

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Exhibit 1 Page 00030

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Exhibit 1 Page 00031

22.6

9.2

2.9

6.3

Non-Large Capacity Magazine Average

Appendix B Combined Mass Shootings Data 1982 – October 2017

				Large			Total		Gun(s)	Offend
-				Cap.	نو	-	Fatalities &	Shots	Obtained	Numbe
Case	Location	Date	Source	Mag.?	Fatalities	Injuries	Injuries	Fired	Legally?	Gun
(f)	(2)	(3)	(4)	(S)	(9)	(3)	(8)	(6)	(10)	(11)
76. Piper Technical Center	Los Angeles, CA	2661/61//	သ	Yes	4	0	4	I	1	
77. Walter Rossler Company	Corpus Christi, TX	4/3/1995	MJ/CC	8 N	9	0	9	 I	Yes	
78. Air Force Base	Fairchild Base, WA	6/20/1994	MJ/CC	Yes	2/6	. 23	28/29	50 T	Yes	
79. Chuck E. Cheese	Aurora, CO	12/14/1993	MJ/CC	°N	4		'	•	1	
80. Long Island Railroad	Garden City, NY	12/7/1993	MJ/CC	Yes	9	19	25	30	Yes	
81. Luigi's Restaurant	Fayetteville, NC	8/6/1993	MJ/CC	%	₹.	∞ .	12	1	Yes	:
82. 101 California Street	San Francisco, CA	7/1/1993	MJ/CC	Yes	6	. 9	15	75	No	
83. Watkins Glen	Watkins Glen, NY	10/15/1992	MJ/CC	°Z	'	0	'n		Yes	
84. Lindhurst High School	Olivehurst, CA	5/1/1992	MJ/CC	No	4	10	14		Yes	
85. Royal Oak Postal	Royal Oak, MI	11/14/1991	MJ/CC	No	\$	5/4	10/9	•	Yes	
86. University of Iowa	Iowa City, IA	11/1/1991	MJ/CC	No No	9		7		Yes	
87. Luby's Cafeteria	Killeen, TX	10/16/1991	MJ/CC	Yes	24	70	44	100	Yes	
88. GMAC	Jacksonville, FL	6/18/1990	MJ/CC	Yes	10	4	14	14	Yes	
89. Standard Gravure Corporation	n Louisville, KY	9/14/1989	MJ/CC	Yes	. Ο	12	21	21	Yes	
90. Stockton Schoolyard	Stockton, CA	6861//1/1	MJ/CC	Yes	9	29/30	35/36	106	Yes	
91. ESL	Sunnyvale, CA	2/16/1988	MI/CC	No	_	4	11		Yes	
92. Shopping Centers	Palm Bay, FL	4/23/1987	MJ/CC	Yes	9	14/10	20/16	40 s	Yes	.,
93. United States Postal Service	Edmond, OK	8/20/1986	MJ/CC	No	15	9	21	. 1	Yes	
94. San Ysidro McDonald's	San Ysidro, CA	7/18/1984	MI/CC	Yes	22	19	41	257	Yes	***
95. Dallas Nightclub	Dallas, TX	6/29/1984	MI/CC	Yes	9		7	•	No	
96. Welding Shop	Miami, FL	8/20/1982	MJ	N_0	∞	en .	111	•	Yes	
		Large Caps	Large Capacity Magazine Average	ne Average	10.3	20.0	30.2	71.5		

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Combined Mass Shootings Data 1982 – October 2017 Appendix B

				Large			Total		Gun(s)	Offender
				Cap.		•	Fatalities &	Shots	Obtained	Number
Case	Location	Date	Source	Mag.?	Fatalities	Injuries	Injuries	Fired	${ m Legally?}^{ m c}$	Guns
(1)	(2)	(6)	(4)	(2)		0	(8)	6)	(10)	(11)

Notes and Sources:

Data from Mother Jones ("US Mass Shootings, 1982-2017: Data from Mother Jones' Investigation," accessed June 1, 2017) and the Citizens Crime Commission of New York City ("Mayhem MI 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 MI 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). are listed first. Except where noted, all data on shots fired obtained from CC.

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

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

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

The October 1, 2017 Las Vegas Strip mass shooting occurred a few days before the filing of this report and thus, any information and statistics on this mass shooting are preliminary.

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

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

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

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

i Shots fired from: "We Thought It Was Part of the Music": How the Pulse Nightclub Massacre Unfolded in Orlando," The Telegraph, June 13, 2016. J Shots fired from: "San Bernardino Suspects Left Trail of Clues, but No Clear Motive," New York Times, December 3, 2015.

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

¹ Shots fired from: "Shooter Set \$10,000 on Fire in Hialeah Shooting Rampage," *NBC News* , July 28, 2013.

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

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

P Shots fired from: "National Briefing | Midwest: Ohio: Shooter At Club May Have Reloaded," New York Times, January 15, 2005. O Shots fired from: "Small Town Grieves for 6, and the Killer," Los Angeles Times, October 9, 2007.

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

^r 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.

⁸ Shots fired from: "6 Dead in Florida Sniper Siege; Police Seize Suspect in Massacre," Chicago Tribune, April 25, 1987.

DECLARATION OF SERVICE BY E-MAIL and U.S. Mail

Case Name:

Duncan, Virginia et al v. Xavier Becerra

No.:

17-cv-1017-BEN-JLB

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter. I am familiar with the business practice at the Office of the Attorney General for collection and processing of correspondence for mailing with the United States Postal Service. In accordance with that practice, correspondence placed in the internal mail collection system at the Office of the Attorney General is deposited with the United States Postal Service with postage thereon fully prepaid that same day in the ordinary course of business.

On October 6, 2017, I served the attached EXPERT REPORT OF LUCY P. ALLEN by transmitting a true copy via electronic mail. In addition, I placed a true copy thereof enclosed in a sealed envelope, in the internal mail system of the Office of the Attorney General, addressed as follows:

C. D. Michel
Michel & Associates, P.C.
180 E. Ocean Boulevard, Suite 200
Long Beach, CA 90802
E-mail Address:
CMichel@michellawyers.com

Erin E. Murphy
Kirkland & Ellis LLP
655 15th Street N.W.
Washington D.C. 20005
E-mail Address;
erin.murphy@kirkland.com

Anna Barvir
Michel & Associates, P.C.
180 East Ocean Blvd., Suite 200
Long Beach CA 90802-4079
E-mail Address:
abarvir@michellawyers.com

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on October 6, 2017, at Sacramento, California.

Chris McCartney

Declarant

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Exhibit 2

1	XAVIER BECERRA	
2	Attorney General of California TAMAR PACHTER	•
3	Supervising Deputy Attorney General NELSON R. RICHARDS	
4	Anthony P. O'Brien Deputy Attorneys General ALEXANDRA ROBERT GORDON	
5	Deputy Attorney General	
6	State Bar No. 207650 455 Golden Gate Avenue, Suite 11000	
7	455 Golden Gate Avenue, Suite 11000 San Francisco, CA 94102-7004 Telephone: (415) 703-5509 Fax: (415) 703-5480	
8	I E-mail:	
9	Alexandra.RobertGordon@doj.ca.gov Attorneys for Defendant Attorney General Xavier Becerra	•
10	Anorney General Xavier Becerra	
11	IN THE UNITED STAT	TES DISTRICT COURT
12	FOR THE SOUTHERN DI	STRICT OF CALIFORNIA
13		
14		
15	VIRGINIA DUNCAN, et al.,	17-cv-1017-BEN-JLB
16	Plaintiffs,	
17	V.	EXPERT REBUTTAL REPORT
18		OF JOHN J. DONOHUE
19	XAVIER BECERRA, in his official	
	capacity as Attorney General of the	Judge: Hon. Roger T. Benitez
20	XAVIER BECERRA, in his official capacity as Attorney General of the State of California, et al.,	Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21	capacity as Attorney General of the State of California, et al., Defendants.	Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21 22		Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21		Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21222324		Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21 22 23		Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21222324		Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21 22 23 24 25		Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017
21 22 23 24 25 26	Defendants.	
21 22 23 24 25 26 27	Defendants.	Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017 HN J. DONOHUE (17-cv-1017-BEN-JLB)

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Expert Rebuttal Report of John J. Donohue

Duncan v. Becerra, United States District Court (S.D. Cal.), Case No.: 17CV1017 BEN JLB November 2, 2017

BACKGROUND AND QUALIFICATIONS

- 1. I, John J. Donohue, am the C. Wendell and Edith M. Carlsmith Professor of Law at Stanford Law School. After earning a law degree from Harvard and a Ph.D. in economics from Yale, I have been a member of the legal academy since 1986. I have previously held tenured positions as a chaired professor at both Yale Law School and Northwestern Law School. I have also been a visiting professor at a number of prominent law schools, including Harvard, Yale, the University of Chicago, Cornell, the University of Virginia, Oxford, Toin University (Tokyo), St. Gallen (Switzerland), and Renmin University (Beijing).
- 2. For a number of years, I have been teaching a course at Stanford on empirical law and economics issues involving crime and criminal justice, and I have previously taught similar courses at Yale Law School, Tel Aviv University Law School, the Gerzensee Study Center in Switzerland, and St. Gallen University School of Law in Switzerland. I have consistently taught courses on law and statistics for two decades.
- 3. I am a Research Associate of the National Bureau of Economic Research and a member of the American Academy of Arts and Sciences. I was a Fellow at the Center for Advanced Studies in Behavioral Sciences in 2000-01, and served as the co-editor (handling empirical articles) of the American Law and Economics Review for six years. I have also served as the President of the American Law and Economics Association and as Co-President of the Society of Empirical Legal Studies.
- 4. I am also a member of the Committee on Law and Justice of the National Research Council ("NRC"), which "reviews, synthesizes, and proposes research related to crime,

- law enforcement, and the administration of justice, and provides an intellectual resource for federal agencies and private groups."
- . 5. My research and writing uses empirical analysis to determine the impact of law and public policy in a wide range of areas, and I have written extensively about the relationship between rates of violent crime and firearms regulation. My complete credentials and list of publications are stated in my curriculum vitae, a true and correct copy of which is attached as Exhibit A.
- 6. The following lists all of the cases in which I have testified as an expert in the past 4 years. I filed an expert declaration in each of two cases involving a National Rifle Association ("NRA") challenge to city restrictions on the possession of large-capacity magazines:

Fyock v. City of Sunnyvale, United States District Court (N.D. Cal.), Case No. 4:13-cv-05807-PJH, January 2014.

San Francisco Veteran Police Officers Association v. City and County of San Francisco, United States District Court (N.D. Cal.), Case No. C 13-05351 WHA, January 2014.

7. I also filed an expert declaration in a case involving a challenge by the NRA to Maryland's restrictions on assault weapons and large-capacity magazines:

Tardy v. O'Malley (currently listed as Kolbe v. Hogan), United States District Court (District of Maryland), Case 1:13-cv-02841-CCB, February 2014.

In all these cases, the relevant gun regulations have (ultimately) been sustained in the relevant federal appellate courts.

8. In addition to filing an earlier expert declaration in this case, I also filed (on June 1, 2017) an expert declaration in a case involving a challenge by the NRA to California's restrictions on carrying of weapons in public:

Flanagan v. Becerra, United States District Court (C.D. Cal.), Case No. 2:16-cv-06164-JAK-AS.

9. I am being compensated at my government rate of \$425 per hour.

¹ See http://www7.national-academies.org/claj/ online for more information about the NRC.

SUBSTANTIVE CONCLUSIONS

10. The events in Las Vegas on October 1, 2017, have underscored—yet again—the wisdom of the efforts of the California legislature, with the overwhelming support of the voters of the state, "to aid in the shaping and application of those wise restraints that make men free" by banning from our state the large-capacity magazines (LCMs)² that were a key element enabling the extent of the carnage in that horrific mass shooting.³ It is my opinion that if, rather than allowing the federal ban on these devices to lapse in 2004, the country had moved to the more complete ban that California has finally adopted, tragedies like the one in Las Vegas would have been far less deadly and damaging to countless individuals who have been maimed and injured throughout the United States and perhaps the world.⁴ It is also my opinion that Section 32310's ban on possession of LCMs would decrease the mayhem from at least some mass killings in California, by making it incrementally harder for those bent on mass destruction to implement their criminal designs.

Response to Curcuruto Report

- 11. In opposition to the ban on LCMs, plaintiffs offer two additional expert reports. The first report is from James Curcuruto of the National Shooting Sports Foundation.
- 12. Mr. Curcuruto provides irrelevant information, opining as his main conclusion that "There are at least one hundred million magazines of a capacity of more than ten rounds in possession of American citizens" (Curcuruto Report at 3), only to concede later that he really does not know but "it is safe to say whatever the actual number of such magazines

https://www.cbsnews.com/news/norway-massacre-spurs-calls-for-new-us-gun-laws/ (last visited Nov. 1, 2017).

² LCMs are defined as ammunition-feeding devices with the capacity to hold more than 10 rounds of ammunition.

³ The quote is from John MacArthur Maguire and is enshrined at the Harvard Law School library. See https://asklib.law.harvard.edu/friendly.php?slug=faq/115309 (last visited Nov. 1, 2017).

⁴ The horrendous mass killing in Norway by Anders Breivik, endangered by the restrictive gun laws of Europe, was salvaged by his ability to procure ten 30-round high-capacity magazines from the United States. Stephanie Condon, "Norway Massacre Spurs Call for New U.S. Gun Laws," CBS News, July 28, 2011, available at

- in United States consumers' hands is, it is in the tens-of-millions." (Curcuruto Report at 4.)
- 13. While Mr. Curcuruto offers his wildly varying estimates of the number of high-capacity magazines in the United States, his undifferentiated national speculations offer no insight into how many of these magazines are possessed in rural areas throughout the United States. As a result, his figures would have little relevance to the appropriate regulatory regime for a state with large urban population centers like California. Mr. Curcuruto does not discuss the stock of high-capacity magazines in California, which of course will be far lower on a per capita basis because it has been unlawful to add to this stock for decades.
- 14. National surveys such as the General Social Survey (GSS) and research by the Pew Research Center and the National Behavioral Risk Factor Surveillance System consistently find a persistent decline in household gun ownership over the past several decades. A March 2013 report from the Pew Research Center states:

The Pew Research Center has tracked gun ownership since 1993, and our surveys largely confirm the General Social Survey trend. In our December 1993 survey, 45% reported having a gun in their household; in early 1994, the GSS found 44% saying they had a gun in their home. A January 2013 Pew Research Center survey found 33% saying they had a gun, rifle or pistol in their home, as did 34% in the 2012 wave of the General Social Survey.⁵

15. Because this reliable social science data shows that the number of households that own guns has likely dropped in recent decades, and certainly has not grown, the robust gun sales in recent years cannot be attributed to increasingly broad gun ownership. Instead, these sales predominantly represent purchases of guns by members of households that previously owned guns, as well as purchases in anticipation that certain gun bans will be enacted with grandfather clauses that will generate profits from the higher prices that follow when the supply of certain weapons or LCMs is restricted.

⁵ Pew Research Center, *Why Own a Gun? Protection is Now Top Reason*, Section 3: Gun Ownership Trends and Demographics, March 12, 2013, *available at* http://www.people-press.org/2013/03/12/section-3-gun-ownership-trends-and-demographics (last visited on November 2, 2017).

- 16. I am not aware of any current social science research providing an estimate for the number of American households that own LCMs or for the number of LCMs in private hands in America. It is reasonable to assume, however, that consumer demand for LCMs is similar to demand for firearms generally.
- 17. If that is the case, then LCM ownership by household is also likely to be concentrated, with increased numbers of LCMs held by a declining share of households. This would be consistent with a January 2013 New York Times/CBS News nationwide poll of 1,110 adults showing that nearly two-thirds of Americans favored a ban on LCMs.⁶ This is roughly the percentage of California voters who cast their ballots to rid the state of these devices.
- 18. Thus, Mr. Curcuruto's unsubstantiated claims about the number of LCMs in private hands should not be confused with broad possession across America, but merely proliferation in the hands of a stable or dwindling number of households. Indeed, plaintiff's other expert, Stephen Helsley, makes this point when he states: "My associates who have such pistols [that accept LCMs] also have a considerable number of spare magazines for them. In my case, I have one 19-round and eight 17-round magazines for my Glock." (Helsley Report at 5.)
- 19. Moreover, it is unclear what relevance the stock of high-capacity magazines could make to determinations about what can be lawfully banned. Had the federal ban on these magazines not been lifted in 2004, the stock would have been dramatically lower than it is today, and since the 1994 federal ban was lawful, efforts by the gun industry to flood the market with these magazines in its wake can hardly be thought to deprive state governments of the ability to regulate in ways that were available to them prior to 1994.

Response to Helsley Report

⁶ Jennifer Steinhauer, *Pro-Gun Lawmakers Are Open to Limits on Size of Magazines*, N.Y. Times, Feb. 18, 2013, *available at* http://www.nytimes.com/2013/02/19/us/politics/lawmakers-look-at-ban-on-high-capacity-gun-magazines.html? r=1& (last visited November 2, 2017).

20. The second expert report submitted for the plaintiffs is from Stephen Helsley. Noting that for the past 24 years, he was a state liaison for and then consultant to the National Rifle Association, Helsley states that soldiers during war and "on duty, uniformed police officers" often use guns equipped with high-capacity magazines. Without acknowledging that the risks faced by soldiers and police are vastly different from those faced by civilians, Helsley then states the following:

The home-owner and the concealed weapon permit holder want a pistol that can hold significantly more cartridges than a revolver for the same reason a law enforcement office or soldier wants one—to increase his or her chances of staying alive. For virtuous citizens buy their guns to protect themselves from the same criminals that police carry guns to protect the citizens, the public, and themselves. (Helsley Report at 5).

- 21. But private individuals have completely different needs than police officers. The former only need to scare off criminals (or hold them off until the police arrive). The police need to effectuate arrests. Thus, while having the criminal run away is a desired outcome for the average citizen, this is a bad outcome for a police officer, which is why an extended gun battle is extremely rare for law-abiding citizens and far more common for the police. Accordingly, Helsley's effort to look to officer-involved shootings to make judgments about the needs of average citizens widely misses the mark. (Helsley Report at 7).
- 22. In opposing the ban on high-capacity magazines, Helsley's claims that "Gunfights frequently involve a lot of 'missing." (Helsley Report at 7.) He then combines that with the fact that the average citizen is not well-trained and is under stress when threatened to argue that more bullets should be sprayed by law-abiding citizens because some of their bullets will likely hit "barriers such as vehicles or walls." (Helsley Report at 7.) But all of these factors actually provide strong support for a ban on LCMs rather than an argument against such a ban. Helsley doesn't consider that bullets fired by a modern weapon with an LCM will easily penetrate walls, threatening family members or occupants in attached dwellings. This point was dramatically underscored when a hapless concealed carry permit holder attending a gun safety class inadvertently fired his weapon, which discharged a bullet that easily penetrated the classroom wall, striking and

killing the owner of the gun store who was working in the next room.⁷ Encouraging untrained, stressed individuals to spray bullets from a high-capacity magazine is a recipe for generating similar unwelcome outcomes that will put family members and neighbors at considerable risk.

- 23. If high-capacity magazines had been completely barred from the civilian market, many lives would have been saved as the destructive capacity of mass shooters would have been appropriately restricted. The *New York Times* video of the recent Las Vegas shooting shows how the Las Vegas concert attendees would use the pauses in firing when the shooter's high-capacity magazines were spent to flee the deadly venue before more shots were fired. If Stephen Paddock had been limited to using only 10-round magazines during his deadly rampage, potentially hundreds of victims at the concert could have been spared.
- 24. A prescient December 2016 editorial in the Las Vegas Sun noted the danger presented—and the lack of practical use for—LCMs:

By overwhelmingly supporting universal background checks for firearms purchases, Clark County voters made it abundantly clear last month that they were concerned about gun violence.

Now, it's time for Las Vegas-area lawmakers to go a step further to protect Nevadans and push to ban the sale of high-capacity magazines in the state.

⁷ Peter Holley, *Ohio gun store owner accidentally killed by student during firearm-safety class*, *Washington Post*, June 19, 2016, *available at* <a href="https://www.washingtonpost.com/news/morning-mix/wp/2016/06/19/ohio-gun-store-owner-accidentally-killed-by-student-during-firearm-safety-class/?utm_term=.ed4c232d20ad (last visited Nov. 1, 2017).

Another example of how doors and walls do not stop bullets from modern handguns occurred on September 13, 2015, when "39-year-old Mike Lee Dickey was babysitting an 8-year-old Casa Grande, Arizona boy. According to police, at about 2 a.m., Dickey was in the bathroom removing his .45-caliber handgun from the waistband of his pants when he unintentionally discharged the gun. The bullet passed through two doors and struck the 8-year-old in his arm while he lay sleeping in a nearby bedroom. The boy was flown to a hospital in Phoenix for treatment." 8-year-old boy unintentionally shot by babysitter, Ohh Shoot, Sept. 13, 2016, available at http://ohhshoot.blogspot.com/2015/09/8-year-old-boy-unintentionally-shot-by.html (last visited Nov. 1, 2017).

⁸ Malachy Browne, et al., 10 Minutes. 12 Gunfire Bursts. 30 Videos. Mapping the Las Vegas Massacre, N.Y. TimesVideo, Oct. 21, 2017, available at https://www.nytimes.com/video/us/100000005473328/las-vegas-shooting-timeline-12-bursts.html (last visited Nov. 1, 2017).

Eight states and the District of Columbia already have imposed such prohibitions, and with good reason. There's simply no legitimate civilian use for magazines that hold dozens upon dozens of rounds of ammunition.

Don't believe us? Fine, then listen to Clark County Sheriff Joe Lombardo.

"I'm a very avid hunter, I was in the military myself, and there's no need to have a high-capacity magazine for any practical reason," Lombardo said during a recent interview with the Sun.

To the contrary, the dangers posed by such magazines are obvious. Lombardo says the time it takes for suspects to change magazines gives potential victims an opportunity to escape and law enforcement officials an opportunity to safely fire back. That being the case, the fewer times a shooter has to switch out magazines, the fewer the chances for people to get away and authorities to get a protected shot.⁹

25. Sheriff Lombardo's views were similarly endorsed in the testimony of United States Attorney (District of Colorado) John Walsh before the Senate Judiciary Committee on February 27, 2013, in which he noted:

From the point of view of most law enforcement professionals, a perspective I share as a long-time federal prosecutor and sitting United States Attorney, shutting off the flow of military-style assault weapons and high-capacity magazines is a top public safety priority. [...]

One of the most disturbing aspects of the recent mass shootings our Nation has endured is the ability of a shooter to inflict massive numbers of fatalities in a matter of minutes due to the use of high-capacity magazines. High-capacity magazines were defined in the 1994 ban as magazines capable of holding more than 10 rounds, and this is a definition the Department endorses. The devastating impact of such magazines is not limited to their use in military-style assault rifles; they have also been used with horrific results in recent mass shootings involving handguns. The 2007 mass shooting at Virginia Tech involved a shooter using handguns with high-capacity magazines. Similarly, recent mass shootings in Tucson, Arizona; Oak Creek, Wisconsin; and Fort Hood, Texas all involved handguns with magazines holding more than 10 rounds. As evidenced by these events, a high capacity magazine can turn any weapon into a tool of mass violence. Forcing an individual bent on inflicting large numbers of casualties to stop and reload creates the opportunity to reduce the possible death toll in two ways: first, by affording a chance for law enforcement or bystanders to intervene during a pause to reload; and second, by giving bystanders and potential victims an opportunity to seek cover or escape when there is an interruption in the firing.

⁹ High-capacity magazine ban a must for Nevadans' safety, Las Vegas Sun, Dec. 11, 2016, available at https://lasvegassun.com/news/2016/dec/11/high-capacity-magazine-ban-a-must-for-nevadans-saf/(last visited Nov. 1, 2017).

This is not just theoretical: In the mass shooting in Tucson, for example, 9-year old Christina-Taylor Green was killed by the 13th shot from a 30-round high-capacity magazine. The shooter was later subdued as he was trying to reload his handgun after those 30 shots. The outcome might have been different if the perpetrator had been forced to reload after firing only 10 times.

Furthermore, high-capacity magazines are not required for defending one's home or deterring further action by a criminal. The majority of shootings in self-defense occur at close range, within a distance of three yards. In such a scenario, and at such close ranges, a 10-round magazine is sufficient to subdue a criminal or potential assailant. Nor are high-capacity magazines required for hunting or sport shooting. Like military-style assault weapons, high-capacity magazines should be reserved for war, and for law enforcement officers protecting the public. The continued commercial sale of high-capacity magazines serves only to provide those determined to produce a high body count with the opportunity and the means to inflict maximum damage. Indeed, there is evidence suggesting that when the previous ban was in effect, it reduced the number of high-capacity magazines seized by the police, as well as the lethality of incidents. ¹⁰ [The citation is from Walsh's statement.] ¹¹

Respectfully submitted,

John J. Donoha III

¹⁰ See, David S. Fallis and James V. Grimaldi, *In Virginia, high-yield clip seizures rise*, Washington Post, Jan. 23, 2011, *available at* http://www.washingtonpost.com/wp-dvn/content/article/2011/01/22/AR2011012204046.html (last visited Nov. 1, 2017).

¹¹ Statement of John F. Walsh before the United States Senate Committee on the Judiciary, https://www.judiciary.senate.gov/imo/media/doc/2-27-13WalshTestimony.pdf (last visited Nov. 1, 2017).

Exhibit A

JOHN J. DONOHUE III

Stanford Law School Stanford, CA 94305 Phone: 650 721 6339

E-mail: donohue@law.stanford.edu

Web pages:

http://works.bepress.com/john_donohue/ https://law.stanford.edu/directory/john-j-donohue-lii/

EMPLOYMENT

Full-time Positions

- Stanford Law School, C. Wendell and Edith M. Carlsmith Professor of Law, September 2010 to the present.
- Yale Law School, Leighton Homer Surbeck Professor of Law, July 2004 to August 2010.
- Stanford Law School, Professor of Law, September 1995 to June 2004.
 - William H. Neukom Professor of Law, February 2002 June 2004.
 - John A. Wilson Distinguished Faculty Scholar, March 1997 January 2002.
 - Academic Associate Dean for Research, since July 2001 July 2003.
 - Stanford University Fellow, September 2001 May 2003.
- Northwestern University School of Law:
 - Class of 1967 James B. Haddad Professor of Law, September 1994-August 1995
 - Harry B. Reese Teaching Professor, 1994-1995
 - Professor of Law, May 1991-September 1994
 - Associate Professor, May 1989-May 1991
 - Assistant Professor, September 1986-May 1989.
- Research Fellow, American Bar Foundation, September 1986-August 1995.
- Associate Attorney, Covington & Burling, Washington, D.C., October 1978-July 1981 (including last six months as Attorney, Neighborhood Legal Services)
- Law Clerk to Chief Justice T. Emmet Clarie, U.S. District Court, Hartford, Connecticut, September 1977-August 1978.

Temporary Appointments

- Visiting Professor, Bocconi University, Milan, Italy, October-November 2012, April 2014, and June 2015.
- 2011 Faculty Scholar in Residence, University of Denver Sturm College of Law, April 21-22, 2011.
- Visiting Fellow, The Milton Friedman Institute for Research in Economics, University of Chicago, October 2009
- Schmidheiny Visiting Professor of Law and Economics, St. Gallen University, November December, 2007.
- Visiting Lecturer in Law and Economics, Gerzensee Study Center, Switzerland, June 2007.
- Visiting Professor, Tel Aviv University School of Law, May 2007.
- Herbert Smith Visitor to the Law Faculty, University of Cambridge, England, February 2006.
- Visiting Professor, Harvard Law School, January 2003.

- Fellow, Center for Advanced Studies in the Behavioral Sciences, Stanford, California, Academic year 2000-01.
- Visiting Professor, Yale Law School, Fall, 1999.
- Professor, Center for the Study of American Law in China, Renmin University Law School, Beijing, July 1998.
- Visiting Professor of Law and Economics, University of Virginia, January 1997.
- Lecturer, Toin University School of Law, Yokohama, Japan, May-June 1996.
- Cornell Law School, Distinguished Visiting Fellow in Law and Economics, April 8-12, 1996 and September 25 29, 2000
- Visiting Professor, University of Chicago Law School, January 1992-June 1992.
- Visiting Professor of Law and Economics, University of Virginia Law School, January 1990-May 1990.
- Fellow, Yale Law School Program in Civil Liability, July 1985-August 1986.
- Private Practice (part-time), New Haven, Connecticut, September 1981-August 1986.
- Instructor in Economics, Yale College, September 1983-August 1985.
- Summer Associate, Donovan Leisure Newton & Irvine, New York, Summer 1982.
- Summer Associate, Perkins, Coie, Stone, Olsen & Williams, Seattle, Washington, Summer 1976.
- Research Assistant, Prof. Laurence Lynn, Kennedy School of Government, Harvard University, Summer 1975.
- LSAT Tutor, Stanley Kaplan Education Center, Boston, Massachusetts; Research Assistant, Prof. Philip Heymann, Harvard Law School; Research Assistant, Prof. Gordon Chase, Harvard School of Public Health. (During Law School).

EDUCATION

Yale University, 1981-1986

- University Fellow in Economics; M.A. 1982, M. Phil. 1984, Ph.D. 1986.
 - Dissertation: "A Continuous-Time Stochastic Model of Job Mobility: A Comparison of Male-Female Hazard Rates of Young Workers." Awarded with Distinction by Yale.
 - Winner of the Michael E. Borus Award for best social science dissertation in the last three years making substantial use of the National Longitudinal Surveys—awarded by the Center for Human Research at Ohio State University on October 24, 1988.
- National Research Service Award, National Institute of Health.
- Member, Graduate Executive Committee; Graduate Affiliate, Jonathan Edwards College.

Harvard Law School, 1974-1977 (J.D.)

- Graduated <u>Cum Laude</u>.
- Activities: Law Clerk (Volunteer) for Judge John Forte, Appellate Division of the District Court of Central Middlesex; Civil Rights, Civil Libertles Law Review; Intra-mural Athletics; Clinical Placement (Third Year): (a) First Semester: Massachusetts Advocacy Center; (b) Second Semester: Massachusetts Attorney General's Office—Civil Rights and Consumer Protection Divisions. Drafted comments for the Massachusetts Attorney General on the proposed U.S. Department of Justice settlement of its case against Bechtel Corporation's adherence to the Arab Boycott of Israeli companies.

Hamilton College, 1970-1974 (B.A.)

- Departmental Honors in both Economics and Mathematics
 - Phi Beta Kappa (Junior Year)
- Graduated fourth in class with the following academic awards:
 - Brockway Prize
 - Edwin Huntington Memorial Mathematical Scholarship
 - Fayerweather Prize Scholarship
 - Oren Root Prize Scholarship in Mathematics
- President, Root-Jessup Public Affairs Council.

PUBLICATIONS

Books and Edited Volumes:

- Law and Economics of Discrimination, Edward Elgar Publishing, 2013.
- Employment Discrimination: Law and Theory, Foundation Press, 2005, 2009 (2d edition) (with George Rutherglen).
- Economics of Labor and Employment Law: Volumes I and II, Edward Elgar Publishing, 2007. http://www.e-elgar.co.uk/bookentry_main.lasso?id=4070
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Book Chapters:

- "Drug Prohibitions and its Alternatives." Chapter 2 in Cook, Philip J., Stephen Machin, Olivier Marie, and Glovanni Mastrobuoni, eds, Lessons from the Economics of Crime: What Reduces Offending? MIT Press. 45-66 (2013).
- "The Death Penalty," Chapter in <u>Encyclopedia of Law and Economics</u>, Spring (2013).
- "Rethinking America's Illegal Drug Policy," in Philip J. Cook, Jens Ludwig, and Justin McCrary, eds, <u>Controlling Crime: Strategies and Tradeoffs</u> (2011), pp.215-289 (with Benjamin Ewing and David Peloquin).
- "Assessing the Relative Benefits of Incarceration: The Overall Change Over the Previous Decades and the Benefits on the Margin," in Steven Raphael and Michael Stoll, eds., "Do Prisons Make Us Safer? The Benefits and Costs of the Prison Boom," pp. 269-341 (2009).
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- "The Evolution of Employment Discrimination Law in the 1990s: A Preliminary Empirical Evaluation" (with Peter Siegelman), in Laura Beth Nielsen and Robert L. Nelson, eds., <u>Handbook of Employment Discrimination</u> <u>Research</u> (2005).

"Divining the Impact of Concealed Carry Laws," in Jens Ludwig and Philip Cook, <u>Evaluating Gun Policy</u>: <u>Effects on Crime and Violence</u> (Washington D.C.: Brookings, 2003).

Articles:

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- "The Death Penalty: No Evidence of Deterrence," <u>The Economists' Voice</u>, (with Justin Wolfers) (April 2006), http://bpp.wharton.upenn.edu/jwolfers/Press/DeathPenalty(BEPress).pdf.
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- "The Impact of Race on Policing and Arrests," <u>Journal of Law and Economics</u>, vol. XLIV October 2001)(with Steven Levitt), pp. 367 – 394.
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- "An Evaluation of the Constitutionality of S. 114, The Proposed Federal Death Penalty Statute," Hearings before the U.S. Senate Judiciary Committee, April 27, 1981, at 151.
- "Godfrey v. Georgia: Creative Federalism, the Eighth Amendment, and the Evolving Law of Death," 30 Catholic University Law Review 13 (1980).
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Blog Posts:

- "Orlando to Las Vegas: Guns, Law, and Mass Shootings in the U.S.," Stanford Law School Legal Aggregate Blog, October 3, 2017, https://law.stanford.edu/2017/10/03/orlando-to-las-vegas-guns-and-law/.
- "Moore v. Texas and the Pathologies that Still Mar Capital Punishment in the U.S.," March 29, 2017, https://law.stanford.edu/2017/03/29/moore-v-texas-and-the-pathologies-that-mar-capital-punishment-in-the-u-s/
- "Trump and Gun Policy," Stanford Law School Legal Aggregate Blog, November 12, 2016, http://stanford.io/2eoWnna
- "Facts Do Not Support Claim That Guns Make Us Safer" Stanford Law School Legal Aggregate Blog, October 12, 2015, https://law.stanford.edu/2015/10/12/professor-john-donohue-facts-do-not-support-claim-that-guns-make-us-safer/
- "When will America wake up to gun violence?" CNN.com, July 20, 2012, http://www.cnn.com/2012/07/20/opinion/donohue-gun-control/index.html

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 http://balkin.blogspot.com/2008/09/have-woman-protective-studies-resolved.html (September 2008).
- "Dodging the Death Penalty Bullet On Child Rape," http://balkin.blogspot.com/2008/07/dodging-death-penalty-bullet-on-child.html (July 2008).
- "Why I'd Stick With Yale Clerks-- Some Econometric Ruminations," http://balkin.blogspot.com/2008/04/why-Id-stick-with-yale-clerks-some.html (April 2008).

WORKSHOPS AND ADDRESSES

- Panelist, "Public Carry: Defending Against Efforts to Expand Carry Laws," National Gun Violence Prevention Meeting, Washington, D.C., October 18, 2017
- "Keynote Presentation: Right-to-Carry Laws and Violent Crime," Second Amendment Litigation & Jurisprudence Conference, The Law Center to Prevent Gun Violence, October 16, 2017.
- "The Latest Evidence on Abortion Legalization and Crime," Conference on Empirical Legal Studies, Cornell University, October 13, 2017.
- "Comey, Trump, and the Puzzling Pattern of Crime in 2015 and Beyond," University of Texas School of Law and Economics Seminar, April 24, 2017, Faculty Workshop, UC Davis School of Law, April 10, 2017; Law and Social Science Seminar, Texas A&M University School of Law, March 6, 2017; Quantlaw, University of Arizona Law School, February 17, 2017.
- Debate with Kent Scheidegger on Capital Punishment, Philosophy of Punishment Seminar, JFK University School of Law, March 18, 2017.
- "The Evidence on Guns and Gun Laws," Federal Bar Council Program on Guns and Gun Laws -- Rancho Mirage, California, February 23, 2017.
- "Guns, Crime and Race in America," Stanford's Center for Population Health Sciences, Stanford Medical School, October 17, 2016.
- "Evaluating the Death Penalty," Forum on California Propositions 62 and 66, Stanford Law School, September 14, 2016.
- "Empirical Analysis and the Fate of Capital Punishment," Colloquium, Presley Center for Crime and Justice Studies; University of California, Riverside, October 24, 2016.
- "Gun Violence and Mental Illness," Department of Psychiatry, Stanford University, August 25, 2016.
- "The Battle Over Gun Policy in America," Physicians and Social Responsibility" seminar; Stanford Medical School, October 3, 2016; Bioethics Committee of the San Mateo County Medical Association, April 27, 2016; The League of Women Voters of Palo Alto, April 19, 2016; Human Rights and Health Seminar, Stanford

University, April 12, 2016; Bechtel International Center, Stanford University, February 23, 2016; Stanford in Government Seminar, Haas Center, Stanford University, February 2, 2016.

- American Economic Association Continuing Education Course "The Economics of Crime" (with Jens Ludwig),
 AEA Annual Meeting, San Francisco, January 5-7, 2016.
- "Race and Arbitrariness in the Connecticut Death Penalty," University of Connecticut School of Law, Nov. 20, 2015.
- "Connecticut v. Santiago and the Demise of the Connecticut Death Penalty," Faculty Workshop, Stanford Law
 School, August 19, 2015.
- "Do Handguns Make Us Safer? A State-Level Synthetic Controls Analysis of Right-to-Carry Laws," Second Amendment Conference, Covington and Burling, New York, May 14, 2015; NBER Summer Institute, Cambridge, MA, July 23, 2015; Faculty Workshop, Stanford Law School, November 11, 2015.
- "U.S. Criminal Justice Under Siege: Will Becker or Beccaria Prevail?" Faculty Seminar, Bocconi University School of Law, Milan, Italy, June 18, 2015.
- "Can You Believe Econometric Evaluations of Law, Policy, and Medicine?" Stanford Law School, Legal Theory Workshop, March 1, 2007; Faculty Workshop, Tel Aviv University School of Law, May 14, 2007; Faculty Workshop, University of Haifa Law School, May 16, 2007; Law and Economics Workshop, Georgetown Law School, September 19, 2007; Law and Economics Workshop, St. Gallen Law School, Switzerland, November 29, 2007; and Yale Law School, February 25, 2008; Law and Economics Workshop, Swiss Institute of Technology, Zurich, Switzerland, May 21, 2008; Faculty Workshop, University of Virginia Law School, October 24, 2008; Plenary Session, Latin American and Caribbean Law and Economics Association, Universitat Pompeu Fabra (Barcelona), June 15, 2009; Google, Milan, Italy, June 8, 2015.
- Commentator: ""Throw Away the Jall or Throw Away The Key? The Effect of Punishment on Recidivism and Social Cost," by Miguel F. P. de Figueiredo, American Law and Economics Association Meetings, Columbia Law School, May 15, 2015.
- "Broken Windows, Stop and Frisk, and Ferguson," 2015 Justice Collaboratory Conference: Policing Post-Ferguson, Yale Law School, April 17, 2015.
- "Assessing the Development and Future of Empirical Legal Studies," Stanford Law School course on Modern American Legal Thought, February 25, 2015.
- Commentator: "Payday Lending Restrictions and Crimes In the Neighborhood," by Yilan Xu, 9th Annual Conference on Empirical Legal Studies, Boalt Hall, Berkeley, CA, November 7, 2014.
- "An Empirical Evaluation of the Connecticut Death Penalty Since 1973: Are There Unconstitutional Race, Gender and Geographic Disparities?" Faculty Workshop, Economics Department, Rice University, Houston, TX, Feb. 18, 2014; Law and Economics Workshop, University of Virginia Law School, September 11, 2014; Faculty Colloquium, University of San Diego School of Law, October 3, 2014.
- "What's Happening to the Death Penalty? A Look at the Battle in Connecticut," Hamilton College, Clinton, New York, June 6, 2014.

- Panel Member, Research Methods Workshop, Conference for Junior Researchers on Law and Society,
 Stanford Law School, May 15, 2014.
- "Logit v. OLS: A Matter of Life and Death," Annual Meeting of the American Law and Economics Association,
 University of Chicago, May 9, 2014.
- "Guns: Law, Policy, Econometrics," Second Amendment Litigation and Jurisprudence Conference, Jenner & Block, Chicago, May 8, 2014.
- "The Impact of Antidiscrimination Law: The View 50 Years after the Civil Rights Act of 1964," Renaissance Weekend, Liguna Niguel, CA, Feb. 15, 2014.
- "Concealed Carry and Stand Your Ground Law," Renaissance Weekend, Liguna Niguel, CA, Feb. 15, 2014.
- "Reducing Gun Violence," Forum on Gun Violence Reduction, Mountainview City Hall, Mountainview, CA, Feb.
 8, 2014.
- "Gun Policy Debate," <u>C-SPAN</u>. National Cable Satellite Corporation, Jan. 16, 2014. http://www.c-span.org/video/?317256-1/GunPoli.
- "Trial and Decision in the Connecticut Death Penalty Litigation," Faculty Workshop, Stanford Law School, November 20, 2013.
- "Rethinking America's Iflegal Drug Policy," Law and Economics Workshop, Harvard Law School, April 20, 2010; NBER Conference, "Economical Crime Control," Boalt Hall, Berkeley, CA, January 16, 2010; NBER Summer Institute Pre-Conference "Economical Crime Control," July 23, 2009; Whitney Center Lecture Series, Hamden, CT, October 5, 2009; Law and Economics Workshop, University of Chicago Law School, October 13, 2009; Seminar for Spanish Law Professors, Harvard Law School, October 23, 2009; The Criminal Law Society, Stanford Law School, March 31, 2011, University of Denver Sturm College of Law, April 21, 2011; Law and Economics Workshop, Boalt Hall, Berkeley, CA, October 17, 2011; Shaking the Foundations Conference, Stanford Law School, November 2, 2013.
- "The Challenge to the Connecticut Death Penalty," Yale Law School, Death Penalty Clinic, November 5, 2007; Graduate Student Seminar, November 11, 2009; Stanford Program in International Legal Studies Seminar, Stanford Law School, Nov. 11, 2010; Faculty Workshop, Stanford Law School, June 8, 2011; Faculty workshop, Duke Law School, April 13, 2012; Program on Public Policy, Stanford University, May 2, 2012; Annual Meeting of the American Law and Economics Association, Vanderbilt Law School, Nashville, TN, May 18, 2013; Faculty Workshop, University of Arlzona Law School, October 17, 2013; 8th Annual Conference on Empirical Legal Studies, University of Pennsylvania Law School, October 26, 2013.
- Commentator: "How to Lie with Rape Statistics" by Corey Rayburn Yung, 8th Annual Conference on Empirical Legal Studies, University of Pennsylvania Law School, October 2013.
- "An Empirical Look at Gun Violence in the U.S." University of Arizona Law School, October 17, 2013
- Discussant, "Sex Offender Registration and Plea Bargaining," NBER Labor Summer Institute, Cambridge, MA, July 25, 2013.
- "What Works in the War Against Crime?" Renaissance Weekend, Jackson Hole, Wyoming, July 5, 2013.

- Seminar Presentation, "Statistics and the Streets Curbing Crime, Realities of the Death Penalty, and Successes in Public Safety," Renaissance Weekend, Jackson Hole, Wyoming, July 5, 2013.
- Flashes of Genius (Glimpses of Extra-ordinarily Novel Thinking) "Stemming Gun Violence," Renaissance Weekend, Jackson Hole, Wyoming, July 5, 2013.
- "Can Laws Reduce Crime?" Safe Oakland Speakers Series, Holy Names University, Oakland, CA, May 1, 2013, http://www.ustream.tv/channel/safe-oakland-speaker-series
- Presentation on "The Death Penalty in America" on a panel on "human rights and criminal justice systems in the world," Science for Peace conference at Bocconi University in Milan, Italy, November 15, 2012. http:// www.fondazioneveronesi.it/scienceforpeace2012/
- Seminar Presentation, "America's Criminal Justice System," Renaissance Weekend, Santa Monica, CA., Feb. 19, 2012.
- "Statistical Inference, Regression Analysis and Common Mistakes in Empirical Research," SPILLS Fellow's Workshop, Stanford Law School, February 2, 2012.
- "New Evidence in the 'More Guns, Less Crime' Debate: A Synthetic Controls Approach," Conference on Empirical Legal Studies, Northwestern Law School, November 4, 2011.
- "Drug Legalization and its Alternatives," Lessons from the Economics of Crime: What Works in Reducing Offending? CESIfo Venice Summer Institute Workshop, July 22, 2011.
- "Incapacitating Addictions: Drug Policy and American Criminal Justice," in Rethinking the War on Drugs through the US-Mexico Prism," Yale Center for the Study of Globalization, May 12, 2011.
- Plenary Session: Flashes of Genius (Glimpses of <u>Extra</u>-ordinarily Novel Thinking) -- "Has Legalized Abortion Reduced Crime?" Renaissance Weekend, Liguna Niguel, CA., Feb. 18, 2011.
- "An Evidence-Based Look at the More Guns, Less Crime Theory (after Tucson)" The American Constitution Society for Law and Policy (ACS), Stanford Law School, January 25, 2011; Renaissance Weekend, Liguna Niguel, CA., Feb. 19, 2011; "Faculty Forum" at the External Relations Office, Stanford Law School, April 5, 2011.
- "Empirical Evaluation of Law: The Dream and the Nightmare," SPILS Fellows Lecture, Stanford Law School, January 15, 2015; Legal Studies Workshop, Stanford Law School, Feb. 7, 2011; Renaissance Weekend, Liguna Niguel, CA., Feb. 20, 2011; University of Denver Sturm College of Law, April 22, 2011; Presidential Address, Annual Meeting of the American Law and Economics Association, Columbia University, May 20, 2011.
- Death Sentencing in Connecticut," American Society of Criminology Annual Meeting, San Francisco, Nov. 17, 2010.
- "The Impact of Right to Carry Laws and the NRC Report: Lessons for the Empirical Evaluation of Law and Policy," Conference on Empirical Legal Studies, Yale Law School, Nov. 6, 2010.
- Comment on Bushway and Gelbach, "Testing for Racial Discrimination in Ball Setting Using Nonparametric Estimation of a Parametric Model," Conference on Empirical Legal Studies, Yale Law School, Nov. 6, 2010.

- Commentator, "A Test of Racial Bias in Capital Sentencing," NBER Political Economy Program Meeting, April 23, 2010.
- "The (Lack of a) Deterrent Effect of Capital Punishment," Faculty Workshop, University of Chicago Economics Department, October 21, 2009.
- Keynote Address, "The Evolution of Econometric Evaluation of Crime and Deterrence," 1st Paris & Bonn
 Workshop on Law and Economics: The Empirics of Crime and Deterrence, University of Paris Ouest Nanterre,
 September 24, 2009.
- Comment on Cook, Ludwig, and Samaha, "Gun Control after Heller: Litigating Against Regulation," NBER Regulation and Litigation Conference, The Boulders, Carefree, Arizona, September 11, 2009.
- "Impact of the Death Penalty on Murder in the US," Faculty Workshop, Law School, Universitat Pompeu Fabra (Barcelona), June 18, 2009.
- Comment on Joanna Shepherd's "The Politics of Judicial Opposition," Journal of Institutional and Theoretical Economics Conference, Kloster Eberbach, Germany, June 12, 2009.
- "The Great American Crime Drop of the '90s: Some Thoughts on Abortion Legalization, Guns, Prisons, and the Death Penalty," Hamilton College, Clinton, NY, June 5, 2009.
- "The Impact of the ADA on the Employment and Earnings of the Disabled," American Law and Economics
 Association Meetings, University of San Diego, May 15, 2009.
- "Crime and Punishment in the United States," Eastern State Penitentiary, Yale Alumni Event, Philadelphia, PA. April 26, 2009.
- "Measuring Culpability in Death Penalty Cases," Conference on Applications of Economic Analysis in Law, Fuqua School of Business, Duke University, April 18, 2009.
- "Autopsy of a Financial Crisis," Workshop on New International Rules and Bodies for Regulating Financial Markets, State University of Milan, March 23, 2009.
- "Yet Another Refutation of the More Guns, Less Crime Hypothesis With Some Help From Moody and Marvell, Law and Economics Workshop, NYU Law School, March 10, 2009.
- Intelligence-Squared Debate: "Guns Reduce Crime," Rockefeller University, New York, October 28, 2008.
- "The D.C. Handgun Controls: Did the Supreme Court's Decision Make the City Safer?" Debate, The Contemporary Club of Albemarle, Charlottesville, VA, October 23, 2008.
- "Evaluating the Empirical Claims of the Woman-Protective Anti-Abortion Movement," Panel on The Facts of the Matter: Science, Public Health, and Counseling, Yale Conference on the Future of Sexual and Reproductive Rights, Yale Law School, October 11, 2008.
- "Empirical Evaluation of Gun Policy," Harvard Law School, October 9, 2008.
- "Assessing the Relative Benefits of Incarceration: The Overall Change Over the Previous Decades and the Benefits on the Margin," Russell Sage Foundation, New York, May 3, 2007; Law and Economics Workshop, Tel Aviv University School of Law, May 28, 2008.
- Death Penalty Debate with Orin Kerr, Bloggingheads, April 11, 2008.

- "Evaluating Connecticut's Death Penalty Regime," Faculty Public Interest Conversation, Yale Law School, April 9, 2008.
- "The Death Penalty in Connecticut and the United States," The Whitney Center, Hamden, CT, November 5, 2007; Seminar on Advanced Criminal Law: Criminal Sentencing and the Death Penalty, Fordham Law School, April 8, 2008; Law and Economics Workshop, Swiss Institute of Technology, Zurich, Switzerland, May 20, 2008.
- Radio Interview, "The Death of Capital Punishment?" Morning Edition: Where We Live. WNPR. Connecticut, March 10, 2008.
- Comment on Thomas Dee's "Born to Be Mild: Motorcycle Helmets and Traffic Safety," American Economics Association Meetings, New Orleans, Louisiana, January 4, 2008.
- "The Empirical Revolution in Law and Policy: Jubilation and Tribulation," Keynote Address, Conference on Empirical Legal Studies, NYU Law School, Novermber 9, 2007.
- "The Optimal Rate of Incarceration," Harvard Law School, October 26, 2007.
- "Empirical Evaluation of Law: The Impact on U.S Crime Rates of Incarceration, the Death Penalty, Guns, and Abortion," Law and Economics Workshop, St. Gallen Law School, Switzerland, June 25, 2007.
- Comment on Eric Baumer's "A Comprehensive Assessment of the Contemporary Crime Trends Puzzle,"
 Committee on Law and Justice Workshop on Understanding Crime Trends, National Academy of Sciences,
 Washington, D.C., April 25, 2007.
- Comment on Bernard Harcourt, Third Annual Criminal Justice Roundtable Conference, Yale Law School,
 "Rethinking the Incarceration Revolution Part II: State Level Analysis," April 14, 2006.
- "Corporate Governance in America: The Disney Case," Catholic University Law School, Milan, Italy, March 19, 2007.
- "The U.S Tort System," (Latin American) Linkages Program, Yale Law School, February 13, 2007.
- Panel Member, "Guns and Violence in the U.S.," Yale University, International Center, January 24, 2007.
- "Economic Models of Crime and Punishment," Punishment: The U.S. Record: A Social Research Conference at The New School, New York City, Nov. 30, 2006
- Comment on Baldus et al, "Equal Justice and the Death Penalty: The Experience fo the United States Armed Forces, Conference on Empirical Legal Studies, University of Texas Law, School, Austin, Texas, October 27, 2006.
- "Empirical Evaluation of Law: The Promise and the Peril," Harvard Law School, October 26, 2006.
- "Estimating the Impact of the Death Penalty on Murder," Law and Economics Workshop, Harvard Law School, September 12, 2006; Conference on Empirical Legal Studies, University of Texas Law School, October 28, 2006; Joint Workshop, Maryland Population Research Center and School of Public Policy, University of Maryland, March 9, 2007.
- "Why Are Auto Fatalities Dropping so Sharply?" Faculty Workshop, Wharton, Philadelphia, PA, April 19, 2006.
- "The Law of Racial Profiling," Law and Economic Perspectives on Profiling Workshop, Northwestern University Department of Economics, April 7, 2006.

- "Landmines and Goldmines: Why It's Hard to Find Truth and Easy To Peddle Falsehood in Empirical Evaluation of Law and Policy," Rosenthal Lectures, Northwestern University School of Law, April 4-6, 2006.
- "The impact of Legalized Abortion on Crime," American Enterprise Institute, March 28, 2006.
- "The Impact of Damage Caps on Malpractice Claims: Randomization Inference with Difference-in-Differences," Conference on Medical Malpractice, The Rand Corporation, March 11, 2006.
- "Powerful Evidence the Death Penalty Deters?" Leighton Homer Surbeck Chair Lecture, Yale Law School, March 7, 2006.
- "Uses and Abuses of Empirical Evidence in the Death Penalty Debate," Faculty Workshop, University of Connecticut Law School, October 18, 2005; Faculty Workshop, UCLA Law School, February 3, 2006; Law and Economics Workshop, Stanford Law School, February 16, 2006; ; Law Faculty, University of Cambridge, Cambridge, England, February 28, 2006; University of Illinois College of Law, Law and Economics Workshop, March 2, 2006; Faculty Workshop, Florida State University Law School, March 30, 2006; ALEA, Berkeley, CA May 6, 2006; University of Chicago Law School, Law and Economics Workshop, May 9, 2006.
- "Is Gun Control Illiberal?" Federalist Society Debate with Dan Kahan at Yale Law School, January 31, 2006.
- "Witness to Deception: An Insider's Look at the Disney Trial," 2005-2006 Distinguished Lecture, Boston University School of Law, November 10, 2005; Center for the Study of Corporate Law, Yale Law School, November 3, 2005; Law Offices of Herbert Smith, London, England, February 23, 2006; Law Faculty, University of Cambridge, Cambridge, England, February 27, 2006.
- "Understanding the Surprising Fall in Crime in the 1990s," Rotary Club, Orange, CT, August 5, 2005; Faculty Workshop, Yale School of Management, September 21, 2005.
- Panel Member, "The Board's Role in Corporate Strategy," The Yale Global Governance Forum, Yale School of Management, September 8, 2005.
- "Crime and Abortion," Museo de la Cuidad de Mexico, Mexico City, October 20, 2003.
- "Allocating Resources towards Social Problems and Away From Incarceration as a Means of Reducing Crime,"
 MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice, San Francisco,
 CA, February 28, 2003.
- "Shooting Down the More Guns, Less Crime Hypothesis," Stanford Law School, Law and Economics Seminar, January 28, 2003; Faculty Workshop, Center for the Study of Law and Society, Boalt Hall, University of California, Berkeley, Feb. 24, 2003; Development Workshop, Stanford Law School, April 25, 2003; Faculty Workshop, Stanford Law School, July 2, 2003; Law and Public Affairs Program Workshop, Princeton University, September 29, 2003; Stanford Alumni Weekend, Stanford University, October 17, 2003; Faculty Workshop, CIDE, Mexico City, October 20, 2003.
- * "The Impact of Legalized Abortion on Teen Childbearing," NBER Labor Summer Institute, Cambridge, MA, July 30, 2002.
- "Do Concealed Handgun Laws Reduce Crime?" Faculty Workshop, Stanford Law School, October 4, 2000; First-Year Orientation, Stanford Law School, September 5, 2001; Faculty Workshop, Harvard Law School, April 26, 2002; Faculty Workshop, Columbia Law School, April 29, 2002.
- "The Evolution of Employment Discrimination Law in the 1990s: An Empirical Investigation," Fellows Workshop, American Bar Foundation, February 11, 2002.

- "The Role of Discounting in Evaluating Social Programs Impacting on Future Generations: Comment on Arrow and Revesz," Colloquium on Distributive Justice, Stanford Law School, Oct. 18, 2001.
- "The Impact of Wrongful Discharge Laws," NBER Labor Summer Institute, Cambridge, MA, July 30, 2001; Labor and Employment Seminar, NYU Law School, October 16, 2001; Faculty Workshop, Stanford Law School, September 18, 2002; Yale Law School, January, 2004.
- "Racial Profiling: Defining the Problem, Understanding the Cause, Finding the Solution," American Society of Criminology Conference, San Francisco, CA, November 15, 2000.
- "Institutional Architecture for Building Private Markets," Conference on "Latin America and The New Economy" at Diego Portales University in Santiago, Chile, October 26, 2000.
- "The History and Current Status of Employment Discrimination Law in the United States," Unicapital School of Law, (Centro Universitario Capital), Sao Paulo, Brazil, March 10, 2000.
- "Corporate Governance in Developing Countries: Opportunities and Dangers," Conference on Neoliberal Policies for Development: Analysis and Criticism," University of Sao Paulo Law School, March 13, 2000
- "Legalized Abortion and Crime," Law and Economics Workshop, University of Pennsylvania Law School, September 21, 1999; Faculty Workshop, Yale Law School, September 27, 1999; John Jay College of Criminal Justice, October 7, 1999; Faculty Workshop, Quinniplac Law School, October 13, 1999; Faculty Workshop, University of Connecticut Law School, October 19, 1999; University of Virginia Law School, October 25, 1999; Faculty Workshop, Baruch College, November 9, 1999; MacArthur Foundation Social Interactions and Economic Inequality Network Meeting, Brookings Institution, December 4, 1999; Faculty Workshop, NYU Law School, January 21, 2000; Faculty Workshop, University of San Diego Law School, February 18, 2000; Public Economics Workshop, Department of Economics, Stanford University, April 28, 2000; Law and Economics Workshop, University of California at Berkeley Law School, September 18, 2000; Faculty Workshop, Cornell Law School, September 26, 2000; OB-GYN Grand Rounds, Stanford Medical School, October 2, 2000; Center for Advanced Studies in the Behavioral Sciences, October 11, 2000; Faculty Workshop, Graduate School of Business, February 5, 2002.
- Panel member, Session on Executive Compensation, Director's College, Stanford Law School, March 23, 1999.
- "Exploring the Link Between Legalization of Abortion in the 1970s and Falling Crime in the 1990s," Law and Economics Workshop, Harvard Law School, March 16, 1999; Law and Economics Workshop, University of Chicago Law School, April 27, 1999; Faculty Workshop, Stanford Law School, June 30, 1999.
- "Is the Increasing Reliance on Incarceration a Cost-Effective Strategy of Fighting Crime?" Faculty Workshop, University of Wisconsin School of Social Science, February 19, 1999.
- "What Do We Know About Options Compensation?" Institutional Investors Forum, Stanford Law School, May 29, 1998.
- Commentator on Orlando Patterson's presentation on "The Ordeal of Integration," Stanford Economics
 Department, May 20, 1998.
- "Understanding The Time Path of Crime," Presentation at Conference on Why is Crime Decreasing? Northwestern University School of Law, March 28, 1998; Faculty Workshop, Stanford Law School, September 16, 1998; Faculty Workshop, University of Michigan Law School, February 18, 1999.
- Commentator, Conference on Public and Private Penalties, the University of Chicago Law School, Dec. 13-14, 1997.

- "Some Thoughts on Affirmative Action," Presentation at a conference on <u>Rethinking Equality in the Global Society</u>, Washington University School of Law, November 10, 1997.
- Commentator on Chris Jencks' Presentation on Welfare Policy, Stanford Economics Department, October 8, 1997.
- "The Impact of Race on Policing, Arrest Patterns, and Crime," Faculty Workshop, Stanford Law School, September 10, 1997; Law and Economics Workshop, University of Southern California Law School, October 23, 1997; Law and Economics Workshop, Columbia University Law School, November 24, 1997; Law and Economics Workshop, Haas School of Business, University of California at Berkeley, February 19, 1998; Annual Meeting of the American Law and Economics Association, University of California at Berkeley, May 8, 1998; Conference on the Economics of Law Enforcement, Harvard Law School, October 17, 1998.
- "Crime in America: Understanding Trends, Evaluating Policy," Stanford Sierra Camp, August 1997.
- "Executive Compensation: What Do We Know?" TIAA-CREF Committees on Corporate Governance and Social Responsibility, Center for Economic Policy Research, Stanford University, June 27, 1997; NASDAQ Director's Day, Stanford University, June 30, 1997.
- Panel Chair, Criminal Law (Theory), Criminal Law (Empirical), and Labor/Discrimination/Family Law, American
 Law and Economics Association, University of Toronto Law School, May 9-10, 1997.
- Commentator, "Diversity in Law School Hiring," Stanford Law School, February 25, 1997.
- Keynote Speaker, "The Optimal Rate of Crime," 11th Annual Conference, The Oklahoma Academy for State Goals, Tulsa, Oklahoma, May 7, 1996.
- Panel member, Session on Executive Compensation, Director's College, Stanford Law School, March 28-29, 1996.
- "The Power of Law: Can Law Make a Difference in Improving the Position of Women and Minorities in the Labor Market?" The Fellows of the American Bar Foundation, Baltimore, Maryland, February 3, 1996.
- "Public Action, Private Choice and Philanthropy: Understanding the Sources of Improvement in Black Schooling Quality in Georgia, 1911-1960," Stanford Faculty Workshop, January 24, 1996; Faculty Workshop, University of Virginia Law School, January 22, 1997; National Bureau of Economic Research, Cambridge, Massachusetts, Labor Studies Conference, April 3, 1998.
- Commentator, "The Effect of Increased Incarceration on Crime," Meetings of the American Economics Association, San Francisco, January 6, 1996.
- Commentator, Symposium on Labor Law, University of Texas Law School, November 10-11, 1995.
- Panel Member, Symposium on Criminal Justice, Stanford Law School, October 6-7, 1995.
- Commentator, "The Litigious Plaintiff Hypothesis," Industrial and Labor Relations Conference, Cornell University, May 19, 1995.
- Commentator on Keith Hylton's, "Fee Shifting and Predictability of Law," Faculty Workshop, Northwestern University School of Law, February 27, 1995.
- "The Selection of Employment Discrimination Disputes for Litigation: Using Business Cycle Effects to Test the Priest/Klein Hypothesis," Stanford University, Law and Economics Seminars, October 31, 1994.

- "Is the United States at the Optimal Rate of Crime?" Faculty Workshop, Indiana University School of Law, Indianapolis, November 18, 1993; Faculty Workshop, Northwestern University School of Law, April 18, 1994; Law and Economics Workshop, Stanford Law School, April 28, 1994; Meetings of the American Law and Economics Association, Stanford Law School, May 13, 1994; American Bar Foundation, September 7, 1994; Faculty Workshop, DePaul Law School, September 21, 1994; Law and Economics Workshop, University of Chicago Law School, October 11, 1994; Faculty Seminar, Stanford Law School, October 31, 1994; Law and Economics Luncheon, Stanford Law School, November 1, 1994; Faculty Seminar Workshop, University of Illinois College of Law, Champaign, November 22, 1994; Law and Economics Workshop, Harvard Law School, November 29, 1994; School Alumni Luncheon, Chicago Club, December 13, 1994; Northwestern Law School, Law and Economics Workshop, Yale Law School, February 1, 1996; Faculty Workshop, Cornell Law School, April 10, 1996; Faculty Workshop, Tokyo University Law School, June 4, 1996; Panel on "The Economics of Crime," Western Economics Association Meeting, San Francisco, July 1, 1996.
- "The Broad Path of Law and Economics," Chair Ceremony, Northwestern University School of Law, September 30, 1994.
- Commentator on Paul Robinson's "A Failure of Moral Conviction," Northwestern University School of Law, September 20, 1994.
- "The Do's of Diversity, The Don'ts of Discrimination," Kellogg School of Business, Northwestern University, May 17, 1994.
- "Does Law Matter in the Realm of Discrimination?" Law and Society Summer Institute, Pala Mesa Lodge, Fallbrook, California, June 25, 1993.
- Commentator, "The Double Minority: Race and Sex Interactions in the Job Market," Society for the Advancement of Socio-Economics, New School for Social Research, March 28, 1993.
- "The Effects of Joint and Several Liability on Settlement Rates: Mathematical Symmetries and Meta-Issues in the Analysis of Rational Litigant Behavior," <u>Economic Analysis of Civil Procedure</u>, University of Virginia School of Law, March 26, 1993.
- Debate with Richard Epstein on Employment Discrimination Law, Chicago Federalist Society, February 23, 1993.
- Panel Chair, "Optimal Sanctions and Legal Rules in Tort and Criminal Law," Meetings of Annual Association of Law and Economics, Yale Law School, May 15, 1992.
- Panel Member, "The Law and Economics of Employment at Will," The Institute For Humane Studies, Fairfax, Virginia, March 27, 1992.
- "The Efficacy of Title VII," Debate with Professor Richard Epstein, University of Chicago Law School, February 26, 1992.
- Moderator, "Using Testers to Demonstrate Racial Discrimination," University of Chicago Law School, February 13, 1992.
- "Law & Macroeconomics: The Effect of the Business Cycle on Employment Discrimination Litigation," Law and Society Workshop, Indiana University, November 6, 1991; Faculty Workshop, University of North Carolina Law School, Chapel Hill, November 8, 1991; Faculty Workshop, Northwestern University School of Law, December 11, 1991; Law and

- Economics Conference, Duquesne Law School, March 14, 1992; University of Chicago Law School, April 2, 1992.
- Panel Chair and Commentator, "New Perspectives on Law and Economics," Society for the Advancement of Socioeconomics, Stockholm, June 17, 1991; Law and Society Meetings, Amsterdam, June 29, 1991.
- Panel Chair, "Regulation of International Capital Markets," Law and Society Meetings, Amsterdam, June 27, 1991.
- Panel Chair, "The Law and Economics of Discrimination," American Association of Law and Economics,
 University of Illinois Law School, May 24, 1991.
- "The Economics of Employment Discrimination Law," Industrial Relations Research Association, Chicago, Illinois, March 4, 1991.
- "Does Current Employment Discrimination Law Help or Hinder Minority Economic Empowerment?" Debate With Professor Richard Epstein, The Federalist Society, Northwestern Law School, February 26, 1991.
- Panel Member, "The Law and Economics of Employment Discrimination," AALS Annual Meeting, Washington, D.C., January 6, 1991.
- "Re-Evaluating Federal Civil Rights Policy," Conference on the Law and Economics of Racial Discrimination in Employment, Georgetown University Law Center, November 30, 1990.
- "Opting for the British Rule," Faculty Seminar, Northwestern Law School, September 11, 1990; Faculty Seminar, University of Virginia Law School, September 14, 1990; Law and Economics Seminar, University of Michigan Law School, October 18, 1990; Faculty Workshop, NYU Law School, November 14, 1990; Faculty Workshop, University of Florida Law School, March 18, 1991.
- "The Effects of Fee Shifting on the Settlement Rate: Theoretical Observations on Costs, Conflicts, and Contingency Fees," at the Yale Law School Conference "Modern Civil Procedure: Issues in Controversy," June 16, 1990.
- "Studying the Iceberg From Its Tip?: An Analysis of the Differences Between Published and Unpublished Employment Discrimination Cases," Law and Society Meetings, Berkeley, California, May 31, 1990.
- Panel Discussion on Tort Reform, University of Pennsylvania Law School, April 27, 1990.
- Panel Discussion of "The Role of Government in Closing the Socio-Economic Gap for Minorities," at the Federalist Society National Symposium on "The Future of Civil Rights Law," Stanford Law School, March 16, 1990.
- "Continuous versus Episodic Change: The Impact of Affirmative Action and Civil Rights Policy on the Economic Status of Blacks," University of Virginia Economics Department, February 15, 1990; Princeton University Department of Economics, February 21, 1990 (with James Heckman); Law & Economics Workshop, University of Toronto Law School, October 8, 1991.
- "Sex Discrimination in the Workplace: An Economic Perspective," Fellows Seminar, American Bar Foundation, October 16, 1989.
- "The Changing Nature of Employment Discrimination Litigation," Law and Economics Workshop, Columbia Law School, March 23, 1989; Faculty Seminar, University of Virginia Law School, March 24, 1989; Law and Economics Workshop, University of Chicago, April 25, 1989; Law & Society Meeting; Madison, Wisconsin,

June 8, 1989; Labor Economics Workshop, University of Illinois, Chicago, November 1, 1989; Law & Economics Workshop, University of Pennsylvania Law School, November 9, 1989; Law and Economics Seminar, University of California at Berkeley, October 4, 1990; Law and Social Science Workshop, Northwestern University, February 3, 1991; Law and Economics Seminar, Stanford Law School, March 21, 1991; Faculty Workshop, Cornell Law School, April 3, 1991; Visiting Committee, Northwestern Law School, April 5, 1991.

- "Law & Economics: The Third Phase," The Association of General Counsel, Northwestern University School of Law, October 14, 1988.
- "Employment Discrimination Litigation," Northwestern Law School Alumni Monthly Loop Luncheon. Chicago Bar Association, May 31, 1988.
- "The Morality of the Death Penalty." A debate with Ernest Van Den Haag. Northwestern University School of Law, April 19, 1988.
- "Models of Deregulation of International Capital Markets." A presentation with David Van Zandt, Faculty Seminar, Northwestern University School of Law, April 1, 1988; Visiting Committee, May 5, 1988.
- "Is Title VII Efficient?" A debate with Judge Richard Posner, Faculty Seminar, Northwestern University School of Law, November 20, 1987.
- "The Senate's Role in Confirming Supreme Court Nominees: The Historical Record," Northwestern University School of Law, September 22, 1987.
- "Diverting the Coasean River: Incentive Schemes to Reduce Unemployment Spells," Yale Law School Civil Liability Workshop, March 30, 1987; Faculty Seminar, Northwestern University School of Law, March 18, 1987; University of Southern California Law Center, May 1, 1987; and Seminar in Law and Politics, Department of Political Science, Northwestern University, May 8, 1987; Labor Workshop, Department of Economics, Northwestern University, October 27, 1987; AALS Annual Meeting, New Orleans, January 7, 1989.
- "Women in the Labor Market--Are Things Getting Better or Worse?" Hamilton College, February 23, 1987.
- "The Changing Relative Quit Rates of Young Male and Female Workers," Hamilton-Colgate Joint Faculty Economics Seminar, February 23, 1987.
- "Living on Borrowed Money and Time--U.S. Fiscal Policy and the Prospect of Explosive Public Debt," Orange Rotary Club, February 22, 1985.
- "Capital Punishment in the Eighties," Hamilton College, April 6, 1981.
- * "Terms and Conditions of Sale Under the Uniform Commercial Code," Executive Sales Conference, National Machine Tool Builders' Association, May 12, 1980.

PROFESSIONAL ACTIVITIES

- Member, Committee on Law and Justice, National Research Council, October 2011 present.
- Fellow of the Society for Empirical Legal Studies, 2015 present.
- Co-Editor (with Steven Shavell), <u>American Law and Economics Review</u>, May 2006 August 2012.
- President, American Law and Economics Association, May 2011 May 2012.

- Co-President, Society for Empirical Legal Studies, November 2011 August 2012. Member, Board of Directors from November 2011 - November 2014.
- Testified before the Connecticut Legislature in Support of Senate Bill 1035 and House Bill 6425 (A Bill to Eliminate the Death Penalty), March 7, 2011; Testified again before the Connecticut Judiciary Committee on March 14, 2012.
- Member of the Special Committee on ALI Young Scholars Medal, October 2009 February 2011.
- Vice-President/President Elect, American Law and Economics Association, June 2010 May 2011.
- Secretary-Treasurer, American Law and Economics Association, June 2009 May 2010.
- Board of Advisors, Yale Law School Center for the Study of Corporate Law, July 2004 August 2010.
- Evaluated the Connecticut death penalty system: "Capital Punishment in Connecticut, 1973-2007: A Comprehensive Evaluation from 4600 murders to One Execution," http://works.bepress.com/john_donohue/137/
- Member, Panel on Methods for Assessing Discrimination, National Academy of Sciences, September 2001 –
 June 2004. Resulting Publication: National Research Council, <u>Measuring Racial Discrimination</u> (2004),
 http://www.nap.edu/catalog/10887.html
- Member, National Science Foundation Review Panel, Law and Social Sciences, September, 1999 April 2001.
- Editorial Board, <u>Journal of Empirical Legal Studies</u>, July 2003 present.
- Editorial Board, International Review of Law and Economics, October 1999 present.
- Editorial Board, Law and Social Inquiry, February 2000 present.
- Board of Editors, <u>American Law and Economics Review</u>, August 1998 April 2013.
- Consultant, Planning Meeting on Measuring the Crime Control Effectiveness of Criminal Justice Sanctions,
 National Academy of Sciences, Washington, D.C., June 11,1998
- Member, Board of Directors, American Law and Economics Association, June 1994-May 1997. Member, ALEA Nominating Committee, July 1995-May 1996. Member, Program Committee, July 1996-May 1998 and July 2000 – May 2002.
- Statistical Consultant, 7th Circuit Court of Appeals Settlement Conference Project (December, 1994).
- Testified before U.S. Senate Labor Committee on evaluating the Job Corps, October 4, 1994.
- Assisted the American Bar Association Standing Committee on the Federal Judiciary in evaluating the qualifications of Ruth Bader Ginsburg (June 1993) and David Souter (June, 1990).
- Chair, AALS Section on Law and Economics, January 1990-January 1991.
- Economic Consultant to Federal Courts Study Committee. Analyzing the role of the federal courts and projected caseload for Judge Richard Posner's subcommittee. February 1989-March 1990.
- Member, 1990 AALS Scholarly Papers Committee.

- Member, Advisory Board, Corporate Counsel Center, Northwestern University School of Law. Since December 1987.
- Associate Editor, <u>Law and Social Inquiry</u>. Summer 1987-December 1989.
- Interviewed Administrative Law Judge candidates for U.S. Office of Personnel Management. Chicago, Illinois. May 23, 1988.
- Member, Congressman Bruce Morrison's Military Academy Selection Committee. Fall 1983.
- 1982 Candidate for Democratic Nomination, Connecticut State Senate, 14th District (Milford, Orange, West Haven).

PRO BONO LEGAL WORK

- Death Penalty case: <u>Heath v. Alabama</u>. Fall 1986-Fall 1989.
- Wrote brief opposing death sentence in Navy spy case. Court ruled in favor of defendant on September 13, 1985.
- Staff Attorney, Neighborhood Legal Services, January-July 1981.
- Appealed sentence of death for Georgia defendant to the United States Supreme Court. Sentence vacated on May 27, 1980. <u>Baker v. Georgia</u>.
- Court-appointed representation of indigent criminal defendant in District of Columbia Superior Court, February-July 1980.

RESEARCH GRANTS

- Stanford University Research Fund, January 1997 and January 1998.
- The National Science Foundation (project with James Heckman), December 1992; (project with Steve Levitt), July 1997.
- Fund for Labor Relations Studies, University of Michigan Law School, March 1988.

BAR ADMISSIONS

Connecticut - October 1977; District of Columbia - March 1978 (Currently Inactive Status); United States
 Supreme Court - November 1980; U.S. District Court for the District of Connecticut - February 14, 1978.

PROFESSIONAL and HONORARY ASSOCIATIONS

- American Academy of Arts and Sciences (since April 2009).
- Research Associate, National Bureau of Economic Research (since October 1996) in Law and Economics and Labor Studies.
- American Law Institute (since September 29, 2010).
- Member, Fellows of the Society for Empirical Legal Studies (since October 2015).
- American Bar Association
- American Economic Association

American Law and Economics Association

PERSONAL

Born: January 30, 1953.

DECLARATION OF SERVICE BY E-MAIL and U.S. Mail

Case Name: Duncan, Virginia et al v. Xavier Becerra

No.: 17-cv-1017-BEN-JLB

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter. I am familiar with the business practice at the Office of the Attorney General for collection and processing of correspondence for mailing with the United States Postal Service. In accordance with that practice, correspondence placed in the internal mail collection system at the Office of the Attorney General is deposited with the United States Postal Service with postage thereon fully prepaid that same day in the ordinary course of business.

On November 3, 2017, I served the attached EXPERT REBUTTAL REPORT OF JOHN J. DONOHUE by transmitting a true copy via electronic mail. In addition, I placed a true copy thereof enclosed in a sealed envelope, in the internal mail system of the Office of the Attorney General, addressed as follows:

C. D. Michel
Michel & Associates, P.C.
180 E. Ocean Boulevard, Suite 200
Long Beach, CA 90802
E-mail Address:
CMichel@michellawyers.com

Erin E. Murphy
Kirkland & Ellis LLP
655 15th Street N.W.
Washington D.C. 20005
E-mail Address:
erin.murphy@kirkland.com

Anna Barvir
Michel & Associates, P.C.
180 East Ocean Blvd., Suite 200
Long Beach CA 90802-4079
E-mail Address:
abarvir@michellawyers.com

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on November 3, 2017, at Sacramento, California.

N. Newlin

Declarant

Signature

SA2017107272 POS.docx

Exhibit 3

1	XAVIER BECERRA		
2	Attorney General of California TAMAR PACHTER Supervising Deputy Attorney General		
3	Supervising Deputy Attorney General NELSON R. RICHARDS ANTHONY P. O'BRIEN		
4	Deputy Attorneys General ALEXANDRA ROBERT GORDON		
5	Deputy Attorney General State Bar No. 207650	•	
6	455 Golden Gate Avenue, Suite 11000 San Francisco, CA 94102-7004		
7	455 Golden Gate Avenue, Suite 11000 San Francisco, CA 94102-7004 Telephone: (415) 703-5509 Fax: (415) 703-5480		
8	L-mail:		
9	Alexandra.RobertGordon@doj.ca.gov Attorneys for Defendant Attorney General Xavier Becerra	•	
10			
11	IN THE UNITED STATES DISTRICT COURT		
12	FOR THE SOUTHERN DISTRICT OF CALIFORNIA		
13			
14			
15	VIRGINIA DUNCAN, et al.,	17-cv-1017-BEN-JLB	
16	Plaintiffs,		
17 18	. V.	REVISED EXPERT REPORT OF	
	VAVIED DECEDDA :- L:cc:.:	DR. LOUIS KLAREVAS	
19 20	XAVIER BECERRA, in his official capacity as Attorney General of the State of California, et al.,	Judge: Hon. Roger T. Benitez Action Filed: May 17, 2017	
21	Defendants.		
22	Defendants.		
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-	_	1	

EXPERT REPORT OF DR. LOUIS KLAREVAS

I. ASSIGNMENT

I was retained by counsel for the Defendant Xavier Becerra, in his official capacity as Attorney General of California, for the purposes of providing an expert opinion on large-capacity magazines and mass shootings.

II. QUALIFICATIONS AND BACKGROUND

I am a security policy analyst and, currently, Associate Lecturer of Global Affairs at the University of Massachusetts–Boston. I am also the author of *Rampage Nation: Securing America from Mass Shootings* (Prometheus 2016), one of the most comprehensive studies on gun massacres in the United States.

I am a political scientist by training, with a B.A. from the University of Pennsylvania and a Ph.D. from American University. My most recent research examines the nexus between American public safety and large-scale gun violence.

During the course of my nearly 20-year career as an academic, I have served on the faculties of the George Washington University, the City University of New York, and New York University. At New York University, I founded and coordinated the graduate concentration in Transnational Security. I have also served as a Defense Analysis Research Fellow at the London School of Economics and Political Science and as United States Senior Fulbright Scholar in Security Studies at the University of Macedonia.

In addition to having made well over 100 media and public speaking appearances, I am the author or co-author of more than 20 scholarly articles and over 70 commentary pieces. My most recent research project (undertaken in collaboration with Prof. David Hemenway of Harvard University) assesses the effectiveness of restrictions on large-capacity magazines in reducing gun massacres.

Last year, I served on a team of experts, coordinated through Johns Hopkins University, tasked with examining the implications of allowing guns on college

campuses. Furthermore, I was one of 32 experts surveyed by the *New York Times* for a review of proposals aimed at curbing gun violence in the United States.¹

Besides the present case, I have been retained by the California Attorney General's office in *Wiese v. Becerra*, Case Number 2:17-cv-00903-WBS-KJN, Eastern District of California, Sacramento Division. *Wiese* is similar to the present case in that it also involves a challenge against California's regulation of large-capacity magazines. Earlier this year, I served as an expert for the State of Colorado, as it defended a legal challenge to its ban on large-capacity magazines in *Rocky Mountain Gun Owners, et al. v. Hickenlooper*, Case Number 2013CV33879, District Court, City and County of Denver, Colorado. This is the only time that I have testified or been deposed in a legal proceeding in the past five years. I have also provided consultative services to the United States Institute of Peace and the Federal Bureau of Investigation.

A more detailed list of my credentials and professional experiences can be found in my curriculum vitae, which is attached as Appendix A.

III. RETENTION AND COMPENSATION

I am being compensated for my time in this case on an hourly basis at a rate of \$300 per hour. My compensation is not contingent on the results of my analysis or the substance of my testimony.

IV. BASIS FOR OPINION AND MATERIAL CONSIDERED

My opinion is based on the pleadings filed in this case, including the Court's Order of June 29, 2017, granting a temporary injunction, as well as the materials discussed in this report, including the resources cited in the footnotes and the data presented in Appendix B.

¹ Quoctrung Bui and Margaret Sanger-Katz, "How to Prevent Gun Deaths? Where Experts and the Public Agree," *New York Times*, January 10, 2017, *available at* https://www.nytimes.com/interactive/2017/01/10/upshot/How-to-Prevent-Gun-Deaths-The-Views-of-Experts-and-the-Public.html (last accessed October 4, 2017).

V. OPINION

It is my professional opinion, based upon my extensive review and analysis of data from the past five decades, that: (1) gun massacres presently pose the deadliest threat to the safety and security of American society, and the problem is growing; (2) gun massacres involving large-capacity magazines, on average, have resulted in a greater loss of life than similar incidents that did not involve large-capacity magazines; and (3) jurisdictions where bans on the possession of large-capacity magazines were in effect experienced fewer gun massacres, per capita, than jurisdictions where such bans were not in effect. As a result, restrictions on LCMs have the potential to significantly reduce the number of lives lost in mass shootings.²

A. Gun Massacres Are a Growing Threat to Public Safety

In 1984, an individual armed with, among other firearms, an Uzi assault weapon walked into a McDonald's restaurant in San Ysidro, California, and murdered 21 people, making it the deadliest mass shooting in American history at the time. It was a tragic marker that was short-lived, as the United States experienced several deadlier shootings in the years that followed: 23 people killed in a gun rampage in Killeen, Texas, in 1991; 32 people killed in a gun rampage at

² In my book *Rampage Nation*, I defined a mass shooting as "any violent attack that results in four or more individuals incurring gunshot wounds." I then differentiated between three different categories of mass shooting: (1) Nonfatal are those mass shootings in which no one dies; (2) Fatal are those mass shootings in which at least one victim dies; and (3) High-Fatality are those mass shootings in which six or more victims die. Throughout my book and in this report, I use the terms "high-fatality mass shooting" and "gun massacre" interchangeably. Of the three categories of mass shooting, gun massacres are the deadliest, resulting in the highest fatality tolls per individual incidents. Given that gun massacres are the most lethal and most disturbing, my original dataset in *Rampage Nation* focused on and surveyed all known gun massacres in the United States from 1966-2015. Louis Klarevas, *Rampage Nation: Securing America from Mass Shootings* 47-48 (Prometheus 2016).

Virginia Tech in Blacksburg, Virginia, in 2007; 27 people killed, including 20 first-graders, in a gun rampage in Newtown, Connecticut, in 2012; 49 people killed in a gun rampage in Orlando, Florida. This year, the United States reached a new milestone when a gunman attacked a crowd of concert-attendees in Las Vegas, Nevada, murdering an unprecedented 58 people in a single shooting. All six massacres had one factor in common: the perpetrator used a semiautomatic firearm armed with an ammunition-feeding device holding more than 10 bullets.³ Such ammunition-feeding devices are frequently referred to as large-capacity magazines (LCMs).⁴

In the past decade, gun massacres—like the Newtown, Orlando, Las Vegas, and Sutherland Springs rampages—have been the deadliest individual acts of violence in the United States. In fact, every single intentional act of violence in the past decade that has claimed ten or more lives has been a mass shooting (*see* App. B, tbl. 1), making gun attacks the greatest and most credible threat to the security and safety of American society in the present era.

In preparation for my book *Rampage Nation*, I assembled 50 years of data capturing all known gun massacres in the United States.⁵ Since 1968, there have

³ App. B, tbl. 2.

⁴ Magazines can come in a variety of capacities, including but not limited to 5, 8, 10, 15, 17, 20, 30, 40, 50, and even 100 rounds. The definition of "large-capacity magazine" varies by state. For instance, California and Connecticut define them as ammunition-feeding devices holding more than 10 bullets, whereas Colorado and New Jersey define them as ammunition-feeding devices holding more than 15 bullets. *See* Law Center to Prevent Gun Violence, *Large Capacity Magazines*, available at http://smartgunlaws.org/gun-laws/policy-areas/classes-of-weapons/large-capacity-magazines (last accessed October 4, 2017). For purposes of this report, unless otherwise stated, LCMs will hereinafter refer to magazines with a capacity greater than 10 rounds.

⁵ My book, which was published in 2016, covered the 50-year period of 1966-2015. In preparation of this report, I have updated the dataset of gun massacres to cover

been a total of 114 gun massacres, resulting in the loss of a combined 1,035 lives. See App. B, tbl. 2 & figs. 1-2. The data show that the past decade (2008-2017) has been the worst on record, accounting for nearly one-third of all gun massacre incidents from the past five decades (37 out of 114) and over 40 percent of all deaths lost in such high-fatality mass shootings (428 out of 1,035).⁶ In fact, this past year (2017) is the deadliest year of the past 50 years, with 100 people dying in gun massacres.⁷ In other words, mass shootings pose a grave threat to the United States, and the threat is growing.

B. The Use of LCMs Is a Major Factor in the Rise of Gun Massacre Violence

A review of the data from the past 50 years indicates that gun massacres have grown in terms of frequency and lethality. The data also point to another striking pattern: the use of LCMs in the commission of gun massacres has risen in vast proportions. *See* App. B, tbl. 2 & figs. 3-4.

A comparison of the ten-year period of 1968-1977 with the most recent decade of 2008-2017 shows that the number of gun massacres involving LCMs has increased eight-fold, from three to 24. Even more disturbing, the number of deaths attributable to LCM-involving gun massacres has jumped over 17-fold between the same two ten-year periods, from 19 to 330. Indeed, the 24 LCM-involving gun massacres from the past decade account for 45 percent of all LCM-involving gun massacres since 1968, and the 330 deaths attributable to the 24 incidents of the past decade account for 55 percent of all deaths resulting from LCM-involving gun massacres since 1968. To present the data in another manner, between 1968-1977, only 17 percent of gun massacres involved LCMs, and those shootings accounted

the 50-year period from 1968 to 2017.

⁶ App. B, tbl. 2 & figs. 1-2.

⁷ *Id*.

for only 16 percent of all gun massacre fatalities from that decade. By contrast, between 2008-2017, 65 percent of gun massacres involved LCMs, and those shootings accounted for 77 percent of all gun massacre fatalities from that decade. These are gigantic increases of 282 percent and 381 percent, respectively.⁸

LCMs provide multiple advantages to active shooters. Offensively, LCMs increase kill potential. Basically, the more bullets a gunman can fire at a target, the more potential wounds he can inflict. Furthermore, the more bullets that strike a victim, the higher the odds that that person will die. There are two forces that allow LCMs to increase kill potential: rapid-fire capability and multiple-impact capability.

When inserted into either a semiautomatic or fully-automatic weapon, an LCM facilitates the ability of an active shooter to fire a large number of rounds at an extremely quick rate. This phenomenon—rapid-fire capability—comes in handy when a target is in a gunman's line of sight for only a few seconds. For example, rapid-fire capability allows a decent shooter to fire three rounds per second with a semiautomatic firearm and ten rounds per second with an automatic firearm. That results in numerous chances to hit a target in a very short window of opportunity.

LCMs also facilitate the ability of a shooter to strike a human target with more than one round. This phenomenon—multiple-impact capability—increases the chances that the victim, when struck by multiple rounds, will die. At least two separate studies have found that, when compared to the fatality rates of gunshot wound victims who were hit by only a single bullet, the fatality rates of those victims hit by more than one bullet were over 60 percent higher.⁹ The implication

⁸ App. B, tbl. 2 & figs. 3-4.

⁹ Dåniel W. Webster, et al., "Epidemiologic Changes in Gunshot Wounds in Washington, DC, 1983-1990," 127 *Archives of Surgery* 694-698 (June 1992); and Christopher S. Koper & Jeffrey A. Roth, The Impact of the 1994 Federal Assault Weapon Ban on Gun Violence Outcomes: An Assessment of Multiple Outcome

is straightforward: being able to strike human targets with more than one bullet increases the shooter's chances of killing his victims. In essence, LCMs are force multipliers when it comes to kill potential—and the evidence from gun massacres supports this commonsense conclusion.

Of the 114 gun massacres since 1968, 53 involved LCMs, resulting in a cumulative 600 deaths. *See* App. B, tbl. 2 & fig. 5. The average death toll for the 53 gun massacres involving LCMs is 11.32 fatalities per shooting. ¹⁰ By contrast, the average death toll for the 61 incidents for which there is no evidence of LCM usage is 7.13 fatalities per shooting. ¹¹ In other words, the use of LCMs in massacres resulted in a 59 percent increase in fatalities per incident. ¹² In the past

Measures and Some Lessons for Policy Evaluation, 17 *Journal of Quantitative Criminology* 33-74 (March 2001); *see also*, Angela Sauaia, et al., Fatality and Severity of Firearm Injuries in a Denver Trauma Center, 2000-2013, 315 *J. of the Am. Med. Ass'n* 2465-2467 (June 14, 2015).

¹⁰ App. B, tbl. 2 & fig. 5.

 $^{^{11}}$ Id. T-tests confirm that the differences in death tolls by LCM status are statistically significant (p < .01 level). The difference remained statistically significant (p < .01 level) regardless of whether non-LCM incidents were limited to only those that did not involve LCMs or also included incidents for which the LCM status was unknown.

¹² The standard methodology is to attribute all deaths in LCM-involving mass shootings to the use of LCMs and to treat cases for which the status of LCM usage is unknown as incidents not involving LCMs. See Gary Kleck, Large-Capacity Magazines and the Casualty Counts in Mass Shootings, 17 Justice Research & Policy 28-47 (June 2016). Therefore, the calculation of the 11.32 mean average is determined by dividing the total number of gun massacres involving LCMs (53) into the total number of deaths resulting from those incidents (600). App. B, tbl. 2 & fig. 5. However, some of the people murdered in five of the 53 LCM-involving gun massacres were shot and killed by firearms that were not LCM-capable. When these five shootings are adjusted to reflect only deaths that were the result of LCM-capable firearms—San Ysidro (19 out of 21 deaths), Littleton (5 out of 13 deaths), Kirkwood (5 out of 6 deaths), Aurora (10 out of 12 deaths), and Newtown (26 out of 27 deaths)—the cumulative death toll decreases to 586. This adjustment drops the average death toll per LCM-involving incident to 11.06 fatalities, which in turn

decade, the difference is even more pronounced: 7.54 versus 13.75 deaths per incident. This is a 82 percent increase in the average death toll, attributed to the use of LCMs. Moreover, since 1968, LCMs have been used in 74 percent of all gun massacres with 10 or more deaths, as well as in 100 percent of all gun massacres with 20 or more deaths—establishing a relationship between LCMs and the deadliest gun massacres. 4

In addition to the offensive advantage that LCMs provide, there is the advantage of extended cover. During an active shooting, perpetrators are either firing their guns or not firing their guns. While pulling the trigger, it is extremely difficult for those in harm's way to take successful defensive maneuvers. But if gunmen run out of bullets, there is a lull in the shootings. This precious down-time affords those in the line of fire with a chance to flee, hide, or fight back.

There are countless examples of individuals fleeing or taking cover while active shooters paused to reload. For instance, in 2012, nine first-graders at Sandy Hook Elementary School in Newtown, Connecticut, literally pushed their attacker aside as he was swapping out magazines, allowing them to escape from their

results in a 55-percent increase (as opposed to a 59-percent increase) in deaths per incident attributed to the use of LCMs. The revised fatality attributions are based on my review of official government documents and autopsy reports pertaining to the three respective mass shootings. Furthermore, the calculation of the 7.13 mean average is determined by dividing the number of incidents for which the status of LCM usage was either none or unknown (61) into the total number of deaths resulting from those incidents (435). However, removing the nine cases wherein the status of LCM usage is unknown from the set of 61 total cases results in 52 incidents and 373 cumulative fatalities. This adjustment decreases the average death toll per non-LCM-involving incident to 7.17 fatalities, which in turn results in a 58 percent increase (as opposed to a 59 percent increase) in deaths per incident attributed to the use of LCMs. App. B, tbl. 2 & fig. 5.

¹³ App. B, tbl. 2 & figs. 1-5.

¹⁴ App. B, tbl. 2.

classroom and dash to safety.¹⁵ There is also the possibility that someone will rush a rampage gunman and try to tackle him (or at the very least try to wrestle his weapon away from him) while he pauses to reload.¹⁶ In recent history, there have been numerous instances of active shooters being physically confronted by unarmed civilians while reloading, bringing their gun attacks to an abrupt end. The following list is just a sampling of examples.¹⁷

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Opened Fire in Seattle Pacific University, Killing One," *New York Daily News*, June 6, 2014, *available at* http://www.nydailynews.com/news/crime/student-hailed-hero-tackling-gunman-opened-fire-seattle-pacific-university-killing-article-

4, 2017); see also Joe Kemp, "Student Hailed Hero for Tackling Gunman Who

1.1819485 (last accessed October 4, 2017).

¹⁵ See Klarevas, Rampage Nation, supra note 2, at 22.

¹⁶ The longer a shooter can fire without interruption, the longer he can keep potential defenders at bay. The longer potential defenders are kept from physically confronting a gunman, the more opportunity there is for the shooter to inflict damage.

¹⁷ See Rich Schapiro, "LIRR Massacre 20 Years Ago: 'I Was Lucky,' Says Hero Who Stopped Murderer," New York Daily News, December 7, 2013, available at http://www.nydailynews.com/new-york/nyc-crime/lirr-massacre-20-years-luckyhero-stopped-murderer-article-1.1540846 (last accessed October 4, 2017); see also Eric Schmitt, "Gunman Shoots at White House from Sidewalk," New York Times. October 30, 1994, available at http://www.nytimes.com/1994/10/30/us/gunmanshoots-at-white-house-from-sidewalk.html (last accessed October 4, 2017); see also Timothy Egan, "Oregon Student Held in 3 Killings; One Dead, 23 Hurt at His School," New York Times, May 22, 1998, available at http://www.nytimes.com/ 1998/05/22/us/shootings-school-overview-oregon-student-held-3-killings-onedead-23-hurt-his.html (last accessed October 4, 2017); see also Ken Ritter, "Trial Begins in Las Vegas Casino Gunfire Case, San Diego Union-Tribune, July 7, 2009, available at http://www.sandiegouniontribune.com/sdut-us-casino-shooting-trial-070709-2009jul07-story.html (last accessed October 4, 2017); see also "Capitol Gunfire Suspect Tried Reloading," Huntsville Item, January 22, 2010, available at http://www.itemonline.com/news/local news/report-capitol-gunfire-suspect-triedreloading/article 7f321cc6-170e-578c-928f-fbc702f1228a.html (last accessed October 4, 2017); see also Adam Nagourney, "A Single, Terrifying Moment: Shots Fired, a Scuffle and Some Luck," New York Times, January 9, 2011, available at http://www.nytimes.com/2011/01/10/us/10reconstruct.html (last accessed October

Examples of Active Shooters Who Were Physically Confronted While Reloading

Date	Perpetrator	Target	Location
December 7, 1993	Colin Ferguson	Long Island Rail Road	Garden City, NY
October 29, 1994	Francisco Duran	White House	Washington, DC
May 21, 1998	Kipland Kinkel	Thurston High School	Springfield, OR
July 6, 2007	Steven Zegrean	New York-New York Casino	Las Vegas, NV
January 21, 2010	Fausto Cardenas	Texas State Capitol	Austin, TX
January 8, 2011	Jared Loughner	Rep. Gabrielle Giffords Event	Tucson, AZ
June 5, 2014	Aaron Ybarra	Seattle Pacific University	Seattle, WA

C. Restrictions on LCMs Result in Fewer Gun Massacres

In light of the growing threat posed by rampage violence, legislatures have enacted measures in an effort to reduce the carnage of mass shootings. Prominent among these measures are restrictions on LCMs. There are at least two rationales for restricting magazine capacity. First, because LCMs, on average, produce higher death tolls in gun massacres, limiting magazine capacity aims to reduce the loss of life attributable to the increased kill potential of LCMs. Second, because LCMs allow rampage gunmen to fire more bullets without interruption, resulting in fewer opportunities for potential victims to take life-saving measures, limiting magazine capacity aims to create conditions which force mass shooters to pause in order to reload fresh magazines. This, in turn, provides authorities and civilians with precious seconds that can be exploited to escape, seek cover, or take other defensive measures, including attacking the gunmen.

In 1994, the United States enacted the Federal Assault Weapons Ban (AWB). Pub. L. No. 103-322, tit. XI, subtit. A, 108 Stat. 1796, 1996-2010 (codified as

former 18 U.S.C. § 922(v), (w)(1) (1994)). The law, which was in effect for only a ten-year period before sun-setting, regulated certain firearms and their components. Among its provisions, the AWB prohibited the manufacture, sale, transfer, or possession of *new* magazines with a capacity greater than 10 rounds. *Id*. With regard to the frequency and lethality of gun massacres, the AWB clearly had a positive impact in reducing the number and carnage of such shootings.

In the 10-year period prior to the AWB (September 13, 1984-September 12, 1994), there were a total of eight gun massacres involving magazines with a capacity greater than 10 rounds. *See* App. B, tbl. 2 & fig. 6. These eight gun massacres claimed a combined 73 lives. During the 10-year period the AWB was in effect (September 13, 1994-September 12, 2004), there were six gun massacres involving magazines with a capacity greater than 10 rounds. These six gun massacres claimed a combined 50 lives. In the ten-year period immediately following the expiration of the AWB (September 13, 2004-September 12, 2014), there were 24 gun massacres involving magazines with a capacity greater than 10 rounds. These 24 gun massacres claimed a combined 230 lives.¹⁹

In terms of incidents, the AWB ushered in a period marked by a 25-percent decrease in the number of gun massacres involving magazines with a capacity greater than 10 rounds. In contrast, the decade following the ban was marked by a 300-percent increase in the number of gun massacres involving magazines with a capacity greater than 10 rounds. In terms of fatalities, the AWB ushered in a period marked by a 32 percent decrease in the cumulative number of lives lost in gun massacres involving magazines with a capacity greater than 10 rounds. In contrast,

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¹⁸ Magazines lawfully in circulation prior to the AWB's date of effect (September 13, 1994) were exempted (i.e., grandfathered) from the ban. Former 18 U.S.C. § 922 (v)(2) (1994).

¹⁹ App. B, tbl. 2 & fig. 6.

the decade following the ban was marked by a 360 percent increase in the cumulative number of lives lost in gun massacres involving magazines with a capacity greater than 10 rounds.²⁰

Since 1990, several states have also enacted restrictions on LCMs, predominantly in an effort to reduce the loss of life in mass shootings.²¹ On March 30, 1990, New Jersey became the first state to regulate LCMs. Seven states and the District of Columbia have since followed suit: Hawaii (July 1, 1992), Maryland (June 1, 1994), Massachusetts (July 23, 1998), California (January 1, 2000), New York (November 1, 2000), Washington, D.C. (March 31, 2009), Connecticut (April 4, 2013), and Colorado (July 1, 2013).²²

²² Through a referendum on Proposition 63 (November 8, 2016), California voters

²⁰ *Id*. In terms of all gun massacres, regardless of whether or not the shootings involved LCMs, patterns in the same directions were noted. For instance, the period of the AWB was marked by a 37 percent decrease in gun massacre incidents and a 43 percent decrease in gun massacre deaths, when compared to the 10-year period immediately preceding the AWB. By contrast, the 10-year period immediately following the AWB was marked by a 183 percent increase in gun massacre incidents and a 239 percent increase in gun massacre deaths, when compared to the decade of the AWB. *See* Klarevas, *Rampage Nation*, *supra* note 2, at 242.

²¹ For a review of state laws that regulate LCMs, *see* Law Center to Prevent Gun Violence, Large Capacity Magazines, *supra* note 1. States differ on the ammunition-capacity threshold of LCMs. California, Connecticut, Hawaii, Maryland, Massachusetts, New York, and Washington, D.C., define LCMs as ammunition feeding devices holding more than 10 bullets, whereas Colorado and New Jersey define LCMs as ammunition feeding devices holding more than 15 bullets. States also differ on whether to exempt LCMs that were in circulation or owned prior to their respective bans going into effect—a practice known as "grandfathering." Colorado, Connecticut, Maryland Massachusetts grandfather pre-ban LCMs. Hawaii, New Jersey, New York, and Washington, D.C., do not grandfather pre-ban LCMs. Pursuant to a preliminary injunction issued by the court in the current matter, California is prohibited from enforcing a law that would prohibit LCMs that were legally possessed prior to January 1, 2000. If the injunction is lifted, California would join Hawaii, New Jersey, New York, and Washington, D.C. in not grandfathering previously-owned LCMs. *Id*.

In the field of epidemiology, a common method for assessing the impact of laws and policies is to measure the rate of onset of new cases of a problem, comparing the rate when and where the laws and policies were in effect against the rate when and where the laws and policies were not in effect. This measure, known as the incidence rate, allows public health experts and criminologists to identify discernable differences, per capita, over a period of time. Relevant to the present case, calculating incidence rates across jurisdictions, in a manner that accounts for whether or not LCM bans were in effect during the period of observation, allows for the assessment of the effectiveness of such bans. In addition, fatality rates—the number of deaths, per capita, that result from particular activities across different jurisdictions—also provide insights into the impact of LCM bans on gun massacres.²³

Since 1990, when the first LCM ban took effect in New Jersey, there have been 69 gun massacres in the United States.²⁴ Calculating gun massacre incidence rates for the time-period 1990-2017, across jurisdictions with and without bans on the possession of LCMs, reveals that the enactment of an LCM ban resulted in an

decided to enhance their existing regulations on LCMs by prohibiting the ownership of all ammunition magazines with a capacity greater than 10 bullets, including any previously "grandfathered" LCMs. The relevant California statutes can be found at Cal. Penal Code §§ 16740, 32310-32450. The particular provisions that are the subject of the current litigation are codified at Cal. Penal Code §§ 32310, 32390. California's new LCM ban was set to take effect on July 1, 2017, although the State is temporarily enjoined from enforcing it pursuant to a ruling in the current case.

²³ For purposes of this report, incidence and fatality (i.e., mortality) rates are calculated in accordance with the methodological principles established by the Centers for Disease Control and Prevention. *See* Centers for Disease Control and Prevention, *An Introduction to Applied Epidemiology and Biostatistics* (2012).

²⁴ App. B, tbl. 2. There were no LCM bans in effect prior to 1990. Therefore, a priori, 1990 is the logical starting point for an analysis of the impact of LCM bans.

79 percent difference, with ban states experiencing a far lower rate of incidence. See App. B, tbl. 3.²⁵ Even if the examination is limited to the last 13 years (2005-2017), which covers the years when the nationwide AWB was no longer in effect, the difference in incidence rates is still 56 percent, with LCM-ban states again experiencing far fewer gun massacres per capita.²⁶

It should be noted that the aforementioned incidence rates pertain to all gun massacres, regardless of the weaponry they involved. When calculations go a step further and are limited to gun massacres involving LCMs, the difference is even more pronounced. *See* App. B, tbl. 3. In terms of incidence rates, for the timeperiod since 1990, the benefit for jurisdictions that regulated LCMs was a 105 percent difference, when compared to jurisdictions that did not regulate LCMs.²⁷ Again, even if the examination is limited to post-federal AWB era, the difference in incidence rates for LCM-involving gun massacres was 88 percent, again with LCM-ban states experiencing far fewer attacks involving LCMs.²⁸

In terms of fatality rates, the patterns are similar. See App. B, tbl. 4. From 1990-2017, the difference in rates was 101 percent, with jurisdictions that had LCM bans in effect experiencing drastically fewer deaths per capita than those areas which did not regulate LCMs. Even after the federal AWB expired, drastically cutting the number of areas restricting LCMs, states with LCM bans experienced fewer gun massacre deaths per capita, marked by a 74 percent difference in fatality

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²⁵ For purposes of coding, between September 13, 1994, and September 12, 2004, the federal AWB was in effect. During that ten-year period, all 50 states and the District of Columbia were under legal conditions that banned the possession of certain prohibited LCMs. As such, the entire country is coded as being under a LCM ban during the decade the AWB was in effect.

²⁶ App. B, tbl. 3.

 $^{^{27}}$ Id.

 $^{^{28}}$ *Id*.

rates. Limiting analysis to only those gun massacres that involved LCMs indicates that the difference in gun massacre fatality rates for LCM-ban jurisdictions was even greater when compared to the fatality rates for jurisdictions that opted not to regulate LCMs. In terms of LCM-involving gun massacres, the differences in fatality rates between the two categories of jurisdictions were 126 percent and 106 percent for the time-periods 1990-2017 and 2005-2017, respectively, in both instances to the benefit of states that regulated LCMs.²⁹

Basically, all of the above epidemiological calculations lead to the same conclusion: when LCM bans are in effect, per capita, fewer gun massacres occur and fewer people die in such high-fatality mass shootings.

The intent underlying most LCM bans is to restrict the circulation of LCMs. The reasoning is that, if there are fewer LCMs in circulation within their jurisdictions, then gunmen will be forced to use firearms with lower ammunition-capacities, resulting in attacks that do not kill enough victims to rise to the level of a gun massacre (six or more victims being shot to death in a mass shooting). Moreover, even if gunmen opt to use semiautomatic firearms equipped with magazines, bans should still result in fewer opportunities to acquire and utilize LCMs prohibited by law to perpetrate gun massacres. The epidemiological data clearly lend support to both of these premises, in turn furthering the argument that bans on the possession of LCMs enhance public safety.

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²⁹ App. B, tbl. 4.

³⁰ For instance, a gunman armed with a six-shot revolver can, in theory, kill six people without having to reload. However, to kill more people, that same gunman would require a way to fire additional ammunition, and the most efficient way to do so is to utilize a firearm armed with a LCM. Restricting the ability of gunmen to deliver large capacities of ammunition without interruption can result in fewer lives lost in shootings.

While imposing constraints on LCMs will not result in the prevention of all future mass shootings, the data suggest that denying rampage gunmen access to LCMs will result in a significant number of lives being saved.

Respectfully Submitted,

Louis Klarevas, Ph.D. January 5, 2018

Queens, NY

Appendix A

Curriculum Vitae of Dr. Louis Klarevas

Louis J. Klarevas

Education

- Ph.D. International Relations, 1999 School of International Service American University
- B.A. Political Science, *Cum Laude*, 1989 School of Arts and Sciences University of Pennsylvania

Current Position

Associate Lecturer, Department of Global Affairs, University of Massachusetts -- Boston, 2015-

Representation

Trident Media Group 41 Madison Avenue New York, NY 10010

Professional Experience

Expert Witness for State of California, *Duncan v. Becerra*, United States District Court for Southern District of California, Case Number 3:17-cv-1017-BEN, 2017

Expert Witness for State of California, *Wiese v. Becerra*, United States District Court for Eastern District of California, Case Number 2:17-cv-00903-WBS-KJN, 2017

Expert Witness for State of Colorado, *Rocky Mountain Gun Owners v. Hickenlooper*, District Court for County and City of Denver, Colorado, Case Number 2013CV33879, 2016-2017

Member, Guns on Campus Assessment Group, Johns Hopkins University Center for Gun Policy and Research, 2016

Consultant, National Joint Terrorism Task Force, Federal Bureau of Investigation, 2015

Senior Fulbright Scholar (Security Studies), Department of European and International Studies, University of Macedonia, Thessaloniki, Greece, 2012

Clinical Assistant Professor, Center for Global Affairs, New York University, 2006-2011

Founder and Coordinator, Graduate Transnational Security Program, Center for Global Affairs, New York University, 2009-2011

Faculty Affiliate, A. S. Onassis Program in Hellenic Studies, New York University, 2007-2011

Consultant, Academy for International Conflict Management and Peacebuilding, United States Institute of Peace, Washington, D.C., 2008-2009

Assistant Professor of Political Science, City University of New York – College of Staten Island, 2003-2006

Adjunct Professor, Center for Global Affairs, New York University, 2004-2006

Consultant, United States Institute of Peace, Washington, DC, 2005

Associate Fellow, European Institute, London School of Economics and Political Science, 2003-2004

Defense Analysis Research Fellow, London School of Economics and Political Science, 2002-2003

Visiting Assistant Professor of Political Science and International Affairs, George Washington University, Washington, D.C., 1999-2002

Adjunct Professor of Political Science, George Washington University, Washington, D.C., 1998-1999

Research Associate, United States Institute of Peace, Washington, D.C., 1992-1998

Adjunct Professor of International Relations, School of International Service, American University, Washington, D.C., 1994

Faculty Advisor, National Youth Leadership Forum, Washington, D.C., 1992

Dean's Scholar, School of International Service, American University, Washington, D.C., 1989-1992

Courses Taught

American Government and Politics (undergraduate)

Counter-Terrorism and Homeland Security (graduate)

European-Atlantic Relations (undergraduate)

International Political Economy (graduate and undergraduate)

International Politics in a Post-Cold War Era (graduate)

International Relations (undergraduate)

International Security (graduate)

Machinery and Politics of American Foreign Policy (graduate)

Role of the United States in World Affairs (graduate)

Security Policy (graduate)

Theories of International Politics (graduate)

Transnational Security (graduate)

Transnational Terrorism (graduate, undergraduate, and senior seminar)

United States Foreign Policy (graduate and undergraduate)

Books

Rampage Nation: Securing America from Mass Shootings (2016) http://www.penguinrandomhouse.com/books/252353/rampage-nation-by-louis-klarevas

Scholarship

Firearms on College Campuses: Research Evidence and Policy Implications, report prepared by the Johns Hopkins University Center for Gun Policy and Research for the Association of American Universities, October 2016 (co-authored with Daniel W. Webster, John J. Donohue, et al.)

"No Relief in Sight: Barring Bivens Suits in Torture Cases," Presidential Studies Quarterly, June 2013

"Trends in Terrorism Since 9/11," Georgetown Journal of International Affairs, Winter/Spring 2011

"The Death Penalty Should Be Decided Only Under a Specific Guideline," in Christine Watkins, ed., *The Ethics of Capital Punishment* (Cengage/Gale Publishers, 2011)

Saving Lives in the 'Convoy of Joy': Lessons for Peace-Keeping from UNPROFOR, United States Institute of Peace Case Study, 2009

"Casualties, Polls and the Iraq War," International Security, Fall 2006

"The CIA Leak Case Indicting Vice President Cheney's Chief of Staff," *Presidential Studies Quarterly*, June 2006

"Were the Eagle and the Phoenix Birds of a Feather? The United States and the 1967 Greek Coup," *Diplomatic History*, June 2006

"Greeks Bearing Consensus: An Outline for Increasing Greece's Soft Power in the West," *Mediterranean Quarterly*, Summer 2005

"W Version 2.0: Foreign Policy in the Second Bush Term," *The Fletcher Forum of World Affairs*, Summer 2005

"Can You Sue the White House? Opening the Door for Separation of Powers Immunity in *Cheney v. District Court,*" *Presidential Studies Quarterly*, December 2004

"Political Realism: A Culprit for the 9/11 Attacks," Harvard International Review, Fall 2004

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"Media Impact," in Mark Rozell, ed., *The Media and American Politics: An Introduction* (Lanham, MD: Rowman & Littlefield, 2003)

"The Surrender of Alleged War Criminals to International Tribunals: Examining the Constitutionality of Extradition via Congressional-Executive Agreement," *UCLA Journal of International Law and Foreign Affairs*, Fall/Winter 2003

"The Constitutionality of Congressional-Executive Agreements: Insights from Two Recent Cases," *Presidential Studies Quarterly*, June 2003

"The 'Essential Domino' of Military Operations: American Public Opinion and the Use of Force," *International Studies Perspectives*, November 2002

"The Polls-Trends: The United States Peace Operation in Somalia," Public Opinion Quarterly, Winter 2001

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"Turkey's Right v. Might Dilemma in Cyprus: Reviewing the Implications of Loizidou v. Turkey," Mediterranean Quarterly, Spring 1999

"An Outline of a Plan Toward a Comprehensive Settlement of the Greek-Turkish Dispute," in Vangelis Calotychos, ed., *Cyprus and Its People: Nation, Identity, and Experience in an Unimaginable Community, 1955-1997*, Boulder, CO: Westview Press, 1998 (co-authored with Theodore A. Couloumbis)

"Prospects for Greek-Turkish Reconciliation in a Changing International Setting," in Robert L. Pfaltzgraff and Dimitris Keridis, eds., Security in Southeastern Europe and the U.S.-Greek-Relationship, London: Brassey's, 1997 (co-authored with Theodore A. Couloumbis)

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"Structuration Theory in International Relations," Swords & Ploughshares, Spring 1992

Book Reviews

Review of James Edward Miller's *The United States and the Making of Modern Greece: History and Power, 1950-1974, Presidential Studies Quarterly, June 2012*

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- "What the U.N. Can Do To Stop Getting Attacked by Terrorists," September 2, 2011
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- "How Obama Could Have Stayed the Execution of Humberto Leal Garcia," July 13, 2011
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- "Libya's Stranger Soldiers: How To Go After Qaddafi's Mercenaries," February 28, 2011
- "Closing the Gap: How To Reform U.S. Gun Laws To Prevent Another Tucson," January 13, 2011
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- "Improving the Justice System Following the Deaths of Michael Brown and Eric Garner," December 4, 2014
- "American Greengemony: How the U.S. Can Help Ukraine and the E.U. Break Free from Russia's Energy Stranglehold," March 6, 2014
- "Guns Don't Kill People, Dogs Kill People," October 17, 2013
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- "Do the Wrong Thing: Why Penn State Failed as an Institution," November 14, 2011
- "Holding Egypt's Military to Its Pledge of Democratic Reform," February 11, 2011
- "The Coming Twivolutions? Social Media in the Recent Uprisings in Tunisia and Egypt," January 31, 2011
- "Scholarship Slavery: Does St. John's 'Dean of Mean' Represent a New Face of Human Trafficking?" October 6, 2010
- "Misunderstanding Terrorism, Misrepresenting Islam," September 21, 2010
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- "Do the Hutaree Militia Members Pose a Terrorist Threat?" May 4, 2010
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- "Terrorism in Texas: Why the Austin Plane Crash Is an Act of Terror," February 19, 2010
- "Securing American Primacy by Tackling Climate Change: Toward a National Strategy of Greengemony," December 15, 2009
- "Traffickers Without Borders: A 'Journey' into the Life of a Child Victimized by Sex Trafficking," November 17, 2009
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"Can the Justice Department Prosecute Reporters Who Publish Leaked Classified Information? Interpreting the Espionage Act," *Writ* (FindLaw.com), June 9, 2006

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"The Supreme Court Considers the Rights of Foreign Citizens Arrested in the United States," Writ (FindLaw.com), March 21, 2005 (co-authored with Howard S. Schiffman)

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"Time to Pay," August 2003

"Does Turkey Have an Ulterior Motive?" July 2003

"Will They Make Up?" June 2003

"Don't Take the Bait," May 2003

"If the Cheers Turn to Jeers," April 2003

"The Power of a Niche Identity," April 2003

"If You Can't Beat Them, Join Them," April 2003

"Show Me the Euros," March 2003

Presentations and Addresses

In addition to the presentations listed below, I have made close to one hundred media appearances, book events, and educational presentations (beyond lectures for my own classes)

"Protecting the Homeland: Tracking Patterns and Trends in Domestic Terrorism," address delivered to the annual meeting of the National Joint Terrorism Task Force, June 2015

"Sovereign Accountability: Creating a Better World by Going after Bad Political Leaders," address delivered to the Daniel H. Inouye Asia-Pacific Center for Security Studies, November 2013

"Game Theory and Political Theater," address delivered at the School of Drama, State Theater of Northern Greece, May 2012

"Holding Heads of State Accountable for Gross Human Rights Abuses and Acts of Aggression," presentation delivered at the Michael and Kitty Dukakis Center for Public and Humanitarian Service, American College of Thessaloniki, May 2012

Chairperson, Cultural Enrichment Seminar, Fulbright Foundation – Southern Europe, April 2012

Participant, Roundtable on "Did the Intertubes Topple Hosni?" Zócalo Public Square, February 2011

Chairperson, Panel on Democracy and Terrorism, annual meeting of the International Security Studies Section of the International Studies Association, October 2010

"Trends in Terrorism Within the American Homeland Since 9/11," paper to be presented at the annual meeting of the International Security Studies Section of the International Studies Association, October 2010

Panelist, "In and Of the World," Panel on Global Affairs in the 21st Century, Center for Global Affairs, New York University, March 2010

Moderator, "Primacy, Perils, and Players: What Does the Future Hold for American Security?" Panel of Faculty Symposium on Global Challenges Facing the Obama Administration, Center for Global Affairs, New York University, March 2009

"Europe's Broken Border: The Problem of Illegal Immigration, Smuggling and Trafficking via Greece and the Implications for Western Security," presentation delivered at the Center for Global Affairs, New York University, February 2009

"The Dangers of Democratization: Implications for Southeast Europe," address delivered at the University of Athens, Athens, Greece, May 2008

Participant, "U.S. National Intelligence: The Iran National Intelligence Estimate," Council on Foreign Relations, New York, April 2008

Moderator, First Friday Lunch Series, "Intelligence in the Post-9/11 World: An Off-the-Record Conversation with Dr. Joseph Helman (U.S. Senior National Intelligence Service)," Center for Global Affairs, New York University, March 2008

Participant, "U.S. National Intelligence: Progress and Challenges," Council on Foreign Relations, New York, March 2008

Moderator, First Friday Lunch Series, "Public Diplomacy: The Steel Backbone of America's Soft Power: An Off-the-Record Conversation with Dr. Judith Baroody (U.S. Department of State)," Center for Global Affairs, New York University, October 2007

"The Problems and Challenges of Democratization: Implications for Latin America," presentation delivered at the Argentinean Center for the Study of Strategic and International Relations Third Conference on the International Relations of South America (IBERAM III), Buenos Aires, Argentina, September 2007

"The Importance of Higher Education to the Hellenic-American Community," keynote address to the annual Pan-Icarian Youth Convention, New York, May 2007

Moderator, First Friday Lunch Series, Panel Spotlighting Graduate Theses and Capstone Projects, Center for Global Affairs, New York University, April 2007

Convener, U.S. Department of State Foreign Officials Delegation Working Group on the Kurds and Turkey, March 2007

"Soft Power and International Law in a Globalizing Latin America," round-table presentation delivered at the Argentinean Center for the Study of Strategic and International Relations Twelfth Conference of Students and Graduates of International Relations in the Southern Cone (CONOSUR XII), Buenos Aires, Argentina, November 2006

Moderator, First Friday Lunch Series, "From Berkeley to Baghdad to the Beltway: An Off-the-Record Conversation with Dr. Catherine Dale (U.S. Department of Defense)," Center for Global Affairs, New York University, November 2006

Chairperson, Roundtable on Presidential Privilege and Power Reconsidered in a Post-9/11 Era, American Political Science Association Annual Meeting, September 2006

"Constitutional Controversies," round-table presentation delivered at City University of New York-College of Staten Island, September 2005

"The Future of the Cyprus Conflict," address to be delivered at City University of New York College of Staten Island, April 2005

"The 2004 Election and the Future of American Foreign Policy," address delivered at City University of New York College of Staten Island, December 2004

"One Culprit for the 9/11 Attacks: Political Realism," address delivered at City University of New York-College of Staten Island, September 2004

"Were the Eagle and the Phoenix Birds of a Feather? The United States and the 1967 Greek Coup," address delivered at London School of Economics, November 2003

"Beware of Europeans Bearing Gifts? Cypriot Accession to the EU and the Prospects for Peace," address delivered at Conference on Mediterranean Stability, Security, and Cooperation, Austrian Defense Ministry, Vienna, Austria, October 2003

Co-Chair, Panel on Ideational and Strategic Aspects of Greek International Relations, London School of Economics Symposium on Modern Greece, London, June 2003

"Greece between Old and New Europe," address delivered at London School of Economics, June 2003

Co-Chair, Panel on International Regimes and Genocide, International Association of Genocide Scholars Annual Meeting, Galway, Ireland, June 2003

"American Cooperation with International Tribunals," paper presented at the International Association of Genocide Scholars Annual Meeting, Galway, Ireland, June 2003

"Is the Unipolar Moment Fading?" address delivered at London School of Economics, May 2003

"Cyprus, Turkey, and the European Union," address delivered at London School of Economics, February 2003

"Bridging the Greek-Turkish Divide," address delivered at Northwestern University, May 1998

"The CNN Effect: Fact or Fiction?" address delivered at Catholic University, April 1998

"The Current Political Situation in Cyprus," address delivered at AMIDEAST, July 1997

"Making the Peace Happen in Cyprus," presentation delivered at the U.S. Institute of Peace in July 1997

"The CNN Effect: The Impact of the Media during Diplomatic Crises and Complex Emergencies," a series of presentations delivered in Cyprus (including at Ledra Palace), May 1997

"Are Policy-Makers Misreading the Public? American Public Opinion on the United Nations," paper presented at the International Studies Association Annual Meeting, Toronto, Canada, March 1997 (with Shoon Murray)

"The Political and Diplomatic Consequences of Greece's Recent National Elections," presentation delivered at the National Foreign Affairs Training Center, Arlington, VA, September 1996

"Prospects for Greek-Turkish Reconciliation," presentation delivered at the U.S. Institute of Peace Conference on Greek-Turkish Relations, Washington, D.C., June, 1996 (with Theodore A. Couloumbis)

"Greek-Turkish Reconciliation," paper presented at the Karamanlis Foundation and Fletcher School of Diplomacy Joint Conference on The Greek-U.S. Relationship and the Future of Southeastern Europe, Washington, D.C., May, 1996 (with Theodore A. Couloumbis)

"The Path toward Peace in the Eastern Mediterranean and the Balkans in the Post-Cold War Era," paper presented at the International Studies Association Annual Meeting, San Diego, CA, March, 1996 (with Theodore A. Couloumbis)

"Peace Operations: The View from the Public," paper presented at the International Studies Association Annual Meeting, San Diego, CA, March, 1996

Chairperson, Roundtable on Peace Operations, International Security Section of the International Studies Association Annual Meeting, Rosslyn, VA, October, 1995

"Chaos and Complexity in International Politics: Epistemological Implications," paper presented at the International Studies Association Annual Meeting, Washington, D.C., March, 1994

"At What Cost? American Mass Public Opinion and the Use of Force Abroad," paper presented at the International Studies Association Annual Meeting, Washington, D.C., March, 1994 (with Daniel B. O'Connor)

"American Mass Public Opinion and the Use of Force Abroad," presentation delivered at the United States Institute of Peace, Washington, D.C., February, 1994 (with Daniel B. O'Connor)

"For a Good Cause: American Mass Public Opinion and the Use of Force Abroad," paper presented at the Annual Meeting of the Foreign Policy Analysis/Midwest Section of the International Studies Association, Chicago, IL, October, 1993 (with Daniel B. O'Connor)

"American International Narcotics Control Policy: A Critical Evaluation," presentation delivered at the American University Drug Policy Forum, Washington, D.C., November, 1991

"American National Security in the Post-Cold War Era: Social Defense, the War on Drugs, and the Department of Justice," paper presented at the Association of Professional Schools of International Affairs Conference, Denver, CO, February, 1991

Referee for Grant Organizations, Peer-Reviewed Journals, and Book Publishers

National Science Foundation, Division of Social and Economic Sciences

American Political Science Review

Comparative Political Studies

Journal of Public and International Affairs

Millennium

Political Behavior

Presidential Studies Quarterly

Brill Publishers

Service to University, Profession, and Community

Expert Witness for State of California, 2017

Expert Witness for State of Colorado, 2016-2017

Member, Guns on Campus Assessment Group, Johns Hopkins University and Association of American Universities, 2016

Member, Fulbright Selection Committee, Fulbright Foundation, Athens, Greece, 2012

Founder and Coordinator, Graduate Transnational Security Studies, Center for Global Affairs, New York University, 2009-2011

Faculty Advisor, Global Affairs Graduate Society, New York University, 2009-2011

Organizer, Annual Faculty Symposium, Center for Global Affairs, New York University, 2009

Member, Faculty Search Committees, Center for Global Affairs, New York University, 2007-2009

Member, Graduate Program Director Search Committee, Center for Global Affairs, New York University, 2008-2009

Developer, Transnational Security Studies, Center for Global Affairs, New York University, 2007-2009

Participant, Council on Foreign Relations Special Series on National Intelligence, New York. 2008

Member, Graduate Certificate Curriculum Committee, Center for Global Affairs, New York University, 2008

Member, Faculty Affairs Committee, New York University, 2006-2008

Member, Curriculum Review Committee, Center for Global Affairs, New York University, 2006-2008

Member, Overseas Study Committee, Center for Global Affairs, New York University, 2006-2007

Participant, New York Academic Delegation to Israel, Sponsored by American-Israel Friendship League, 2006

Member, Science, Letters, and Society Curriculum Committee, City University of New York-College of Staten Island, 2006

Member, Graduate Studies Committee, City University of New York-College of Staten Island, 2005-2006

Member, Summer Research Grant Selection Committee, City University of New York-College of Staten Island, 2005

Director, College of Staten Island Association, 2004-2005

Member of Investment Committee, College of Staten Island Association, 2004-2005

Member of Insurance Committee, College of Staten Island Association, 2004-2005

Member, International Studies Advisory Committee, City University of New York-College of Staten Island, 2004-2006

Faculty Advisor, Pi Sigma Alpha National Political Science Honor Society, City University of New York-College of Staten Island, 2004-2006

Participant, World on Wednesday Seminar Series, City University of New York-College of Staten Island, 2004-2005

Participant, American Democracy Project, City University of New York-College of Staten Island, 2004

Participant, Philosophy Forum, City University of New York-College of Staten Island, 2004

Department Liaison, Commencement, City University of New York-College of Staten Island, 2004

Member of Scholarship Committee, Foundation of Pan-Icarian Brotherhood, 2003-2005, 2009

Scholarship Chairman, Foundation of Pan-Icarian Brotherhood, 2001-2003

Faculty Advisor to the Kosmos Hellenic Society of the George Washington University, 2001-2002

Member of University of Pennsylvania's Alumni Application Screening Committee, 2000-2002

Participant in U.S. Department of State's International Speakers Program, 1997

Participant in Yale University's United Nations Project, 1996-1997

Member of Editorial Advisory Board, Journal of Public and International Affairs, Woodrow Wilson School of Public and International Affairs, Princeton University, 1991-1993

Voting Graduate Student Member, School of International Service Rank and Tenure Committee, American University, 1990-1992

Member of School of International Service Graduate Student Council, American University, 1990-1992

Teaching Assistant for the Several Courses (World Politics, Beyond Sovereignty, Between Peace and War, Soviet-American Security Relations, and Organizational Theory) at School of International Service Graduate Student Council, American University, 1989-1992

Representative for American University at the Annual Meeting of the Association of Professional Schools of International Affairs, Denver, Colorado, 1991

Associations and Organizations (Past and Present)

Academy of Political Science

American Political Science Association

Anderson Society of American University

Carnegie Council Global Ethics Network

International Political Science Association

International Studies Association

Museum of Modern Art

New York Screenwriters Collective

Pan-Icarian Brotherhood

Pi Sigma Alpha

Sigma Nu Fraternity

Social Science Research Network

United States Department of State Alumni Network

United States Institute of Peace Alumni Association

University of Pennsylvania Alumni Association

Honors and Awards

Senior Fulbright Fellowship, 2012

Professional Staff Congress Research Grantee, City University of New York, 2004-2005

Research Assistance Award (Two Times), City University of New York-College of Staten Island, 2004

Summer Research Fellowship, City University of New York-College of Staten Island, 2004

European Institute Associate Fellowship, London School of Economics, 2003-2004

Hellenic Observatory Defense Analysis Research Fellowship, London School of Economics, 2003

United States Institute of Peace Certificate of Meritorious Service, 1996

National Science Foundation Dissertation Research Grant, 1995 (declined)

Alexander George Award for Best Graduate Student Paper, Runner-Up, Foreign Policy Analysis Section, International Studies Association, 1994

Dean's Scholar Fellowship, School of International Service, American University, 1989-1992

Graduate Research and Teaching Assistantship, School of International Service, American University, 1989-1992

American Hellenic Educational Progressive Association (AHEPA) College Scholarship, 1986

Political Science Student of the Year, Wilkes-Barre Area School District, 1986

Appendix B

Tables and Figures in Support of Expert Report Submitted by Dr. Louis Klarevas

Appendix B – Table 1

The 10 Deadliest Intentional Acts of Violence of the Past Decade, 2008-2017

	Deaths	Incident Type	Date	Perpetrator	City	State
1	58	Mass Shooting	10/1/2017	Stephen Paddock	Las Vegas	NV
2	49	Mass Shooting	6/12/2016	Omar Mateen	Orlando	FL
3	27	Mass Shooting	12/14/2012	Adam Lanza	Newtown	CT
4	26	Mass Shooting	11/5/2017	Devin Kelley	Sutherland Springs	TX
5	14	Mass Shooting	12/2/2015	Syed Rizwan Farook and Tashfeen Malik	San Bernardino	CA
6	13	Mass Shooting	4/3/2009	Jiverly Wong	Binghamton	NY
7	13	Mass Shooting	11/5/2009	Nidal Hasan	Fort Hood	TX
8	12	Mass Shooting	7/20/2012	James Holmes	Aurora	CO
9	12	Mass Shooting	9/16/2013	Aaron Alexis	Washington	DÇ
10	10	Mass Shooting	3/10/2009	Michael McLendon	Kinston, Samson, and Geneva	AL

Appendix B – Table 2

Gun Massacres in the United States, 1968-2017

	Date	City	State	Perpetrator(s)	LCM	Deaths
1	3/16/1968	Ironwood	MI	Eric Pearson	N	7
2	6/25/1968	Good Hart	MJ	Undetermined	N	6
3	12/19/1968	Napa	CA	Charles Bray	N	6
4	9/3/1971	Phoenix	AZ	John Freeman	N	7
5	6/21/1972	Cherry Hill	NJ	. Edwin Grace	Y	6
6	1/7/1973	New Orleans	LA	Mark Essex	N	7
7	6/21/1973	Palos Hills	IL	William Workman	N	7
8	4/22/1973	Los Angeles	CA	William Bonner	N	7
9	6/9/1973	Boston	MA	George O'Leary	N	6
10	11/4/1973	Cleveland	OH	Cyril Rovansek	N	7
11	2/18/1974	Fayette	MS	Frankie Lias	N	7
12	11/13/1974	Amityville	NY	Ronald DeFeo	N	6
13	3/30/1975	Hamilton	OH	James Ruppert	N·	11
14	10/19/1975	Sutherland	NE	Erwin Simants	N	6
15	3/12/1976	· Trevose	PA	George Geschwendt	N	6
16	7/12/1976	Fullerton	CA	Edward Allaway	Y	7
17 .	7/23/1977	Klamath Falls	OR	DeWitt Henry	Y	6
18	. 8/26/1977	Hackettstown	NJ	Emile Benoist	N	6
19	7/16/1978	Oklahoma City	OK	Harold Stafford, Roger Stafford, and Verna Stafford	N	6
20	1/3/1981	Delmar	IA	Gene Gilbert	N .	6
21	1/7/1981	Richmond	VA	Artie Ray Cherry, Michael Finazzo, and Tyler Frndak	N	6
22	5/2/1981	Clinton	MD	Ronald Ellis	N	6
23	8/21/1981	Indianapolis	IN	King Bell	N	6
24	2/17/1982	Farwell	MI	Robert Haggart	,N	7
25	8/9/1982	Grand Prairie	TX	John Parish	N.	
26	8/20/1982	Miami	FL	Carl Brown		6
27	9/7/1982	Craig	AK.		N	8
28		Wilkes-Barre		Undetermined	N	8
	9/25/1982		PA	George Banks	Y	13
29	2/18/1983	Seattle	WA	Kwan Fai Mak and Benjamin Ng	N	13
30	3/3/1983	McCarthy	AK	Louis Hastings	N	6
31	10/11/1983	College Station and Hempstead	TX	Eliseo Moreno	N	6
32	4/15/1984	Brooklyn	NY	Christopher Thomas	N	10
33	5/19/1984	Manley Hot Springs	AK	Michael Silka	N	8
34	6/29/1984	Dallas	TX	Abdelkrim Belachheb	Y	6
35	7/18/1984	San Ysidro	CA	James Huberty	Y	21
36	10/18/1984	Evansville	ĪΝ	James Day	N	6
37	8/20/1986	Edmond	OK	Patrick Sherrill	N	14
38	12/8/1986	Oakland	CA	Rita Lewis and David Welch	Y	6
. 39	2/5/1987	Flint	MI	Terry Morris	N	6
40	4/23/1987	Palm Bay	FL	William Cruse	Y	6
41	7/12/1987	Tacoma	WA	Daniel Lynam	N	7
42	9/25/1987	Elkland	MO	James Schnick	N	7
43	12/30/1987	Algona	IA	Robert Dreesman	N	.6
4 4	2/16/1988	Sunnyvale	CA	Richard Farley	N	7
45	9/14/1989	Louisville	KY	Joseph Wesbecker	Y	8
4 6	6/18/1990	Jacksonville	FL	James Pough	Y	9
47	1/26/1991	Chimayo	NM	Ricky Abeyta	N	7
48	8/9/1991	Waddell	AZ	Jonathan Doody and Alessandro Garcia	Ŋ	9
49	10/16/1991	Killeen	TX	George Hennard	Y	23
50	11/7/1992	Morro Bay and Paso Robles	CA	Lynwood Drake	Ŋ	6
51	1/8/1993	Palatine	IL	James Degorski and Juan Luna	N	.7
52	5/16/1993	Fresno	CA	Allen Heflin and Johnnie Malarkey	Y	7
53	7/1/1993	San Francisco	CA ·	Gian Luigi Ferri	Y	8
54	12/7/1993	Garden City	NY	Colin Ferguson	Y	
55	4/20/1999	Littleton	CO	Eric Harris and Dylan Klebold	Y	6
56	7/12/1999	Atlanta	GA	Cyrano Marks	. U	13
57	7/29/1999	Atlanta	GA	Cyrano Marks Mark Barton	Y	6
58	9/15/1999	Fort Worth	TX	Mark Barton Larry Ashbrook		9 .
58 59	9/13/1999 11/2/1999	· Honolulu	HI		Y	7
60				Byran Koji Uyesugi	Y	7
οŲ	12/26/2000	Wakefield	MA	Michael McDermott	Y	7

Appendix B - Table 2 (Cont.)

Gun Massacres in the United States, 1968-2017

	Date	City	State	Perpetrator(s)	LCM	Deaths
61	12/28/2000	Philadelphia	PA	Shihean Black, Dawud Faruqi, Khalid Faruqi, and Bruce Veney	Y	. 7
62	8/26/2002	Rutlegde	AL	Westley Harris	N	6
63	1/15/2003	Edinburg	TX	Humberto Garza, Robert Garza, Rodolfo Medrano, and Juan Ramirez	Ü	. 6
64	7/8/2003	Meridian	MS	Douglas Williams	N	6
65	8/27/2003	Chicago	IL	Salvador Tapia	N	. 6
66	3/12/2004	Fresno	CA	Marcus Wesson and Sebhrenah Wesson	N	9
67	11/21/2004	Birchwood	WI	Chai Soua Vang	Y	6
68	3/12/2005	Brookfield	WI	Terry Ratzmann	Ŷ	7
69	3/21/2005	Red Lake	MN	Jeffrey Weise	Ÿ	ģ
70	1/30/2006	Goleta	CA	Jennifer San Marco	Y	7
71	3/25/2006	Seattle	WA	Kyle Huff	Y	6
72	6/1/2006	Indianapolis	IN	James Stewart and Desmond Turner	Y	7
73	12/16/2006	Kansas City	KS	Hersel Isadore	N	6
74	4/16/2007	Blacksburg	VA	Seung Hui Cho	Y	32
75	10/7/2007	Crandon	WI	Tyler Peterson	Y	
76	12/5/2007	Omaha	NE	•		6
77	12/24/2007	Carnation	WA	Robert Hawkins	Y	8
78	2/7/2008	Kirkwood	MO	Michele Anderson and Joseph McEnroe	U	6
76 - 79				Charles Lee Thornton	Y	6
	9/2/2008	Alger	WA	Isaac Zamora	U	6
80	12/24/2008	Covina	CA	Bruce Pardo	Y	8
81	1/27/2009	Los Angeles	CA	Ervin Lupoe	N	6
82	3/10/2009	Kinston, Samson, and Geneva	AL	Michael McLendon	Y	10
83	3/29/2009	Carthage	NC	Robert Stewart	N	. 8
84	4/3/2009	Binghamton	NY	Jiverly Wong	Y	13
85	11/5/2009	Fort Hood	TX	· Nidal Hasan	Y	13
86	1/19/2010	Appomattox	VA	Christopher Speight	Y	8
87	8/3/2010	Manchester	CT	Omar Thornton	Y	8
88	1/8/2011	Tucson	ΑZ	Jared Loughner	Y	6
89	7/7/2011	Grand Rapids	MI	Rodrick Dantzler	Y	7
90	8/7/2011	Copley Township	OH	Michael Hance	N	7
91	10/12/2011	Seal Beach	CA	Scott Dekraai	N	8
92	12/25/2011	Grapevine	TX	Aziz Yazdanpanah	N	6
93	4/2/2012	Oakland	CA	One Goh	N	7
94	7/20/2012	Aurora	CO	James Holmes	Y	12
95	8/5/2012	Oak Creek	WI	Wade Page	Y	6
96	9/27/2012	Minneapolis	MN	Androw Engeldinger	Ÿ	6
97	12/14/2012	Newtown	CT	Adam Lanza	Ŷ	27
98	7/26//2013	Hialeah	FL	Pedro Vargas	Ŷ	6
99	9/16/2013	Washington	DC	Aaron Alexis	N	12
100	7/9/2014	Spring	TX	Ronald Lee Haskell	Y	6
101	9/18/2014	Bell	FL	Don Spirit	Û	7
102	2/26/2015	Tyrone	MO	Joseph Jesse Aldridge	Ü	7
103	5/17/2015	Waco	TX	Unidentified	Ÿ	9
104	6/17/2015	Charleston	SC	Dylann Storm Roof	Y	9
105	8/8/2015	Houston	TX	David Conley	Ü	8
106	10/1/2015	Roseburg	OR	Christopher Harper-Mercer		
107	12/2/2015	San Bernardino	CA	Syed Rizwan Farook and Tashfeen Malik	Y Y	9
107	2/21/2016	Kalamazoo	MI	Jason Dalton		14
108	4/22/2016	Piketon	OH		Y	6
110	6/12/2016	Orlando	FL	Undetermined	U	8
				Omar Mateen	Y .	49
111	5/27/2017	Brookhayen	MS	Corey Godbolt	U	8
112	9/10/2017	Plano	TX	Spencer Hight	Y	8
113	10/1/2017	Las Vegas	NV	Stephen Paddock	Y	58
114	11/5/2017	Sutherland Springs	TX	Devin Kelley	Y	26

Note: The incidents highlighted in gray represent the 20 gun massacres that occurred at a time when and place where a ban on certain LCMs was in effect. Incidents marked as LCM-positive involved fatalities resulting from a firearm armed with least one magazine capable of holding more than 10 bullets.

Y=Yes / N=No / U=Undetermined.

Appendix B – Table 3

Gun Massacre Incidence Rates by Whether or Not LCM Bans Were in Effect

	1990-2017 (All L	ncidents N=69)		
	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference	
Incidence Rate	.327	.142	79%	
Number of Incidents	49	20		
·	2005-2017 (All I	ncidents N=47)		
	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference	
Incidence Rate	.171	.096	56%	
Number of Incidents	39	. 8		
	1990-2017 (Incidents Only	Involving LCMs N=44)		
	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference	
Incidence Rate	.227	.071	105%	
Number of Incidents	34	10		
	2005-2017 (Incidents Only	Involving LCMs N=32)		
	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference	
Incidence Rate	.123	.048	88%	
Number of Incidents	28	4		

Note: Incidence rates are calculated per one million people. All population data used to calculate incidence rates in this table are drawn from United States Census Bureau, "Population and Housing Unit Estimates Tables," https://www.census.gov/programs-surveys/popest/data/tables.html (last accessed January 4, 2018). The percentage difference refers to percentage difference between the two incidence rates—the rate for the jurisdictions where an LCM ban was in effect and the rate for the jurisdictions where an LCM ban was not in effect. All percentage differences were calculated using the Calculator Soup online percentage difference calculator. As the Calculator Soup website states, "Percentage difference equals the absolute value of the change in value, divided by the average of the 2 numbers, all multiplied by 100." The calculator and formula are available at the following website:

https://www.calculatorsoup.com/calculators/algebra/percent-difference-calculator.php (last accessed January 4, 2018).

Appendix B – Table 4

Gun Massacre Fatality Rates by Whether or Not LCM Bans Were in Effect

1990-2017 (Fatalities in All Incidents N=699)						
	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference			
Fatality Rate	3.58	1.17	101%			
Number of Fatalities	535	164				
2005-2017 (Fatalities in All Incidents N=522) No LCM Ban in Effect LCM Ban in Effect Fatality Rate 1.96 Number of Fatalities 447 75						

1990-2017 (Fatalities in Incidents Only Involving LCMs N=521)

		¥	·
	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference
Fatality Rate	2.87	0.65	126%
Number of Fatalities	429	92	

2005-2017 (Fatalities in Incidents Only Involving LCMs N=412)

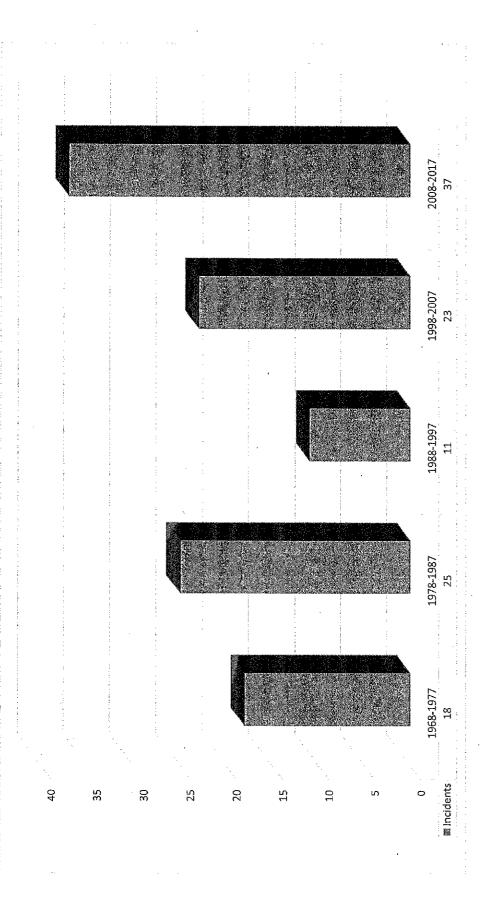
•	No LCM Ban in Effect	LCM Ban in Effect	Percentage Difference
Fatality Rate	1.62	0.50	106%
Number of Fatalities	370	42	

Note: Fatality rates are calculated per one million people. All population data used to calculate fatality rates in this table are drawn from United States Census Bureau, "Population and Housing Unit Estimates Tables," https://www.census.gov/programs-surveys/popest/data/tables.html (last accessed January 4, 2018). The percentage difference refers to percentage difference between the two fatality rates—the rate for the jurisdictions where an LCM ban was in effect and the rate for the jurisdictions where an LCM ban was not in effect. All percentage differences were calculated using the Calculator Soup online percentage difference calculator. As the Calculator Soup website states, "Percentage difference equals the absolute value of the change in value, divided by the average of the 2 numbers, all multiplied by 100." The calculator and formula are available at the following website:

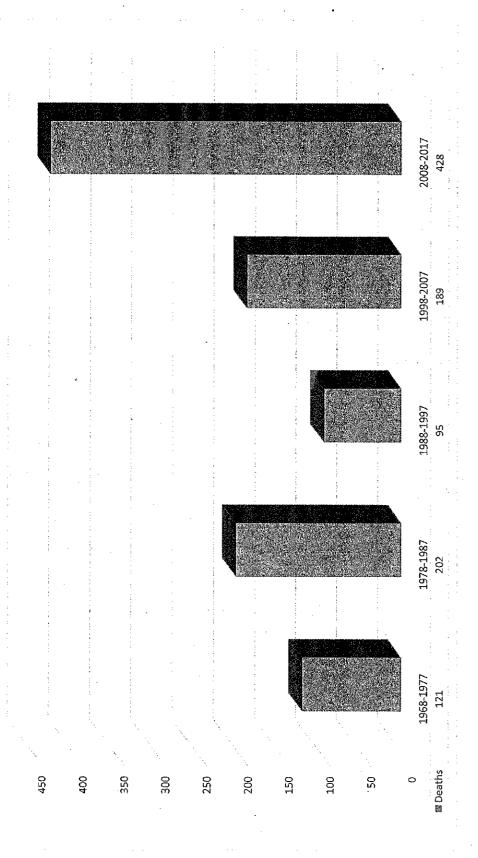
https://www.calculatorsoup.com/calculators/algebra/percent-difference-calculator.php (last accessed January 4, 2018).

Appendix B - Figure 1

Gun Massacre Incidents by Decade, 1968-2017

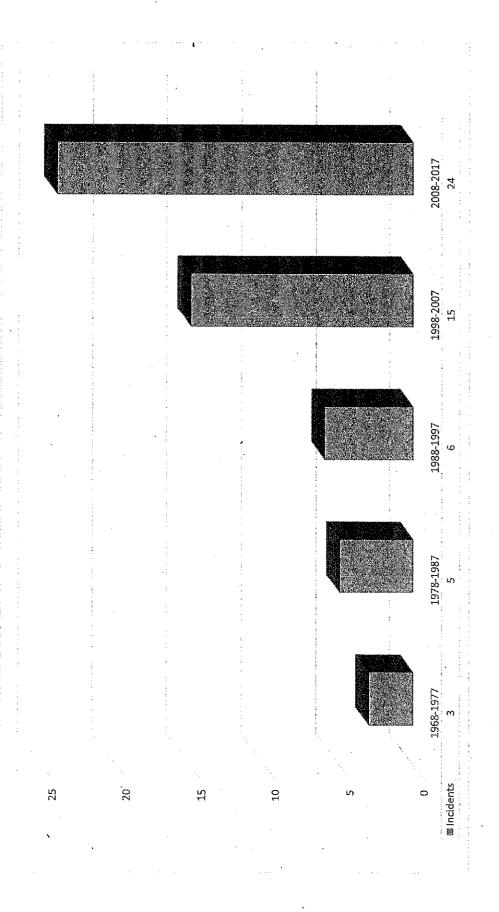


Appendix B – Figure 2 Gun Massacre Deaths by Decade, 1968-2017



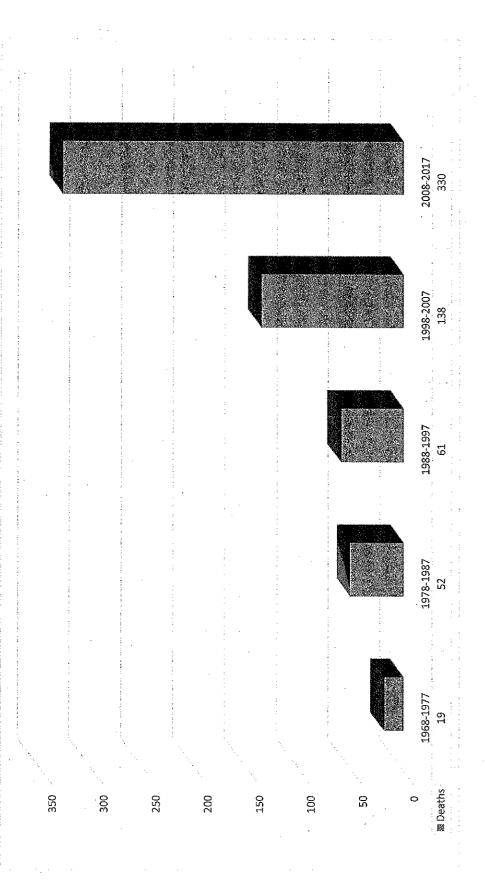
Appendix B – Figure 3

Gun Massacre Incidents Involving LCMs by Decade, 1968-2017



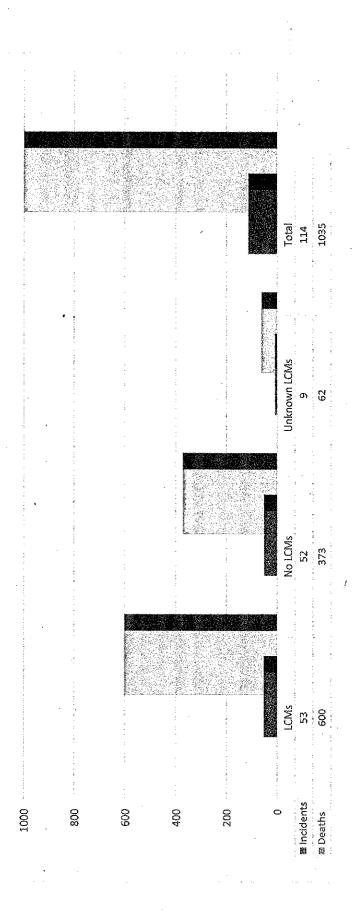
Appendix B – Figure 4

Gun Massacre Deaths from Incidents Involving LCMs by Decade, 1968-2017



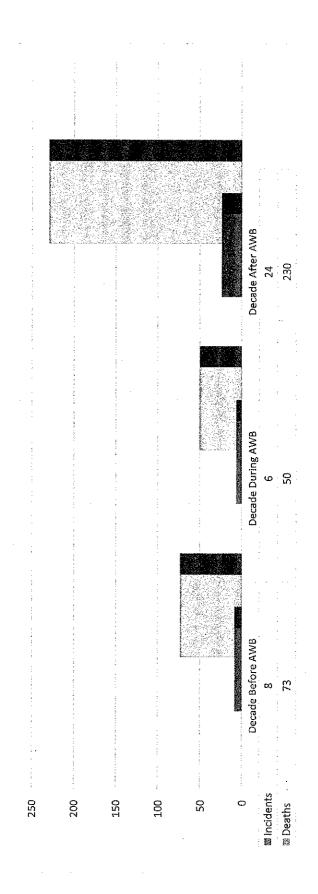
Appendix B – Figure 5

Gun Massacre Incidents and Deaths by Magazine Capacity, 1968-2017



Appendix B - Figure 6

LCM-Involving Gun Massacre Incidents and Deaths by Decade Before, During, and After the Federal Assault Weapons Ban



Note: The Federal Assault Weapons Ban was in effect from September 13, 1994, through September 12, 2004.

DECLARATION OF SERVICE BY E-MAIL and U.S. Mail

Case Name: Duncan, Virginia et al v. Xavier Becerra

No.: 17-cv-1017-BEN-JLB

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter. I am familiar with the business practice at the Office of the Attorney General for collection and processing of correspondence for mailing with the United States Postal Service. In accordance with that practice, correspondence placed in the internal mail collection system at the Office of the Attorney General is deposited with the United States Postal Service with postage thereon fully prepaid that same day in the ordinary course of business.

On January 9, 2018, I served the attached

REVISED EXPERT REPORT OF DR. LOUIS KLAREVAS

by transmitting a true copy via electronic mail. In addition, I placed a true copy thereof enclosed in a sealed envelope, in the internal mail system of the Office of the Attorney General, addressed as follows:

C. D. Michel
Anna Barvir
Michel & Associates, P.C.
180 E. Ocean Boulevard, Suite 200
Long Beach, CA 90802
E-mail Address:
CMichel@michellawyers.com
abarvir@michellawyers.com

Erin E. Murphy
Kirkland & Ellis LLP
655 15th Street N.W.
Washington D.C. 20005
E-mail Address:
erin.murphy@kirkland.com

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on January 9, 2018, at San Francisco, California.

N. Newlin	/s/ N. Newlin	
Declarant	Signature	

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