

In The Matter Of:

*Shawn J. Tardy, et al. vs.
Martin J. O'Malley, et al.*

Christopher S. Koper, Ph.D.

Vol. 1

February 3, 2014

Gore Brothers Reporting & Videoconferencing

20 South Charles Street, Suite 901

Baltimore, MD 21201

410-837-3027

www.gorebrothers.com



Since 1961 - Serving MD, DC & VA - Worldwide

Min-U-Script® with Word Index

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
(Northern Division)

SHAWN J. TARDY, et al.

Plaintiffs

Case No.

vs.

1:13-cv-02841-CCB

MARTIN J. O'MALLEY, et al.

Defendants

_____ /

The deposition of CHRISTOPHER S. KOPER,
PH.D. was held on Monday, February 3, 2014, commencing
at 1:48 p.m., at George Mason University, Research
Hall, 4400 University Drive, Fairfax, Virginia 22030,
before Amanda J. Curtiss, CSR, Notary Public.

REPORTED BY: Amanda J. Curtiss, CSR

1 APPEARANCES:

2

3

ON BEHALF OF THE PLAINTIFFS:

4

JOHN PARKER SWEENEY, ESQUIRE

5

JAMES W. PORTER, III, ESQUIRE

6

MARC A. NARDONE, ESQUIRE

7

Bradley, Arant, Boult, Cummings, LLP

8

1615 L Street, NW, Suite 1350

9

Washington, DC 20036

10

Telephone: 202-719-8216

11

Facsimile: 202-719-8316

12

Email: jsweeney@babco.com

13

14

ON BEHALF OF DEFENDANT, MARTIN J. O'MALLEY:

15

MATTHEW J. FADER, ESQUIRE

16

Maryland Office of the General Attorney

17

200 Saint Paul Place, 20th Floor

18

Baltimore, Maryland 21201

19

Telephone: 410-576-7906

20

Facsimile: 410-576-6955

21

Email: mfader@oag.state.md.us

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

INDEX

Deposition of Christopher S. Koper, Ph.D.

February 3, 2014

Examination By:	Page
Mr. Sweeney	5

Exhibit No.		Marked
Exhibit 1	Notice of Deposition	5
Exhibit 2	Report of Christopher S. Koper	24
Exhibit 3	Testimony in Support of SB 281	27
Exhibit 4	Disassembling the Assault-Gun Ban	46
Exhibit 5	Updated Assessment of the Federal Assault Weapons Ban: Impacts of Gun Markets and Gun Violence, 1994-2003	82
Exhibit 6	Article By Mark Gius	85
Exhibit 7	Expanded Homicide Data Table 8	99
Exhibit 8	Impact Evaluation of the Public Safety and Recreational Firearms Use Protection Act of 1994	112

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

INDEX (Continued)
Deposition of Christopher S. Koper, Ph.D.
February 3, 2014

Exhibit 9	Impact of Handgun Types of Gun	133
	Assault Outcomes	
Exhibit 10	Mass Shootings in the United States:	176
	An Exploratory Study of the Trends	
	from 1982-2012	

PROCEEDINGS

1
2 Whereupon,

3 CHRISTOPHER S. KOPER, PH.D.,

4 called as a witness, having been first duly sworn to
5 tell the truth, the whole truth, and nothing but the
6 truth, was examined and testified as follows:

7 EXAMINATION BY MR. SWEENEY

8 Q Please state your -- your name, your title,
9 and your business address for the record.

10 A Christopher Koper, an associate professor
11 at George Mason University. My address here is 316
12 Research Hall on the George Mason campus in Fairfax.

13 Q My name is John Sweeney. I represent the
14 plaintiffs in the matter which is captioned Stephen
15 Kolbe versus Martin J. O'Malley, and you've provided a
16 report for the defendants in that case; am I correct?

17 A Yes.

18 Q And I have marked as Exhibit 1 a copy of
19 the notice of deposition for you today.

20 (Koper Exhibit 1 was marked for
21 identification.)

1 A Uh-huh.

2 Q Have you seen that before?

3 A Yes.

4 Q Okay. Did you bring with you as requested
5 your file in this matter?

6 A Yes.

7 Q All right. And could you show me what you
8 have brought?

9 A Okay. Copy of the 2004 report I did for
10 the Department of Justice.

11 Q All right. And we have copies of this and
12 so I will hand that back to you.

13 A Okay. This is a copy of the 1997 report
14 that Jeff Roth and I wrote for the Department of
15 Justice.

16 Q All right. And we have copies of that as
17 well.

18 A Okay. There's that.

19 Q Thank you.

20 A I also brought along two articles that Jeff
21 Roth and I published in the Journal of Quantitative

1 Criminology in 2001.

2 MR. NARDONE: I have that.

3 MR. SWEENEY: All right. So do you have it
4 with you?

5 MR. NARDONE: I believe I do, yes.

6 BY MR. SWEENEY:

7 Q All right. So I'll hand back to you the
8 first of those two articles on the impact of the 1994
9 federal assault weapon ban. We have a copy of that.
10 But I'll hold for the time being at least the second
11 article because I do not believe we have a copy of that
12 with us. Thank you.

13 A Okay. I have this 2013 book "Reducing Gun
14 Violence in America." It was edited by Dan Webster and
15 Jon Vernick and I --

16 Q That we have a copy of. Thank you.

17 A And then as requested, I brought a copy of
18 Luke Dillon's thesis, "Mass Shootings in the United
19 States: An Exploratory Study of the Trends From
20 1982-2012."

21 Q Great. And will we be able to use this as

1 an exhibit in today's --

2 A Sure.

3 Q This is an extra copy? Okay. Great.

4 A Oh, I have also my statement.

5 Q Oh, and your report. I have an extra copy
6 of that. I've already marked one as an exhibit.

7 A Okay.

8 Q And do you have extra copies of this
9 article, the "A Priori Assertions Versus Empirical
10 Inquiry" article?

11 A Yes, I do.

12 Q Would we be able to use this as an exhibit
13 today?

14 A Yeah.

15 Q Okay.

16 MR. NARDONE: I don't have the copy of the
17 other one with me.

18 BY MR. SWEENEY:

19 Q Oh, let's pull out the other. Thank you.
20 All right. Thank you.

21 Do you have anything else? Have we covered

1 everything that you brought today in response to the
2 notice?

3 A I think that's everything, yeah.

4 Q All right. Thank you. Now, have you ever
5 had your deposition taken before?

6 A No.

7 Q Have you ever given testimony in court
8 before?

9 A No.

10 Q Let me go over a few ground rules that may
11 make it easier for both of us to make a clear record
12 today.

13 A Uh-huh.

14 Q It's my job to ask the questions and your
15 job to answer them, but we can only do it one at a
16 time, so I will try not to interrupt you. If you wait
17 for me to finish before you start your answer, we'll
18 make a much clearer record. If you -- it is imperative
19 that you understand my question, so if for any reason
20 you don't understand my question, please let me know
21 and I will do my best to rephrase it. I ask many

1 awkward questions that are not obvious and so I can
2 always stand to improve my questions, so don't hesitate
3 to contact me.

4 If you want to break for whatever reason at
5 any time, just give me a holler and we'll stop and take
6 a break, okay?

7 A Okay.

8 Q Any questions about today?

9 A No.

10 Q Great. Have you ever given a declaration
11 or other report in any other litigation before the
12 report that you provided in this Kolbe case?

13 A Yes. I did one for the State of New York
14 in their recent case on assault weapons.

15 Q Okay.

16 A One for the State of Connecticut, and very
17 recently really about the same time that this one was
18 being put together I did statements for the cities of
19 San Francisco, California and Sunnyvale, California.

20 Q Okay. And when were you first contacted in
21 connection with providing the report in this case?

1 A Defendants contacted me sometime back in
2 the fall. Maybe November something, sometime around
3 then.

4 Q Was that Mr. Fader?

5 A Yes.

6 Q And what was it that he asked you to do?

7 A Asked me if I --

8 MR. FADER: I just want to step in because
9 I assume that the question is what you were asked to do
10 specifically with respect to the opinion that -- the
11 written opinion that you have offered in this case.

12 THE WITNESS: Uh-huh.

13 MR. FADER: If there's any issues with
14 respect to consulting or issues not with respect to the
15 formal opinion that you've offered, those are protected
16 work product and I assume he's not asking about those
17 questions. If he -- he is, I'll give you an
18 instruction not to answer.

19 BY MR. SWEENEY:

20 Q Let me rephrase the question to make it
21 clearer.

1 What did Mr. Fader ask you to do in terms
2 of preparing a report for this case?

3 A Asked me if I'd be willing to put in a
4 declaration for the case based on my work on the
5 federal assault weapons ban, describing some of the key
6 findings of that work, their implications for public
7 safety considerations in assault weapon cases, and
8 discuss the implications of those findings for the
9 Maryland law.

10 Q Okay. And I gather there was some other
11 work involving consulting in connection with the
12 defense of the litigation that did not make its way
13 into your report; am I correct in that?

14 A Not certain I follow.

15 Q Sure. I mean did you do any other work for
16 Mr. Fader in connection with this case?

17 A No. It's just been preparing this -- this
18 statement.

19 Q All right. Could you summarize your
20 education for me, at least your professional education?

21 A I have a bachelor's, master's, and Ph.D.s

1 in criminology and criminal justice from the University
2 of Maryland.

3 Q Did you do doctoral dissertations?

4 A Yes.

5 Q What were they on?

6 A My dissertation looked at changes over time
7 in the types of guns being used in crime and looked at
8 how that was affecting trends in lethal gun violence.

9 Q Did you publish your dissertation in any
10 form?

11 A Just the -- just the basic dissertation
12 publication. All dissertations are published by the
13 university microforms, just that. They didn't publish
14 any other articles based on it.

15 Q All right. The article that you coauthored
16 with Darin Reedy in 2003 on "The Impact of Handgun
17 Types on Gun Assault Outcomes," did that rise out of
18 the work you've done on your doctoral dissertation?

19 A No. That arose out of our work on the
20 assault weapons ban.

21 Q All right. Have you done any follow-up

1 work from the work you did on your doctoral
2 dissertation?

3 A Yeah. My first grant from the National
4 Institute of Justice was basically a replication study
5 of my dissertation. The issues raised in the
6 dissertation have also had relevance to other things
7 that I've studied like the assault weapons ban.

8 Q When you say your first grant, is the
9 publication that resulted from that your 1997
10 publication?

11 A It was a report called "Gun Density Versus
12 Gun Type."

13 Q All right. What were the conclusions of
14 your doctoral dissertation?

15 A Essentially I found that there had been
16 shifts over time in the types of guns that were being
17 used in crime. There was a increase in the use of
18 semi-automatics in general. There was also a shift
19 upward in the caliber of crime guns. And so I looked
20 at whether those trends had affected trends in lethal
21 violence. I was doing this with a database from Kansas

1 City, Missouri. And I found the clearest evidence for
2 a link between the trend upward in use of large caliber
3 guns and upward trend in gun homicide.

4 Q And just so I'm understanding, would I be
5 correct in concluding that you thought there was an
6 association between larger caliber guns being used to
7 shoot people and people suffering more injury and death
8 as a result?

9 A Yes.

10 Q All right. But am I correct that you
11 didn't find a similar association with semi-automatic
12 handguns, per se?

13 A Yeah, that was less clear in the data.

14 Q Okay.

15 A Both were trending upward at the same time
16 but for statistical reasons, it was harder to -- to
17 nail down the association.

18 Q The article that you coauthored with Darin
19 Reedy in 2003 touched on the semi-automatic pistol
20 issue again; correct?

21 A Uh-huh. Yes.

1 Q And what was your conclusion there?

2 A There we were comparing handgun attacks
3 with semi-automatic pistols and handgun attacks with
4 revolvers, and we found that the handgun attacks
5 involving semi-automatic pistols resulted in more shots
6 fired and more people hit per incident than did the
7 attacks involving revolvers.

8 Q Am I correct that you didn't have
9 sufficient amount of data as to the capacity of the
10 magazines in the semi-automatic pistols to draw any
11 conclusion about magazine capacity in that study?

12 A Well, not entirely. We -- we had very
13 limited magazine capacity data. There's a footnote in
14 my 2004 report where we gave a few statistics for --
15 for cases where magazine capacity was available, it
16 seemed to follow the same basic pattern. But another
17 key finding that came out of that was that a small
18 percentage of the gunshot incidents with
19 semi-automatics involved more than ten shots fired, so
20 that would suggest that there are small but, you know,
21 important number of cases where more than ten shots are

1 being fired.

2 Q Why do you focus on ten shots? What's the
3 magic of a ten-shot magazine capacity?

4 A It's just evaluating this in the context of
5 the federal law that had capped magazine capacity at
6 ten, so that seemed like an important number to try to
7 nail down. No other study had tried to do that before.

8 Q All right. And so at least with respect to
9 your 2003 study, would it be fair in saying that it was
10 inconclusive with respect to the association of
11 magazine size with the increase in injury or death from
12 gun violence?

13 A I think what has to be limited in the
14 conclusions, 'cause there wasn't complete gun make and
15 model and magazine capacity information in the data,
16 but I think the findings do have important implications
17 for that association.

18 Q Right. What areas would you consider
19 yourself to be an expert in?

20 A I study firearms violence and firearms
21 policy. I study policing as well, particularly looking

1 at police strategies and their impacts on crime, other
2 police organizational issues. Those are my greatest
3 areas of expertise. And program evaluation I would
4 say, too.

5 Q And you study it as a social scientist;
6 correct?

7 A Yes.

8 Q And as a social scientist, you base your
9 research on scientific principles; correct?

10 A Yes.

11 Q And you draw conclusions based upon
12 reasonable degrees of probability as a scientist;
13 correct?

14 A I look at patterns in data and, yeah,
15 assess probabilities.

16 Q All right. And notwithstanding the fact
17 that I'm representing the parties challenging the ban
18 that you're here to support, can I count on you to
19 answer my questions based on the science as you
20 understand it and without regard to any particular
21 point of view?

1 A Yes.

2 MR. FADER: Objection to the form. You can
3 answer.

4 THE WITNESS: Yes.

5 BY MR. SWEENEY:

6 Q Thank you. Were you asked to submit
7 testimony or your reports or any materials to the
8 Maryland General Assembly when it was considering a ban
9 on assault weapons and what it calls large capacity
10 magazines?

11 A No.

12 Q Did anyone contact you about that in any --
13 in any respect?

14 A Not that I recall.

15 Q Do you know Daniel Webster?

16 A Yes.

17 Q How do you know Daniel Webster?

18 A A professional colleague. He's a professor
19 at Johns Hopkins so we've interacted over the years,
20 professional meetings and things like that.

21 Q Can you recall when you first met him?

1 A Probably around the late 1990s.

2 Q And do you remember the context in which
3 you met?

4 A Probably just met him at professional
5 conferences because we were both researchers doing work
6 on firearms.

7 Q Okay. And he invited you to a symposium in
8 January 2013 at Johns Hopkins; correct?

9 A Right.

10 Q And that's part of the book that you
11 brought here that you have a chapter in; correct?

12 A Correct.

13 Q And did you present orally at this
14 symposium?

15 A Yes. It can be seen. It's on videotape on
16 the --

17 Q And was there any -- anyone there who
18 debated with you your conclusions?

19 A I don't quite remember what questions came
20 up after I had done my presentation, so it's -- can't
21 quite clearly remember.

1 Q All right. You don't recall anybody
2 challenging what you were presenting?

3 A I'm having a hard time remembering, yeah,
4 anyone presenting a big challenge to it.

5 Q All right. And do you understand that the
6 conclusions of that symposium were in support of a ban
7 on so-called assault weapons and so-called large
8 capacity magazines?

9 A At the end, the group came up with some
10 consensus recommendations for policy makers to consider
11 based on the types of evidence that was presented.

12 Q And were you there for former Mayor
13 Bloomberg's opening remarks at that symposium?

14 A Yes.

15 Q And he called for that sort of a ban on --
16 on assault weapons and large capacity magazines at the
17 beginning of the symposium; correct?

18 A I don't recall specifically.

19 Q All right. And you were meeting at the
20 Bloomberg School of Public Health; correct?

21 A Yes.

1 Q Has Michael Bloomberg or any foundation
2 related to him provided any support for George Mason
3 University?

4 A I don't know.

5 Q All right. Provided any support for your
6 center here?

7 A No.

8 Q You are, in addition to being an associate
9 professor at George Mason University, a senior fellow
10 at the George Mason Center for Evidence-Based Crime
11 Policy; correct?

12 A Correct.

13 Q And what is the Center for Evidence-Based
14 Crime Policy?

15 A It's a center here within the Department of
16 Criminology Law and Society. It brings together
17 researchers and students who have interests in -- in a
18 wide range of issues. Many of us study policing to a
19 significant degree, but -- but other issues as well.
20 And the idea is to try to inform policy and practice
21 with scientific evidence on what works in reducing

1 crime.

2 And so in addition to our research
3 activities, the Center also sponsors a lot of events to
4 try to have outreach to practitioners and policy
5 makers, occasionally do things like Congressional
6 briefings. We have a annual symposium that brings in a
7 lot of researchers and practitioners and policy makers
8 from around the area.

9 As another example, just a week or two ago
10 we had a four of our grant projects a large training
11 session on evidence-based policing for police
12 practitioners around the region and around the country.

13 Q Would it be fair to say your center does a
14 lot of work in support of law enforcement around the
15 country?

16 A We -- yes. We do a lot of work relevant to
17 evidence-based policing and trying to improve policing
18 through -- through research.

19 Q You mentioned your first grant from the
20 Justice Department. And how was it that you obtained
21 funding from the Department of Justice in the early

1 days?

2 A You went through a competitive grant
3 proposal process, so they still do that now. You --
4 they put out solicitations for proposals on different
5 topics of interest and you write a proposal, it gets
6 peer reviewed by a panel of people, and they -- and
7 they select certain ones for funding.

8 Q Okay. At the beginning of your report,
9 which we've marked as Exhibit 2.

10 (Koper Exhibit 2 was marked for
11 identification.)

12 A Okay.

13 Q And you can use that copy to follow along
14 on.

15 A Okay.

16 Q On page one, you discuss very briefly your
17 background and you state you've been studying firearms
18 issues since 1994.

19 A Uh-huh.

20 Q Is that a reference to the doctoral
21 dissertation we discussed earlier?

1 A Yes.

2 Q And then you go on to talk about your 1997
3 study on the effects of the federal ban; correct?

4 A Yes.

5 Q And you state you updated your original
6 1997 study in 2004, and then briefly revisited the
7 issue again by reexamining my 2004 report in 2013. Do
8 you see that?

9 A Yes.

10 Q All right.

11 A Uh-huh.

12 Q What was it that caused you to update your
13 original 1997 study in 2004?

14 A The 1997 study could only look at the very
15 short-term impacts of the assault weapons ban. Many of
16 the measures that we were looking at were based on just
17 one to two years or maybe slightly more than two years
18 of post-ban data, so we had an interest in trying to do
19 a longer term evaluation. The Department of Justice
20 also agreed that that would be a good idea. And so we
21 submitted a later proposal to them to get funding to do

1 additional work on the ban and got that funding from
2 them.

3 Q And why did you revisit the issue again
4 reexamining your 2004 report in 2013?

5 A For the 2013 book chapter, I was asked by
6 Daniel Webster if I would take part in the gun summit
7 at Johns Hopkins that you mentioned earlier, and they
8 asked if I would prepare basically a chapter that just
9 briefly summarized the results of the -- the 2004
10 report.

11 Q All right. In the last sentence of this
12 paragraph, you state, "My conclusions on the impact of
13 the federal ban are most accurately and completely set
14 forth in my 2004 and 2013 reports." Do you see that,
15 sir?

16 A Yes.

17 Q So if I want to look at the most accurate
18 and complete conclusions that you've drawn on your work
19 on the federal ban, I would look to those two reports;
20 correct?

21 A Yes.

1 Q All right. Are you familiar with the
2 information that was put before the General Assembly in
3 support of the so-called assault weapon and large
4 capacity magazine ban?

5 A No.

6 Q Did your acquaintance, Daniel Webster,
7 share with you the testimony in support of SB 281 that
8 he provided?

9 A No.

10 Q Let's go ahead and mark this as Koper
11 three, please.

12 Had you been asked to provide information
13 to the Maryland General Assembly considering a ban on
14 assault weapons and large capacity magazines, what
15 would you have provided them?

16 (Koper Exhibit 3 was marked for
17 identification.)

18 A I probably would have provided them with
19 really the -- my reports, particularly the 2004 report,
20 maybe perhaps something very similar to what I've
21 provided for the defendants in this case.

1 Q Let me show you what I've had marked as
2 Exhibit 3. And Mr. Fader, I don't have an extra copy
3 of this with me, but I think you probably know it by
4 heart.

5 And direct your attention, there's only one
6 paragraph in there that covers assault weapons and
7 other firearms with large capacity magazines, and
8 that's on page five on assault weapons. And I believe
9 from my review of that, that Mr. Webster -- I'm sorry,
10 Professor Webster only provided the General Assembly
11 with a citation to your 1997 report. Would that be how
12 you would read his citation there and then his
13 references cited below is only referring the General
14 Assembly to your 1997 report?

15 MR. FADER: Objection to the form. You can
16 answer.

17 THE WITNESS: He only appears to, yes, cite
18 the 1997 report, although he's -- it appears here that
19 he's not really conveying the conclusions about what we
20 found about the ban's impact. He's citing one very
21 specific issue regarding use of assault weapons in mass

1 shootings and the impact of assault weapons on victims
2 injured or killed in criminal events.

3 BY MR. SWEENEY:

4 Q All right. What courses do you teach here
5 at the university?

6 A Currently I'm teaching a course on program
7 evaluation for graduate students. I've also taught a
8 undergraduate course on gun crime and gun policy. I
9 also take part in a professionalization seminar that we
10 have for graduate students.

11 Q Is that one course that you offer on gun
12 crime and gun policy?

13 A Yes. I haven't offered it in a few years,
14 but a few times.

15 Q That was my next question. How often do
16 you offer that course on crime and gun policy?

17 A I did it in 2011 -- or excuse me. Twice in
18 2012, in the spring and the fall semester. I have not
19 gotten back to it since.

20 Q Would that be a total of three times that
21 you've offered that course then?

1 A Twice.

2 Q Two times. Okay. And are there any other
3 courses that you have taught here at George Mason on
4 firearms policy or policing?

5 A No, not exactly. I do incorporate research
6 on policing and firearms issues into my program
7 evaluation class for graduate students, but it's not a
8 class focused on gun crime, per se.

9 Q All right. And have you taught any courses
10 at any other college or university on firearms policy?

11 A No.

12 Q Has any court qualified you as an expert on
13 firearms policy or policing?

14 A A court?

15 Q A court.

16 A No. Unless, just to clarify, unless my
17 statements in those earlier cases I mentioned, if that
18 would somehow qualify me as an expert then they would,
19 but I've never received anything from a court saying
20 to -- to that effect.

21 Q Do you have any information one way or the

1 other as to whether the courts in any of those cases
2 have qualified you as an expert?

3 A No.

4 Q Okay. And are you currently conducting any
5 research here?

6 A Yes.

7 Q And are you conducting any research into
8 firearms policy?

9 A Very limited. Most of my work at the
10 moment has to do with policing.

11 Q Okay. And obviously there may be some
12 issues related to firearms that come into policing, but
13 that would not be the primary focus of your research;
14 correct?

15 A Not at the moment. You know, I've done
16 research on police and firearms, I've even had some
17 very recent publications on the issue, but projects I'm
18 actively engaged in at the moment are mostly dealing
19 with police and technology and evidence-based policing
20 more generally. Now, sometimes I may also work with
21 students on different projects related to firearms, but

1 it's not a, at the moment, not a heavy emphasis.

2 Q All right. And who are you doing research
3 for currently on policing?

4 A A lot of my work is funded by the
5 Department of Justice. Working on projects funded by
6 the National Institute of Justice. Also a project
7 funded by the Bureau of Justice Assistance.

8 Q And with respect to your firearms related
9 research, can we try to identify each discrete research
10 project that you've done on firearms over the years?

11 A Uh-huh. Well, without having my CV in
12 front of me, I have --

13 Q It's attached to what we've marked as
14 Exhibit 2.

15 A Okay.

16 Q And I have a copy of it here.

17 A Okay. All right. Well, going down the
18 list, should I start with the most recent and work
19 backward?

20 Q And what page are you on just for --

21 A Page two of my CV.

1 Q I'm with you. Let's go.

2 A Okay. So 2013 report, "Crime Gun Risk
3 Factors: Buyer, Seller, Firearm, and Transaction
4 Characteristics Associated" --

5 Q Can I just pause you there? Who provided
6 the funding for that work?

7 A Okay. That was a project funded by the
8 National Institute of Justice.

9 Q Okay. All right. Please continue.

10 A Okay. The next firearms project down is
11 "Gun Violence Prevention Practices among Local Police
12 in the United States."

13 Q Again, who funded that project?

14 A That work was partially funded by the Joyce
15 Foundation and partly funded by Motorola Foundation.

16 Q And how did you obtain a grant from the
17 Joyce Foundation?

18 A I applied.

19 Q And what made you select the Joyce
20 Foundation?

21 A They were just about the only foundation I

1 could find, the only organization that was providing
2 funding for research on gun crime at that time.

3 Q And how did you learn that they were
4 providing funding on research on gun crime?

5 A They have a well-known program on gun
6 violence prevention that they've been funding for a
7 number of years.

8 Q And are you aware of their support of the
9 Johns Hopkins Bloomberg school's gun policy center?

10 A I was not directly aware, no.

11 Q Okay. This is just first you've heard of
12 it?

13 A I think so.

14 Q All right. Please continue.

15 A Okay. "Police Strategies to Reduce Illegal
16 Possession and Carrying of Firearms."

17 Q And can you tell me who funded that
18 research?

19 A That work was done for an organization
20 called the Campbell Collaboration. It's an
21 international organization that commissions intensive

1 reviews of research on the effects of different social
2 policies and programs. This was work that I had been
3 doing over a number of years. I believe Campbell
4 Collaboration made a small amount of funding available
5 at the time that I started. A lot of that work would
6 have also been supported by the Jerry Lee Center of
7 Criminology where I worked at the University of
8 Pennsylvania for a number of years.

9 Q All right. Please continue.

10 A Okay. A project that I did with Douglas
11 Wiebe and colleagues in 2009, "Homicide and Geographic
12 Access to Gun Dealers in the United States."

13 Q All right. And who funded that research?

14 A I don't believe that anyone in particular
15 funded that one, at least I didn't receive any funding
16 for it.

17 Q All right. Did you do any original
18 research that went into this report?

19 A I was collaborating with a group of
20 colleagues. I wasn't the -- the lead author, but I was
21 consulting with them in the writing of the paper and

1 design of the project.

2 Q All right. And next?

3 A Okay. The next article listed is one
4 "Reducing Firearm Violence: A Research Agenda." If you
5 consider that a project, it was an outgrowth of the
6 small conference that was held at the University of
7 Pennsylvania back in 2005, I think, and that was a
8 publication that came out of that.

9 Q Had you done any original research in
10 support of this report?

11 A This was a group of people were brought
12 together to discuss different issues and make some
13 recommendations about future research on firearms, so
14 it didn't really involve original research, per se.

15 Q All right. And next?

16 A Okay. The next publication is "Police
17 Crackdowns on Illegal Gun Carrying: A Systematic
18 Review." That's an earlier version of the 2012
19 publication we had discussed earlier.

20 Q Was that also supported by a grant from
21 the --

1 A Campbell Collaboration.

2 Q -- Campbell Collaboration?

3 A Yeah.

4 Q Okay. Next, please.

5 A Okay. "Purchase of Multiple Firearms as a
6 Risk Factor for Criminal Gun Use," that was a project I
7 published in 2005. That was supported by a grant from
8 Smith Richardson Foundation.

9 Q And how did it happen to apply to them for
10 grant money?

11 A It was a competitive grant award. I think
12 they had some kind of a program they called like a
13 public policy fellowship or something like that. I
14 just applied for it.

15 Q All right. And next?

16 A Next one down was a study of illegal gun
17 markets that I did with Glenn Pierce and other
18 colleagues. It was funded by the National Institute of
19 Justice.

20 Q All right. And next?

21 A Next was the publication we talked about

1 earlier with Darin Reedy looking at the impact of
2 handgun types and assault outcomes. That was an
3 outgrowth of the work on the federal assault weapons
4 ban that was funded by the National Institute of
5 Justice.

6 Q All right.

7 A That particular analysis I should note was
8 kind of -- well, yeah, we used primarily funding from
9 the assault weapons work to support that, so fair
10 enough to say.

11 Q Okay.

12 A The next one, "Federal Legislation and Gun
13 Markets: How Much Have Recent Reforms of the Federal
14 Firearms Licensing System Reduced Criminal Gun
15 Suppliers?" That was funded by the National Institute
16 of Justice.

17 Q All right.

18 A The next two publications are ones that I
19 did with Jeff Roth on the 1994 federal assault weapons
20 ban. Those were both publications stemming from our
21 1997 report. Same is true for the other one below

1 that, "A Priori Assertions Versus Empirical Inquiry."

2 Q All right. And we'll get back to those.
3 Just -- and they all came out of the NIJ funded 1997
4 study?

5 A Yeah.

6 Q All right.

7 A Further down the list, there's a
8 publication that I did with Peter Reuter on
9 "Suppressing Illegal Gun Markets: Lessons from Drug
10 Enforcement." That was not a funded project, just a
11 project that we wrote together. Okay. If we go under
12 book chapters, there's the 2013 book chapter on the
13 assault weapons ban we noted earlier.

14 Q All right. And that didn't involve any
15 original research, that was a review by you of your
16 prior work; correct?

17 A Correct.

18 Q All right. Did -- were your expenses paid
19 to attend that conference?

20 A Yes.

21 Q And who paid them?

1 A Johns Hopkins.

2 Q Okay. And next?

3 A Let me look here. When we go through my
4 publications and reports for government agencies, there
5 will be some overlap with the other --

6 Q Understood.

7 A -- in some places. And page six a
8 publication, again another version of the review that I
9 did with Evan Mayo-Wilson on "Police Strategies to
10 Reduce Illegal Gun Possession and Carrying." Another
11 project 2010 that I led with a group of colleagues at
12 the Police Executive Research Forums called "Developing
13 a St. Louis Model for Reducing Gun Violence." That was
14 funded by the Bureau of Justice Assistance, a grant to
15 St. Louis and PERF, Police Executive Research Forum.
16 Down near the end of or bottom of page six, there's my
17 2007 grant report to the National Institute of Justice
18 on the crime gun risk factors paper I mentioned
19 earlier.

20 Q All right.

21 A On page seven, my 2004 report on the

1 federal assault weapons ban. Bit further down, the
2 publication led by Glenn Pierce on "Characteristics and
3 Dynamics of Crime Gun Markets." That was the grant
4 report. 2002, there was an interim report that I had
5 done for the Department of Justice on the assault
6 weapons ban.

7 Q So this was in between your '97 and 2004
8 analysis; correct?

9 A Correct. And this one was never -- never
10 made public. Over on page eight, Jeff Roth and I
11 published a DOJ brief in 1999 on the impacts of the
12 assault weapons ban that was based on your 1997 study.
13 Also further down, 1997 my "Gun Density Versus Gun
14 Type" study.

15 Q Okay.

16 A Funded by NIJ. Under that, the original
17 study of the assault weapons ban that I did with Jeff
18 Roth in '97. Now, the 1995 entry, "Reducing Gun
19 Violence: A Research Program in Progress," that was
20 really just a presentation that I did for a DOJ
21 conference.

1 Q And that related to the work you were doing
2 for the NIJ at the time; right?

3 A Yeah. Yeah. Uh-huh. See. On page nine,
4 there is the second to the last publication listed.
5 It's one by the Police Executive Research Forum, "Guns
6 and Crime: Breaking New Ground." That was something
7 that I was working on when I was at the Police
8 Executive Research Forum.

9 Q Do you know who funded that?

10 A This was the part that was funded, I had
11 made reference to this project earlier, one of the
12 articles I published last year that we reviewed kind of
13 stemmed from this work. This first part of it was
14 funded by Motorola.

15 Q Okay.

16 A On page ten under a police -- under a
17 Police Executive Research Forum violent crime study,
18 there was a -- there was a chapter that I had in there
19 where they had done a homicide gunshot survey, just a
20 brief piece that was part of that publication.

21 Q Can you elaborate on what the homicide

1 gunshot survey covered?

2 A As I recall, they had surveyed a number of
3 police agencies around the country, big city police
4 agencies, and they were trying to get information on
5 the calibers of the guns that were being used in
6 homicide at that time, and I think I was doing some
7 analyses just charting out those trends, what they
8 were.

9 Q Okay. Thank you.

10 A The thing under that, 2004, that's just an
11 editorial I wrote for the Baltimore Sun when the
12 assault weapons ban expired.

13 Q All right.

14 A Going further down under the other
15 publication section, there's a "Gun Enforcement and Gun
16 Violence Prevention Practices Among Local Law
17 Enforcement Agencies." This is an earlier version of a
18 publication that we discussed earlier. 2008, paper on
19 "Policing Gun Violence: A Brief Overview," that was
20 part of the St. Louis project I mentioned earlier.
21 Farther down, 2013, "Police Strategies for Reducing

1 Illegal Possession and Carrying of Firearms." That was
2 the original protocol for the Campbell Collaboration
3 review.

4 MR. FADER: You said 2013. I think you
5 mean 2003?

6 MR. SWEENEY: Yes.

7 THE WITNESS: Yeah, this is the 2003, yes.
8 2003. Below that are two papers, two working papers
9 just that I wrote that I worked on at different times.
10 One had to do with concealed carry laws, one had to do
11 with looking at trends and types of guns used in crime.
12 Underneath that is my dissertation study, lethality and
13 homicide. At the top of page 11 is a review essay that
14 I had written on a book on "The Politics of Gun
15 Control." I think that should be it.

16 BY MR. SWEENEY:

17 Q All right. Let's pause just for a moment
18 on the politics of gun control.

19 A Uh-huh.

20 Q What was the point of your essay there?

21 A It was just a review essay for a magazine

1 called "The Criminologist." It's published by the
2 American Society of Criminology. You just write a
3 brief essay, you know, reviewing what the book is about
4 and, you know, giving some critical commentary on it.

5 Q And I take it you've held opinions since
6 1995 on the politics of gun control?

7 A Sure.

8 Q And how would you describe your opinions on
9 the politics of gun control?

10 A Well, I should say that that's not really
11 been an emphasis of my study. It's been more on
12 looking at the impacts of different policies on -- on
13 gun violence and looking at other basic epidemiological
14 issues in gun violence. Hasn't been as much on the
15 politics, per se, but -- but, you know, certainly
16 you're aware of it and you operate in that environment.

17 Q Do you hold opinions on gun control?

18 A I try -- in my role as a social scientist,
19 I try to just inform policy as best I can with
20 evidence. In the end, policy makers have to make a
21 value judgment. They have to weigh the public safety

1 considerations at issue with the restrictions that a
2 law or a policy imposes on, you know, the gun rights of
3 the population and they have to make a value judgment
4 about that as does the public as do the courts. So I
5 try to generally in my work stay away from -- from
6 those sorts of things and just try to inform policy
7 making as best I can.

8 Q We touched briefly before on an editorial
9 in the Baltimore Sun. Let's go ahead and mark this as
10 the next exhibit, I believe it's five. Thank you.
11 I'll just put that in front of you. And this is what I
12 could find online, but I believe it's what you
13 referenced in your CV with respect to "Disassembling
14 the Assault-Gun Ban" that appeared in the Baltimore Sun
15 on September 13th, 2004?

16 (Koper Exhibit 4 was marked for
17 identification.)

18 A Correct.

19 Q And what caused you to author this and have
20 it published in the Baltimore Sun?

21 A I wanted to just put the information out

1 there publicly about the study that I'd done for the
2 Department of Justice and make people, policy makers
3 aware of it and what the findings were.

4 Q Did this or a similar piece appear in any
5 other publication?

6 A No. Just Baltimore Sun.

7 Q How was it that you selected the Baltimore
8 Sun to offer it for publication?

9 A I actually sent it to a couple of different
10 newspapers to see if there was interest in it, and
11 Baltimore Sun was one of them that I chose. In my 2004
12 report, I'd done a number of analyses with Baltimore
13 data so I think they were particularly interested in it
14 and accepted it.

15 Q You referenced the federal ban, which of
16 course covered both assault weapon and large capacity
17 magazines, and you state here the most important
18 restriction is the law's ban a large capacity
19 ammunition magazines; correct?

20 A Correct.

21 Q And that's still your opinion today that

1 that was the most significant aspect of the ban?

2 A Yes.

3 Q All right. And why is that?

4 A Well, the bans on large capacity magazines
5 have the potential to affect a lot more gun crimes than
6 do restrictions on assault weapons because there are
7 many crimes that are committed with guns having large
8 capacity magazines that are not assault weapons. I
9 think one can also make an argument that a large
10 capacity magazine is the most functionally important
11 feature of the guns that are defined as assault
12 weapons.

13 Q Now, on the end of the article, the third
14 to the last paragraph, you talk about the political
15 stakes are high, the gun lobby is powerful, and you
16 state, "But anti-ban legislators face risks in allowing
17 the ban's expiration. Gun deaths and injuries could
18 rise."

19 A Uh-huh.

20 Q Correct? Do you see that?

21 A Uh-huh.

1 Q And that was in 2004?

2 A Uh-huh.

3 MR. FADER: Just a reminder, you have to
4 say "yes" rather than "uh-huh" so the reporter can take
5 it down.

6 THE WITNESS: Sorry. Yes.

7 BY MR. SWEENEY:

8 Q Are you familiar with the data about gun
9 deaths and injuries since the ban expired in 2004?

10 A Generally, yes.

11 Q Have they risen?

12 A They did for a time in 2005/2006. Since
13 then, no, they've continued declining.

14 Q Okay.

15 A Although I should also note, too, that in
16 my reports I always point out that my projections are
17 that the effects would be small in percentage terms of
18 restrictions and ups and downs in the use of these
19 types of weapons, so that can be perhaps hard to sort
20 out against the -- amidst all the other things that
21 cause shooting rates to go up and down.

1 Q Well, on that point, in the prior paragraph
2 you state that, "Available evidence is too limited to
3 make firm projections," referring to the impact of
4 large capacity magazine bans; correct?

5 A Yes.

6 Q And that's still your view today; right?

7 A Yes. And when I say firm projections, I
8 mean, you know, projections that are -- that are highly
9 definitive and precise.

10 Q And then you go on to say, "Attackers using
11 semi-automatics to spray," what do you mean by spray?

12 A To fire rapidly.

13 Q All right. "More than ten shots may be
14 responsible for up to five percent of shooting
15 victims," correct?

16 A Yes.

17 Q And that's based on one study?

18 A Yes.

19 Q Do you know of any other studies that focus
20 on that issue?

21 A No.

1 Q All right. And you -- and then you say
2 accordingly, "Just don't expect dramatic changes." So
3 that even if you did control magazine capacity to ten
4 or less, you would not expect quote, unquote dramatic
5 changes; am I correct in that conclusion?

6 A Correct.

7 Q That's still your view today?

8 A Yes.

9 Q All right. And in fact, you wouldn't
10 expect to see any change in violence related to guns if
11 the assault weapon ban were continued; correct?

12 A That's my conclusion, that it would not
13 affect the overall rate at which people use guns in
14 assaults and robberies.

15 Q All right. And you went on here to -- to I
16 guess question, "Could renewal of just the magazine ban
17 and restriction of imports offer a workable
18 compromise?"

19 A Uh-huh.

20 Q And that was your thought that forget the
21 assault weapon ban, but maybe there's something to be

1 done here on a federal ban or a state ban on large
2 capacity magazines; is that what you were saying here?

3 MR. FADER: Objection to the form. You can
4 answer.

5 THE WITNESS: Yeah, I was offering this as
6 a possible compromise given the intense division that
7 there are, just recognizing the political realities and
8 trying to say, well, maybe if the magazine ban is the
9 most important part, then maybe politically that's a
10 more viable option is to go there.

11 BY MR. SWEENEY:

12 Q Now, you went on to say, "Most of the
13 public supports the magazine ban." What's the basis of
14 that statement?

15 A I don't remember the specific poll that I
16 was citing, but I'm sure that at the time I was looking
17 at some kind of public opinion poll that must have been
18 released right around the time of the ban's expiration.

19 Q All right. Do you know of any public
20 opinion polls that represent Maryland citizens in terms
21 of their support for a magazine ban or an assault

1 weapon ban for that matter?

2 A No.

3 Q All right. And you say here, "It,"
4 referring to a ban on large capacity magazines, "puts
5 little burden on gun owners." What do you mean by
6 that?

7 A It was a judgment that the restriction in
8 the scheme of things is a modest one, just reducing
9 magazine capacity as opposed to a more stringent bans
10 on weapons.

11 Q All right. And then you say, "It's
12 something for Congress to consider," correct?

13 A Yes.

14 Q Now, do you yourself -- so let's
15 distinguish between an assault weapon ban and a large
16 capacity magazine ban.

17 A Uh-huh.

18 Q Based on the evidence, you would not be
19 able to say to a reasonable degree of probability that
20 a ban on so-called assault weapons would have a
21 significant impact on reducing firearm related crime;

1 correct?

2 MR. FADER: Objection. You can answer if
3 you can.

4 THE WITNESS: Do you mean independently of
5 a magazine ban?

6 BY MR. SWEENEY:

7 Q Correct.

8 A Okay. That's a bit harder to project.
9 When you're thinking about the impacts of these sorts
10 of laws, it's most easily to -- it's most easy to try
11 to define possible impacts in terms I think of the
12 magazine bans. With the assault weapons, it becomes
13 more difficult because they're just a share of the guns
14 used overall with large capacity magazines. But that's
15 not to say that it couldn't have any effect on gunshot
16 victimizations, it becomes just harder to -- to measure
17 that.

18 When -- when I look at the assault weapons
19 legislation, I -- one way that I tend to view this is I
20 think policy makers are making a judgment about a
21 particular class of weaponry that they think is

1 particularly dangerous and lethal because of the
2 constellation of features that those weapons have, even
3 if they're only rarely used in crime. When they are,
4 they can be very damaging because they combine
5 semi-automatic firing with the ability to accept
6 detachable magazines. They typically take very large
7 magazines, you know, 30 or more rounds. They have a
8 design with pistol grips and a more compact design to
9 facilitate control of the weapon and rapid fire. If
10 you're talking about assault rifles, then obviously
11 they inflict more lethal wounds than handguns. And
12 they have other features that might increase their risk
13 of being used in crime, say things like folding stocks
14 or flash hiders in the barrels.

15 So in that sense, I think policy makers are
16 making a judgment that this is a particularly dangerous
17 class of weaponry when it is -- when they are used in a
18 criminal fashion. I tend to think of it in some ways
19 as being similar to a federal restrictions on machine
20 guns, that in that context it was probably very similar
21 that policy makers were reacting to some, you know,

1 highly publicized troubling incidents and so they were
2 restricting a class of weaponry they felt was
3 particularly dangerous, even though they probably had
4 very little data on how many gun crimes involved
5 machine guns at that time or whether machine guns were
6 used disproportionately in crime or probably didn't
7 have any data on lethality of attacks with machine guns
8 versus other weapons, but they -- they made that
9 decision to restrict those and in the time since then,
10 machine guns have been very rarely used in crime.

11 So that's just I think another -- another
12 consideration, another way of looking at the assault
13 weapons provisions.

14 Q Did the federal government ban machine
15 guns?

16 A Began restricting them and registering them
17 in the 1930s and then they stopped giving out further
18 permits in the 1980s.

19 Q Would I be able to get a tax stamp and
20 purchase a machine gun today?

21 A You'd -- as I understand it, there are no

1 more new permits. You would have to get one that's
2 already existing somehow.

3 Q So I could -- I could purchase one from
4 somebody whose already owned?

5 A Correct. If -- if you went through all the
6 proper procedures and background checks.

7 Q All right. But I couldn't do that with
8 respect to a semi-automatic long gun that's banned in
9 Maryland?

10 A You would -- you could keep the one that
11 you have right now, but you wouldn't be able to
12 transfer it, no.

13 Q Right. But I could if I jumped through the
14 right hoops get myself a machine gun; correct?

15 A Well, you know, Maryland legislatures and
16 the federal -- federal legislatures have different
17 considerations, different ways they chose to approach
18 the issue.

19 Q Right. And so the federal government never
20 actually banned machine guns?

21 A In a strict sense, that's perhaps true, but

1 they very heavily regulate them and restrict them.

2 Q Understood. We wouldn't want them falling
3 into criminal hands, would we?

4 A No.

5 Q Are you an expert in ballistics?

6 A I have some general knowledge. I -- I
7 should hesitate to call myself an expert, per se.

8 Q All right. And while you're an expert in
9 firearms policy, are you an expert in firearms?

10 A How do you mean?

11 Q Technical aspects of firearms, for
12 instance.

13 A I have a limited basic working knowledge.
14 Of course in doing the assault weapons work, I had to
15 learn a lot about different makes and models and their
16 features. I'm not the sort of person who could take
17 apart a firearm for you and put it back together.

18 Q You are not?

19 A No.

20 Q Do you own any firearms?

21 A No.

1 Q Have you ever owned any firearms?

2 A No.

3 Q Have you fired firearms?

4 A Yes.

5 Q When did you do that?

6 A In the -- I was in a police lab and I fired
7 some firearms before.

8 Q And when was that?

9 A Several years back.

10 Q And where was that?

11 A I remember firing some guns in a lab in
12 Kansas City. I'm not sure if I've been any place else,
13 but I remember that one.

14 Q All right. And what firearms did you fire
15 at the police lab in Kansas City?

16 A Some different handguns.

17 Q And do you recall what makes and models you
18 fired?

19 A Not clearly, no.

20 Q Do you recall if you fired revolvers?

21 A Yeah, there was one revolver and at least

1 one semi-automatic pistol.

2 Q And do you know what capacity magazine the
3 semi-automatic pistol had?

4 A Don't quite recall, no.

5 Q Okay. And have you ever fired a rifle?

6 A No.

7 Q Have you ever fired a shotgun?

8 A No.

9 Q And other than shooting at the police lab
10 in Kansas City a revolver and the semi-automatic
11 pistol, have you had any training in operating
12 firearms?

13 A No.

14 Q And have you had any training in firearms
15 design and manufacture?

16 A No.

17 Q And have you had any training in firearm
18 performance?

19 A No.

20 Q Have you had any training in ammunition?

21 A Not formal training.

1 Q All right. And what informal training have
2 you had?

3 A Oh, again, just, you know, learning about
4 things as needed for my research projects, learning
5 about different ammunition calibers and things like
6 that.

7 Q All right. And you made a statement about
8 high power --

9 A Uh-huh.

10 Q -- firearms. What do you mean by high
11 power?

12 A Well, if you're talking about in context of
13 rifles, I know that rifles fire more lethal rounds than
14 handguns and do much greater damage in general.
15 Center-fire ammunition fires more lethal rounds than
16 say rim-fire ammunition, those sorts of things.

17 Q What do you mean by more lethal?

18 A Well, they inflict more serious wounds.

19 Q All right. Now, would you agree with me
20 that lethal means dead?

21 A It inflicts greater injury and greater

1 damage.

2 Q Okay. And what does the phrase "deadly
3 force" mean to you?

4 A Using force that could potentially be
5 deadly in some context.

6 Q And would you agree with me that all
7 firearms are potentially deadly?

8 A Yes.

9 Q Are you familiar with ballistic studies on
10 so-called assault weapons versus handguns in terms of
11 the rate of injury or death associated with their use?

12 A I may have seen reports like that in the
13 past. I don't really remember any specifically.
14 Depend on what -- what particular weapons that you're
15 looking at.

16 Q All right. And you mentioned some studies
17 of calibers. What caliber do you find assault rifles
18 using?

19 A It can be a variety of different ones. It
20 could be 762-millimeter, could be .223. There's a
21 variety of different rifle calibers.

1 Q And do you know whether or not an assault
2 rifle will have greater stopping power than a handgun?

3 A An assault -- a rifle?

4 Q Yes.

5 A Yes, it will.

6 Q All right. And do you make a study of law
7 enforcement use of firearms?

8 A I haven't studied that specifically very
9 often.

10 Q Do law enforcement officers use a firearm
11 in the course of their duties to kill or to stop
12 perpetrators?

13 MR. FADER: Objection. You can answer.

14 THE WITNESS: I think their intention is to
15 shoot someone to stop them, and if it -- if it ends up
16 killing them, but the intention is to stop them.

17 BY MR. SWEENEY:

18 Q All right. And we know that's true because
19 if the perpetrator is stopped, it would be highly
20 unusual and probably illegal for the officer to
21 continue to shoot until they're dead; correct?

1 A Correct.

2 Q Do you know what firearms are chosen by
3 Maryland State Police in -- for their official
4 functions in Maryland?

5 A No.

6 Q All right. Do you know if they've chosen
7 to use what they call patrol rifles that are assault
8 weapons that would be banned under the new law?

9 A I don't know specifically, but I'll take
10 your word for it.

11 Q Why would they choose a firearm that is
12 more lethal than a handgun if their purpose is to stop
13 and not kill?

14 MR. FADER: Objection to the form. You can
15 answer.

16 THE WITNESS: Okay. They're making sure
17 that they're equipped to deal with the potential
18 adversary. Their job might require them to go into
19 very dangerous circumstances, maybe raid a drug house
20 where people have a great deal of weaponry, something
21 of that sort.

1 BY MR. SWEENEY:

2 Q But again, their intent would be to stop
3 perpetrators in the act, not to kill them
4 unnecessarily; correct?

5 MR. FADER: Objection to the form. You can
6 answer.

7 THE WITNESS: That would be their intent
8 ideally, but when they have to fire at someone, they're
9 going to fire at the central body, the main part of the
10 target. And if, you know, we can hope ideally that
11 they don't perish, but they very well may.

12 BY MR. SWEENEY:

13 Q Should law enforcement officers choose
14 firearms that are less lethal but effective at stopping
15 perpetrators?

16 MR. FADER: Objection. You can answer.

17 THE WITNESS: Well, there has been a
18 movement in law enforcement towards often using
19 nonlethal weapons if they can. We've seen the spread
20 of tasers, for example, so that is -- there is perhaps
21 a movement in that regard in that direction.

1 BY MR. SWEENEY:

2 Q We mentioned before in connection with one
3 of your studies the Police Executive Research Forum.
4 What is that?

5 A Police Executive Research Forum is a police
6 executive membership and research organization based in
7 Washington DC. The members of PERF consist of law
8 enforcement executives generally from larger police
9 agencies and jurisdictions around the country. At the
10 DC office, they have staff who do research studies. I
11 was part of the research group. They also have people
12 who do management and consulting studies, things of
13 that sort.

14 Q And I understood from your résumé that you
15 were their director of research there at one point;
16 correct?

17 A Yes.

18 Q And that -- that period was May 2010 to
19 August 2011 according to your CV; is that correct?

20 A Yes.

21 Q Have you had any other relationship with

1 that organization?

2 A I still have some ongoing work that I'm
3 finishing with them. There was some grant projects I
4 was involved in at the time I left that we're still
5 completing.

6 Q All right. And are you aware that -- may I
7 refer to it as PERF, P-E-R-F?

8 A Yeah.

9 Q Is a member of the National Law Enforcement
10 Partnership to Prevent Gun Violence?

11 A Correct.

12 Q And you understand, I'm sure, that that
13 national partnership advocates the banning of assault
14 weapons and high capacity magazines; correct?

15 A I'll take your word for it.

16 Q You have no reason to doubt that; correct?

17 A No. Huh-uh.

18 Q All right. We talked about your 1997 study
19 on the federal ban.

20 A Uh-huh.

21 Q And that involved original research with

1 respect to the impact of the ban, the federal ban on
2 assault weapons and large capacity magazines; correct?

3 A Uh-huh.

4 Q Other than that original research --

5 MR. FADER: That was an "uh-huh." You have
6 to say "yes."

7 THE WITNESS: Sorry. Correct.

8 BY MR. SWEENEY:

9 Q I apologize. Thank you, Mr. Fader. In my
10 rush to move this forward, I don't always catch that
11 you haven't said a verbal yes, although I do absolutely
12 catch your uh-huh and your nod and I know that you're
13 with me, but you're right. We have to make a record,
14 so thank you.

15 A Okay.

16 Q Have you done any other original research
17 in connection with banning assault weapons or large
18 capacity magazines or the impact of any such bans other
19 than that original research that you reported on in
20 1997?

21 A The 2004 report.

1 Q All right. And that's the one that you
2 said updated the 1997 data with the experience under
3 the ban since 1997; correct?

4 A Correct.

5 Q Now, have you done any other original
6 research with respect to bans on assault weapons or
7 large capacity magazines or their impact other than
8 those two studies?

9 A No.

10 MR. SWEENEY: All right. Why don't we take
11 a quick break here? I'm getting a little dry and I'm
12 heading for the water fountain.

13 MR. FADER: Good.

14 (Off the record.)

15 BY MR. SWEENEY:

16 Q Back on the record.

17 Turning to page one of your curriculum
18 vitae.

19 A Okay.

20 Q You worked for the Police Executive
21 Research Forum as a deputy director from 2007 to

1 May 2010, so roughly four years you were there; am I
2 correct?

3 A Yeah. Close to four.

4 Q All right. And before then, you were at
5 the RAND Corporation?

6 A Yep.

7 Q What did you do there?

8 A I worked on a variety of different things
9 when I was there. I don't think I did any
10 firearms-related research, but I remember I was
11 involved in some research on police hiring issues.

12 Q All right.

13 A Also was involved in a little bit of
14 national security work. Variety of different things.

15 Q All right. And you were with the, before
16 that, the Jerry Lee Center of Criminology at the
17 University of Pennsylvania. Did you do any
18 firearms-related work there?

19 A Yes. That was where I did -- where I was
20 when I finished the 2004 report on assault weapons. I
21 was also working on the Campbell Collaboration reviews

1 of police crackdowns on illegal gun carrying, finishing
2 the Jersey City work with Darin Reedy at that time, and
3 some of the other publications I was also working on at
4 that time.

5 Q What did you do at the Urban Institute from
6 1997 to 2001?

7 A I was a research associate there and I
8 worked on the assault weapons studies, some other
9 studies related to gun policy. I was also involved in
10 the National Evaluation of the Federal Cops Program.
11 Those are some of my main projects I worked on. Oh,
12 study of police hiring and retention. Those are some
13 of the highlights. Gun market research, too.

14 Q You -- you were at the University of
15 Maryland Department of Criminology and Criminal Justice
16 as a faculty research science just in 1997. What led
17 to that appointment and what did you do there?

18 A During this time period I was working a
19 good deal with Lawrence Sherman, who was a professor at
20 Maryland who was my advisor in graduate school. He ran
21 this company called Crime Control Institute that I'd

1 worked at for a number of years. He became the
2 chairman of the Department of Criminology at Maryland
3 in '95, so there was just a brief period of time when I
4 was on staff there working with him on a project.

5 Q All right. And you had previously worked
6 for the department from 1989 to 1994 as a graduate
7 assistant; right?

8 A Yes.

9 Q And the Crime Control Institute you worked
10 as a research scientist from 1994 to 1997; correct?

11 A Yes.

12 Q And what work did you do at the Crime
13 Control Institute?

14 A There was a number of firearms projects.
15 One was the NIJ grant that we talked about earlier, the
16 1997 report, that "Gun Density Versus Gun Type." Also,
17 during that time I was working for the Urban Institute
18 through subcontracts, or actually I think we had a
19 thing called IPA, an Interpersonnel Agreement. So
20 actually when I was working with Jeff Roth on that
21 initial assault weapons study published in '97, I was

1 technically employed by Crime Control Institute but was
2 working for the Urban Institute through this
3 arrangement.

4 Q Now, where was Mr. Roth at the time?

5 A He was at the Urban Institute.

6 Q Uh-huh. And you worked at the National
7 Institute of Justice yourself in 1990; correct?

8 A I was a summer intern there, yes.

9 Q All right. And before that, you were at
10 the Police Foundation. What was the work that you did
11 there?

12 A In that early stage, I did a variety of
13 different projects. A lot of it was related to the
14 issue of community policing at that time.

15 Q What -- what caused you to go into
16 criminology as an area of study?

17 A Just an area I was always interested in. I
18 chose that as my field of study when I started my
19 undergraduate degree and stuck with it over the years.

20 Q Do any of your family members own firearms?

21 A Do you mean -- well, I'd rather not say,

1 talk about my immediate family members, but I just
2 think that gets a little too personal in identifying.
3 I can say that I have relatives who own firearms.

4 Q All right. And have you ever gone hunting?

5 A I have not.

6 Q Have you ever been a victim of gun
7 violence?

8 A No.

9 Q Any family member?

10 A No.

11 Q Any family member been a victim of violent
12 crime of any kind?

13 A No.

14 Q Do you believe that the Second Amendment
15 protects an individual's right to own a firearm for
16 lawful purpose in this country?

17 A Yes. That's what the Heller decision
18 established.

19 Q Do you believe that notwithstanding the
20 Second Amendment, the government can ban ownership of
21 certain firearms?

1 MR. FADER: Objection. You can answer.

2 THE WITNESS: The government -- the Heller
3 decision leaves open the possibility that government
4 might restrict particular types of firearms, even
5 though there is a basic right to firearms ownership.

6 BY MR. SWEENEY:

7 Q And is there any limit on the type of
8 firearms that the government can ban?

9 A I believe the criteria that they put forth
10 in Heller had to do with how commonly different weapons
11 are owned by the population and used for sporting and
12 defensive purposes and things like that.

13 Q So it's your understanding that the
14 government cannot ban firearms that are commonly owned
15 for lawful purposes?

16 MR. FADER: Objection. You can answer.

17 THE WITNESS: That would seem to be the
18 reading of -- of the Heller decision, yes.

19 BY MR. SWEENEY:

20 Q All right. And do you believe that the
21 government can place restrictions on magazine capacity

1 for firearms?

2 A Well, I think that's what these cases are
3 probably likely to determine. So the government will
4 have to make a decision about potential damage caused
5 by the magazines and weigh it against the right to
6 ownership among the population.

7 Q Now, your Baltimore Sun article talked
8 about magazines with a capacity of as much as 100
9 rounds; correct?

10 A Correct.

11 Q Are you aware that Maryland's had a
12 restriction on the capacity of magazines to no more --
13 no more than 20 rounds for quite some time now?

14 A Yes.

15 Q Are you aware of any evidence that supports
16 lowering a restriction on magazine capacity from 20 to
17 ten in terms of the probability of having an impact on
18 firearm-related violence?

19 A I've not seen any research that's evaluated
20 a law like that. I think perhaps one could look to
21 other types of data to make some estimates of that,

1 like our Jersey City data for example.

2 Q And what would the Jersey City data shed
3 light on here?

4 A Well, the Jersey City data showed that
5 there were essentially about five percent of the
6 gunshot victimizations in that sample came from cases
7 where more than ten shots were fired. One could -- I
8 don't know if there were any cases in those data where
9 more than 20 were fired, I don't recall exactly, but
10 one could look at those sorts of data potentially to
11 gain some -- some assessment.

12 Q Are you familiar with Lucy Allen?

13 A No.

14 Q Do you know who she is?

15 A No.

16 Q Have you ever read any reports by her?

17 A No.

18 Q Are you familiar with Edward Eugene
19 Cornwell?

20 A No.

21 Q Know who he is?

1 A No.

2 Q All right. Are you familiar with Joseph
3 Vince?

4 A Yes.

5 Q And who is he?

6 A He's a former ATF official and now I
7 believe he's working -- I think he's the director of a
8 criminal justice program at a college somewhere here in
9 Maryland. I knew Mr. Vince when he was with ATF. He
10 was an official that we had some dealings with when
11 doing the 1997 report.

12 Q Did you suggest his name to Mr. Fader?

13 A No.

14 Q Did Mr. Fader advise you that he was
15 working with Mr. Vince in connection with this case?

16 A No.

17 Q And what role did Mr. Vince have in the
18 study that you did in your 1997 report?

19 A He didn't have an active role in the study.
20 He was an official at ATF at the time, so he was
21 someone who helped us in acquiring data that we need --

1 needed. I believe he and others at ATF also, you know,
2 read our report, provided feedback on it. Helped to
3 facilitate meetings for us, things of that sort.

4 Q Okay. Do you know who Mark Gius is?

5 A I've heard the name, but I don't know him.

6 Q Have you read any published works of his?

7 A No.

8 Q When we went over your published works on
9 your CV earlier, did they all appear -- when we -- in
10 peer review publications, those are the ones you list
11 first there; correct?

12 A Correct.

13 Q And what is the difference between a peer
14 review publication and some of the other chapters or --
15 or presentations or reports that you list separately?

16 A The peer review publications are ones where
17 you submit them to a journal and the journal editor
18 sends the paper out to people who review it and comment
19 on it and render a verdict on whether it's -- they
20 think it's a good piece that should be published.

21 Q Okay. And generally speaking, do you find

1 the articles that you read in peer review journals more
2 reliable than articles that appear that have not been
3 peer reviewed?

4 A Not necessarily. It depends. Sometimes
5 you can find, you know, work done, for example, in
6 National Institute of Justice reports that's very high
7 quality. I should say, too, that all grant reports
8 submitted to the National Institute of Justice are in
9 fact peer reviewed, but the process is different. The
10 peer reviewers are not rendering a verdict on whether
11 this is going to be published. NIJ, as a matter of
12 process, they're going to publicly archive all of these
13 studies but they do want some quality assurance, so
14 they do have peer reviewers look at your studies.

15 Q You did not list under peer review articles
16 the chapter in the 2013 book that came out of the Johns
17 Hopkins symposium; correct?

18 A Correct. Book chapters are often handled a
19 bit differently. Typically you might be invited by the
20 editor of the book to write the chapter and the editor
21 and or maybe multiple editors, they'll review your

1 piece and exercise some quality control on it and give
2 you feedback on it, but it's a somewhat different
3 process from when you send it to an academic journal
4 where the peer review is in theory blinded.

5 Q All right. And the book chapter that you
6 wrote in 2013 for that book was not peer reviewed;
7 right?

8 A It was peer reviewed by Dr. Webster and I
9 believe he was -- they were trying to find different
10 people who took part in the conference to review the
11 chapters. I don't know who specifically might have
12 read mine in advance other than Professor Webster.

13 Q Did you receive any comments back from
14 Professor Webster or anyone else on how to improve your
15 article to make it suitable to publish on a peer basis?

16 A Yeah, he made some suggestions.

17 Q Okay. And you incorporated those?

18 A Yes.

19 Q All right. And did you get any comments
20 from anyone else?

21 A Not that I recall.

1 MR. SWEENEY: All right. Let's pull out
2 the 2004 article. Let's mark this as the next exhibit.
3 I think we're finally at five.

4 (Koper Exhibit 5 was marked for
5 identification.)

6 (Off the record.)

7 BY MR. SWEENEY:

8 Q Let's go back on the record.

9 On page 81 of your 2004 report that we've
10 marked as Koper Exhibit 5, you state your conclusions
11 with respect to the effect of the assault weapon and
12 large capacity magazine federal ban; correct?

13 A Are you referring to the first full
14 paragraph?

15 Q Yes, I am.

16 A That's a partial statement of it, yes.

17 Q All right. And you state there quote,
18 "Because offenders can substitute non-banned guns and
19 small magazines for banned AWs and LCMs," meaning
20 assault weapons and large capacity magazines?

21 A Correct.

1 Q "There is not a clear rationale for
2 expecting the ban to reduce assaults and robberies with
3 guns." Am I reading that correctly?

4 A Yes.

5 Q And that correctly and accurately state
6 your conclusion with respect to the impact on
7 firearm-related crime of the federal ban on assault
8 weapons and large capacity magazines; correct?

9 A That's a partial statement of it.

10 Q All right. But -- but accurate in and of
11 itself?

12 A Yes.

13 Q Okay. And when you say you would not
14 expect the assault weapon or large capacity magazine
15 ban to reduce assaults with guns, that would include
16 assaults leading to homicides; correct?

17 A Not exactly. What I'm saying here is I
18 don't expect the overall level of assaultive violence
19 with guns to change whether or not these guns and
20 magazines are available, but what I am hypothesizing is
21 that changes in the use of these guns and magazines

1 could affect the share of attacks that involve -- that
2 result in injuries or deaths.

3 Q But -- but they -- you would not expect a
4 ban on assault weapons or large capacity magazines to
5 actually reduce the number of firearm-related assaults
6 or robberies; correct?

7 A Correct.

8 Q And you would not expect a ban on assault
9 weapons or large capacity magazines to reduce
10 firearm-related home invasions; correct?

11 A No. Correct, I mean.

12 Q And you wouldn't expect a ban on assault
13 weapons or large capacity magazines to reduce the
14 number of firearms assaults on police officers;
15 correct?

16 A Correct. That's fair enough.

17 Q On note 95 on that page, you address I
18 believe state bans on assault weapons in which you say,
19 "A few studies suggest that state-level assault weapon
20 bans have not reduced crime." Am I reading that
21 correct?

1 A Yes.

2 Q And is that still your view today?

3 A I've not seen any further studies of this
4 yet, but yes, I mean, essentially that's the
5 conclusion.

6 Q All right.

7 A With the qualifiers that are stated in the
8 rest of the footnote.

9 Q Let's mark this as Exhibit 6, please. Let
10 me show you what I've marked as Exhibit 6, which is an
11 article authored by Mark Gius, G-I-U-S, on an
12 examination of the effects of concealed weapon laws and
13 assault weapons bans on state-level murder rates.

14 (Koper Exhibit 6 was marked for
15 identification.)

16 A Okay.

17 Q And I first ask you are you familiar with
18 this article?

19 A No. I've not read this.

20 Q And has anyone mentioned this to you?

21 A Defense counsel did mention the existence

1 of this.

2 Q All right. And this appeared in Applied
3 Economics Letters; right?

4 A Okay.

5 Q And is that a peer reviewed journal, to
6 your knowledge?

7 A I don't know.

8 Q All right. And, you know, do you make it
9 your business to keep up with the literature on the
10 impact of firearms bans?

11 A I try to. How extensively I'm engaged in
12 that research might ebb and flow a little bit depending
13 on what exactly I'm working on at that time, so I see
14 this article, for example, just came out in last
15 November so that's quick to keep up with.

16 Q All right. And my reading of this, and I
17 appreciate if you just put it in front of you, is that
18 it concludes using data for the period I believe 1980
19 to 2009 that state-level assault weapons bans did not
20 reduce state-level murder rates. And that would be
21 consistent with the prior studies in your footnote 95

1 on page 81 of Exhibit 5; correct?

2 MR. FADER: Objection.

3 THE WITNESS: That would be consistent with
4 it. Again, I probably have a number of questions about
5 it, but it is consistent with what I said there.

6 BY MR. SWEENEY:

7 Q All right. Now, on page 267 of this
8 article, the one, two, three, four, I think fourth
9 sentence states, "In addition, the Federal assault
10 weapons ban is significant and positive, indicating
11 that murder rates were 19.3 percent higher when the
12 Federal ban was in effect."

13 Have you studied in the work that you've
14 done on the impact of the federal assault weapon and
15 large capacity magazine ban the murder rates during the
16 federal ban?

17 A In our 1997 report, we actually did do a
18 study of state-level murder rates and we found that in
19 the very short-term aftermath of the ban 1995 that gun
20 murder rates were actually six to seven percent lower
21 than would be expected based on pre-existing trends.

1 Now, there were difficulties in judging whether or not
2 that was a statistically significant finding, meaning a
3 real policy impact, or whether it was due to more
4 random fluctuation in the murder rates, but that was
5 the -- the point estimate.

6 Now, in later work I felt that that and
7 many of the other findings that we had on the ban's
8 impact on gun violence measures had to be discounted by
9 the findings regarding trends of use of large capacity
10 magazines, meaning that what we had found was when
11 you're doing program evaluation, you often have a
12 series of outcome measures that you're looking at.
13 You'll have what we might call intermediate or initial
14 outcome measures and then what we sometimes call more
15 distal outcome measures.

16 When you're studying something like an
17 assault weapons law, it's critical that your initial
18 and intermediate outcome measures are going to be
19 crimes committed with the banned guns and magazines and
20 you have to examine that first and demonstrate that
21 those have declined before you can go on to confidently

1 examining other more distal outcome measures such as,
2 you know, reductions in shootings associated with the
3 law.

4 What we have found in the 2004 report was
5 that while use of assault weapons had gone down in the
6 immediate aftermath of the ban, we had not found
7 evidence at that point as of the early 2000s of a
8 reduction in use of guns having large capacity
9 magazines. So any other analyses that look at things
10 like gun murder rates or, you know, other measures of
11 gun deaths and injuries have to be qualified based on
12 that initial finding. There's always going to be some
13 ambiguity in interpreting those analyses.

14 Q When I look at the statement in Professor
15 Gius' article that federal assault weapons ban is
16 significant and positive, how do you interpret what he
17 means by significant and positive there?

18 A What he is saying is that, and again I
19 should qualify all my comments about this based on the
20 fact that, you know, I haven't been able to read this
21 and critically assess this, but --

1 Q And I've shown it to you today for the
2 first time, even though it's been mentioned to you
3 previously by Mr. Fader, I understand you haven't read
4 previously?

5 A That's correct. So he's saying that the --
6 that during the time of the federal ban, gun murder
7 rates were 19.3 percent higher than one would have
8 otherwise expected based on pre-existing trends. That
9 strikes me as being problematic. One cannot -- it's
10 hard to think of a theory as to why, you know, why the
11 federal assault weapons ban would be associated with a
12 change that large in the murder rate, especially
13 driving it upward. But -- but that's what he's
14 concluding.

15 Q Table one below there is labeled "Fixed
16 effects regression gun-related murder rate." What does
17 that mean to you?

18 A He's referring to a certain type of
19 statistical model that he's estimating where they
20 use -- he's tracing state-level gun murder rates over
21 time, and the fixed effects refer to a statistical

1 technique that you use to try to control for
2 differences between, in this case, different states
3 that are constant over time. He's also probably
4 controlling for common time trends as well across the
5 sample, and then essentially trying to look at whether
6 changes in some of these other variables are associated
7 with changes in the gun murder rate controlling for
8 those things.

9 Q Now, have you performed any similar
10 regression analysis with respect to gun-related murder
11 rate in relationship to the federal ban on assault
12 weapons and large capacity magazines?

13 A Yes. The analysis that I mentioned earlier
14 that was in the part of the 1997 report had a similar
15 type of modeling strategy, and ours suggested a small
16 reduction in gun murders after the ban went into
17 effect.

18 Q In table one across from federal assault
19 weapons ban, there appear the numerals 0.66 and
20 underneath that parentheses 2.42 closed parentheses and
21 then two asterisks. What does that data mean to you,

1 sir?

2 A The 0.66 is his regression coefficient and
3 how you interpret that will depend on the nature of the
4 data that he's looking at. For example, whether the
5 data is in raw metrics or logarithms. The 2.42
6 underneath is basically a test of -- a test statistic
7 to show if the change or the coefficient that he has is
8 statistically significant.

9 Q And the two asterisks refer to down below I
10 believe one percent less than P-value less than five
11 percent. What does that mean to you?

12 A So what this test statistic suggests is
13 that the, and again all contingent on the adequacy of
14 the model specification, but contingent on that it's
15 showing that the likelihood of the finding being due to
16 say random variation is less than one percent.

17 Q So put another way, the confidence level of
18 that statistical analysis is greater than 99 percent;
19 correct?

20 A Yes. But again, contingent on the way that
21 the -- the model is specified and its adequacy. That

1 matters as much or more than statistical significance.

2 Q All right. And above that -- no,
3 nevermind. Scratch that.

4 Turning back to your 2004 study, did you
5 have anything in here on the impact on homicide rates
6 of the federal assault weapons and large capacity
7 magazine ban?

8 A We did a few things here that were a bit
9 tentative. As I said, the analysis of the key initial
10 intermediate outcome measures showed mixed results. So
11 we saw that there was a reduction in the use of assault
12 weapons, but not clearly a reduction yet in the use of
13 guns with large capacity magazines. So any further
14 analysis of impacts on measures like of injuries and
15 deaths was going to be ambiguous and somewhat
16 problematic, but nonetheless I did put together a few
17 basic trend lines for descriptive purposes looking at
18 some measures that I thought might potentially be
19 affected by ups and downs in the use of assault weapons
20 and large capacity magazines. So I was looking at a
21 few different things like the percentage of violent gun

1 crimes resulting in death. I think the percentage of
2 gunshot victimizations resulting in death. I also
3 summarized in chapter nine of this report some of the
4 other findings that we had had in the '97 report when
5 we had looked at some different similar types of
6 outcome measures.

7 Q On page 96 of your 2004 report marked as
8 Exhibit 5, that's your summary of your conclusions;
9 correct?

10 A Yes.

11 Q And in the third sentence you state, "There
12 has been no discernable reduction in the lethality and
13 injuriousness of gun violence," is that correct?

14 A Yes.

15 Q And is that still your view today based
16 upon your study and analysis of the impact of the
17 federal ban on assault weapons and large capacity
18 magazines?

19 A Yes. Based on the data that I analyzed,
20 it's still my view of it. Again, subject to the
21 qualifications that I noted earlier.

1 Q All right. And are you aware of anyone
2 else's data with respect to studying the impact of the
3 federal ban on assault weapons and large capacity
4 magazines that reached a conclusion different from the
5 conclusion that you state here?

6 A No.

7 Q Would you agree with me that the government
8 interest to be served by the federal assault weapon ban
9 and large capacity magazine ban was the reduction of
10 firearm-related violence; correct?

11 A You could view it that way or you could
12 view it more specifically as trying to get a reduction
13 in shootings in incidents with high numbers of shots
14 fired. And so, you know, again, I tended to view --
15 judge this more specifically in terms of effects on gun
16 injuries and gun deaths. As I noted in the report,
17 given the trends in use of assault weapons and large
18 capacity magazines that had been observed to that
19 point, I felt it was actually premature to make any
20 definitive conclusions about the ban's effects on gun
21 deaths and injuries. I felt that the effects of the

1 ban were still unfolding at that time and might still
2 take a while to fully unfold.

3 Q Isn't it true that as you sit here today,
4 you cannot conclude with a reasonable degree of
5 scientific probability that the federal ban on assault
6 weapons and large capacity magazines reduced crimes
7 related to guns?

8 A Correct.

9 Q And it didn't reduce the number of deaths
10 or injuries caused by guns either; correct?

11 A Correct.

12 Q Returning to your report for a moment,
13 Professor. I lost my copy of.

14 On paragraph five at the top of page two
15 you say, "Based on my research, I found, among other
16 things, that assault pistols" --

17 A I'm sorry. Could you clarify for me?

18 Q I'm sorry. Page two.

19 A Page two. Got you.

20 Q Paragraph five.

21 A Uh-huh.

1 Q Under "Summary of Findings."

2 A Okay.

3 Q You state, "Based on my research, I found,
4 among other things, that assault pistols are used
5 disproportionately in crime in general, and that
6 assault weapons more broadly were disproportionately
7 used in murder and other serious crimes in some
8 available data sources," correct?

9 A Yes.

10 Q Let's see if we can pull that apart so I
11 can understand what you're saying here. Now, how do
12 you define assault pistols?

13 A Handguns that have the military style
14 features qualifying as assault weapons.

15 Q And would you agree with me that they
16 became popularly used by criminals in connection with
17 the so-called crack epidemic of the 1980s?

18 A I don't know that I can make a statement
19 that specific. I can say that, I mean, there are
20 statistics in the report on how widely they were used
21 in crime. Generally assault weapons accounted for a

1 small percentage of crime guns. Assault pistols tended
2 to be used more often than assault rifles.

3 Q And is it your understanding that assault
4 pistols have been continuously banned in the State of
5 Maryland since at least 1994?

6 A Yes.

7 Q And that the challenge by my clients to the
8 ban on assault weapons does not include a challenge to
9 the ban on assault pistols, do you understand that?

10 A Okay. Yeah.

11 Q Now, when you say assault weapons more
12 broadly, are you including assault pistols within the
13 definition of assault weapons when you say assault
14 weapons more broadly were disproportionately used in
15 murder and other serious crimes?

16 A Yes. That's a reference to assault weapons
17 in general, so it would be assault pistols and assault
18 rifles together.

19 Q All right. And would you agree with me
20 that evidence does not support that assault rifles as
21 opposed to assault pistols are disproportionately used

1 in murder and other serious crimes?

2 A That issue has not been examined as closely
3 to my knowledge. It was not something that I
4 necessarily broke out in my own reports, so I think
5 there may be -- well, I think it could depend on the
6 type of crime, though, that you're talking about. One
7 thing that I can say that I do recall was that assault
8 rifles did tend to be more heavily involved in murders
9 of police. In the 1997 report that Jeff Roth and I
10 did, we were looking at murders of police from 1992
11 through early 1996, and of the assault weapons cases we
12 found about half of them were assault rifles. So that
13 might support an inference that they were more
14 disproportionately involved in that particular category
15 of crime, perhaps in the mass shooting incidents as
16 well, but there's not as much data on that particular
17 question.

18 Q Let me hand you what we've marked as
19 Exhibit 7, and this is -- well, let me ask you if you
20 recognize what this is.

21 (Koper Exhibit 7 was marked for

1 identification.)

2 A This looks to be murder victims by weapon.
3 I assume these are a national data taken from the
4 Uniform Crime Reports.

5 Q Of the FBI.

6 A Of the FBI.

7 Q And this is data that you use and rely on
8 in your analysis; correct?

9 A In some of them, yes.

10 Q And here they have an analysis of homicides
11 in this instance in this table murder victims by weapon
12 in the period 2008-2012; correct?

13 A Correct.

14 Q And this would be a period a number of
15 years after the expiration of the federal ban on
16 assault weapons; correct?

17 A Yes.

18 Q And so that you would expect that to the
19 extent firearms previously subject to the ban were now
20 being freely sold and transferred in the United States,
21 that the data here would fairly reflect their impact on

1 murder; correct?

2 A Perhaps. I don't have any information on
3 how common -- how common the formerly banned weapons
4 are right now or how often they're used in crime. I
5 haven't seen any further studies of that.

6 Q Well, as a matter of fact here where they
7 breakdown firearms, they -- they break out handguns,
8 rifles, shotguns, other guns, and firearms not stated,
9 but they do not break out so-called assault weapons
10 from all other rifles; correct?

11 A Correct.

12 Q And the murders during this period that are
13 associated with rifles are a very small percentage;
14 correct?

15 A I don't have a calculator with me, so I
16 can't calculate the exact percentages.

17 Q Fortunately I do.

18 A All right.

19 Q So if we were to take 322, which is the
20 number in 2012 of rifles involved in murders, and we
21 were to divide that by the total number of murders of

1 12,765, my calculator says 2.52 percent.

2 A What about as a percentage of just the
3 firearm murders? That would be a somewhat larger
4 percentage there.

5 Q Somewhat. How much more?

6 A Huh?

7 Q How much more? Shall we calculate that?

8 A Sure.

9 Q Let's just divide the 322 by 8,885. And
10 that produces approximately 3.6 percent. Does that
11 sound about right?

12 A Okay.

13 Q And do you know what the approximate
14 percentage of rifles in the general population in this
15 period of time is?

16 A I want to say -- well, I don't have
17 specific breakdowns in front of me. I've seen some
18 different surveys that have looked at what portion of
19 the gun stock is, say, handguns versus rifles. Off the
20 top of my head, I want to say, you know, somewhere
21 around 40 percent of the gun stock is handgun -- excuse

1 me, long guns. I'm not sure if that's specifically
2 rifles or it's probably rifles and shotguns together,
3 but I'd have to look. Somewhere in that neighborhood.

4 Q All right. And would you agree with me
5 based on these numbers that we're looking at for this
6 period of time, that you would not be able to say that
7 rifles are disproportionately used in murders; correct?

8 A Rifles generally, yes, that is correct.
9 Handguns tend to be the primary weapons used in -- in
10 various crimes.

11 Q All right. And do you know during this
12 period of time what percentage of rifles were assault
13 weapon rifles as you understand the term?

14 A No.

15 Q Are you familiar with the report of James
16 Curcuruto of the National Shooting Sports Foundation
17 that's been filed in this case?

18 A No.

19 Q All right. If -- if I were to represent to
20 you that he reported that over 20 percent of firearms
21 sold in 2012 were assault weapons of -- that were long

1 guns, would you have any reason to dispute that number?

2 A I don't think I'd have any reason to agree
3 or disagree.

4 Q All right. And if you agree with me that
5 that is the best data we have or at least right now on
6 the representation of those firearms being sold during
7 that period of time and at most 3.6 percent of -- of
8 the firearm-related murders were related to rifles, you
9 would not be able to conclude from that data that
10 rifles including assault weapons were
11 disproportionately used in murders; correct?

12 MR. FADER: Objection.

13 THE WITNESS: That's something I'd want to
14 look at a bit more carefully to make a definitive
15 judgment about that.

16 BY MR. SWEENEY:

17 Q What would you want to look at in addition?

18 A I think you'd probably want to know more
19 about the specifics on the rifles that are being used.
20 I'd want to know more about the exact estimates of the
21 prevalence of the assault type rifles. And, you know,

1 you might want to look at different types of murder
2 incidents, too.

3 I, again, in -- in my own studies, I often
4 found that assault rifles were a very small percentage
5 of the recovered weapons but they turned up more highly
6 in certain types of incidents, murders of police and
7 also the mass shooting incidents. So, you know, I
8 think you'd probably want to look at a number of
9 different things in that regard.

10 Q There's no breakdown in this data table
11 that we're looking at of the types of rifles. Where
12 would you go to find that data?

13 A You would probably have to go to different
14 police agencies. You know, as I did when I did my --
15 my reports on the assault weapons ban, we looked at
16 data from a number of different localities and the
17 specific makes and models that were used in those
18 crimes.

19 Q Have you done that for the period
20 subsequent to the expiration of the federal ban?

21 A No.

1 Q Do you know of anybody who has and has
2 reported on their study?

3 A No.

4 Q Returning to page two of your report, which
5 is Exhibit 2, paragraph five, you state that, "I also
6 found in particular that assault weapons and other
7 firearms with large capacity magazines are used in a
8 higher share of mass public shootings and killings of
9 law enforcement officers." Am I reading that
10 correctly?

11 A Yes.

12 Q And that's the reference you just made to
13 the types of murders in which assault weapons are used;
14 correct?

15 A Yes.

16 Q Let's see if we can parse out that sentence
17 because it seems to me there are approximately four
18 variables. On the one hand, you have assault weapons
19 and other firearms with large capacity magazines, and
20 then you also have mass public shootings and killings
21 of law enforcement officers.

1 A Uh-huh.

2 Q So is it your conclusion that assault
3 weapons are used in a higher share of mass public
4 shootings than other firearms?

5 A Yes. I believe that's what I did say in
6 the 2004 report.

7 Q All right. Can you point me to that?

8 A Page 15. So here on page 15, there's a
9 series of bullet points. Criminal use of assault
10 weapons and I'm looking at some different -- relaying
11 summarizing results from some different data sources
12 that we had looked at. And so you see that in many of
13 them, most of them, assault weapons are used in a small
14 share of gun crimes. The numbers were higher, though,
15 for guns used in murders of police. It was as high
16 as -- you see the footnote 12, it was as high as
17 16 percent in 1994, and they were also used in four to
18 13 percent of a sample of mass murders that we had
19 looked at. Of course there's more recent data
20 available on that issue. So they tended to seem a bit
21 more heavily represented in those particular cases

1 relative to -- to some of the other types of crimes.

2 Q Well, your conclusion to the representation
3 there being assault weapons representation and all
4 crime was between one and six percent in your study;
5 correct?

6 A Yes. And again, you know, there's
7 variability in different data sources, but that was
8 kind of the range.

9 Q All right. And at the time of your study,
10 do you have data on the extent to which assault weapons
11 were present in the general population?

12 A The best available estimates at the time
13 were that assault weapons probably represented about
14 one point -- probably about 1.5 million of them out
15 there, which I state elsewhere in this statement that
16 that was roughly around one percent of the gun stock.

17 Q All right. Now, your definition of assault
18 weapon that you're using on page 15 of your report here
19 and the data you have in the bullet points that we just
20 referred to include assault pistols; correct?

21 A Correct.

1 Q Do you have any breakout of assault long
2 guns either as a percentage of guns used in all crime
3 or as a percentage of guns used in the breakdowns of
4 different sorts of crime that you have under your
5 bullet points on page 15?

6 A Generally speaking I did not always break
7 out assault rifles and assault pistols. In I believe
8 it's chapter six of the report, there are some
9 statistics, there are some breakouts that look
10 specifically at assault rifles. It's a limited group
11 of assault rifles that I was examining at that time.
12 Also, as I had noted before in the -- the gun murders
13 of police, we found about half of those assault weapon
14 cases were assault rifles.

15 Q This is the bullet on national guns used in
16 murders of police '92 to '94 that you're referring to?

17 A Yeah.

18 Q Do you know how many instances numerically
19 were involved there?

20 A This is taken -- that statistic is taken
21 from our 1997 report, and I believe -- now this may not

1 have been specific to just '92 through '94, but in the
2 sample that which were looking at, which I believe is
3 '92 through early '96, stands out in my mind that there
4 were something like 20 cases that involved an assault
5 weapon.

6 Q All right. And if we were to back out
7 assault pistols, it would be my understanding that half
8 of -- only half of these would refer to assault long
9 rifles?

10 A Yes.

11 Q So we would drop down to three and a half
12 percent to four and a half percent roughly?

13 A Roughly, yeah.

14 Q Now, on the mass murder bullet immediately
15 below that, you also included assault pistols. Do you
16 know how that would change if you backed out assault
17 pistols and only included assault long guns?

18 A I'm not sure offhand. There are actually
19 more recent data sources that one could go to on that
20 issue. Been some studies of mass shootings by of
21 course Mother Jones magazine and Mayors Against Illegal

1 Guns that one could look at on that issue.

2 Q What I'm trying to do is understand your
3 data and your study and conclusions to be drawn from
4 that.

5 A Uh-huh.

6 Q Am I correct from footnote 13 here that
7 only one case of mass murders of four or more persons
8 in the period 1992 to 1994 involved an assault weapon?

9 A Yes.

10 Q And as you sit here today, do you know
11 whether that assault weapon was an assault pistol or an
12 assault long gun?

13 A I would have to look for that in the '97
14 report. But I would also note to that that I don't
15 know if this was a very representative sample of mass
16 murders. It was just based on a sample that we found
17 through some newspaper reports at the time.

18 Q And one should always be careful in
19 extrapolating conclusions from such small database of
20 points; correct?

21 A Yeah, one has to be cautious. There is

1 another -- another one we could look at here, too, that
2 could be of relevance which is it mentioned on page 14,
3 I was recounting some of the -- some of the mass
4 shooting incidents that were documented in -- well, if
5 you want to check the '97 report first.

6 Q Yeah. Let's mark this as Exhibit 8 if
7 we're going to talk about it. All right. I went to
8 A-2.

9 (Koper Exhibit 8 was marked for
10 identification.)

11 A Okay.

12 Q Is that the right place to look? And when
13 I looked at '92, '93, '94 data and saw no entries for
14 rifles, it made me conclude that the one assault weapon
15 involved in the mass murders that you referenced on
16 page 15 of your 2004 report was an assault pistol.

17 A There are a couple of rifles in the -- in
18 the sample. As I'm looking at this, there were
19 semi-automatics, handgun, rifle. There were at least
20 two rifle cases.

21 Q And the period 1992/1994 that you refer to

1 in your 2004 report on page 15?

2 A Oh, got you. Okay. Yeah, you're correct.

3 Q All right. So the one report of an assault
4 weapon used in the 1992/1994 period for mass murders of
5 four or more persons was in fact an assault pistol;
6 correct?

7 A It would seem so.

8 Q Okay.

9 A Now, there's some additional relevant data
10 on page 14. So on page 14, I was making reference to a
11 compilation of mass shooting incidents that Gary Kleck,
12 a professor at Florida State, had put together on
13 incidents where I believe his criteria was where six or
14 more people were killed or a total of 12 or more were
15 shot. And as I said here, assault weapons or other
16 semi-automatics, large capacity magazines were involved
17 in six, at least 15 shooting incidents.

18 Q Can you --

19 A Some of them had assault rifles, I think.

20 Q Now, can you separate out how many of those
21 six incidents involved assault weapons as opposed to

1 other semi-automatics with large capacity magazines?

2 A I don't have the full list in front of me,
3 but I have a few references here. In paragraph one, I
4 make reference to the incident with James Huberty
5 involved an Uzi carbine.

6 Q Now, that would be an assault pistol;
7 correct?

8 A I thought it would be a rifle. I thought
9 it would be the rifle version of the Uzi.

10 Q All right.

11 A The Joseph Wesbecker case, an AK-47 was
12 involved. The Patrick Purdy incident, another AK-47.
13 So there were at least -- at least three of those that
14 appeared to have involved an assault rifle.

15 Q So maybe three of the six we know or half
16 might have been assault weapons that were long guns?

17 A Yes. There could have been others, too. I
18 don't have the full list in front of me.

19 Q All right. Do you know from the
20 information whether those assault rifles were actually
21 used in those mass murders or simply possessed by the

1 murderer?

2 A They were possessed. I believe they were
3 the weapons used. The way I write about the Patrick
4 Purdy incident in particular used the AK-47. I
5 believe -- well, but the other ones you have to look
6 into more depth into the cases.

7 Q Now, if we return to your report, we talked
8 about the last sentence of paragraph five and the
9 assault weapons involved in a higher share of mass
10 public shootings. What information do you have that
11 other firearms with large capacity magazines are used
12 in a higher share of mass public shootings?

13 A So you're saying specifically guns with
14 large capacity?

15 Q I'm obviously trying to control only for
16 the large capacity magazines and eliminate assault
17 weapons.

18 A Uh-huh. I don't think in our report, I
19 don't think we had specific data on -- I don't think we
20 ever produced a figure on what share of the shootings
21 of police involved a large capacity magazine. But for

1 the mass shooting incidents, there were a number that
2 involved large capacity magazines.

3 Q And do you have that data in your 2004
4 report that you can point me to?

5 A Yes. Hang on just second. Okay. Well,
6 again, going back to page 14.

7 Q All right.

8 A First of all, I think it's probably safe to
9 assume that all these cases that involved assault
10 weapons involved a large capacity magazine because
11 those guns are equipped with large capacity magazines.
12 So actually I would say probably all six of them
13 involved large capacity magazines.

14 Q And let's distinguish between assault
15 weapons with large capacity magazines and other
16 firearms with large capacity magazines. What data do
17 you have to support your statement that other firearms
18 with large capacity magazines are used in a higher
19 share of mass public shootings?

20 MR. FADER: Objection.

21 THE WITNESS: Well, in this particular

1 case, there are some incidents that are shown there in
2 the second paragraph. One that happened in Killeen,
3 Texas. There's the Colin Ferguson incident. If -- if
4 six of these incidents involved assault weapons or guns
5 with large capacity magazines and three of them, at
6 least three of them were assault weapon cases, so that
7 would have been perhaps the other three, at least two
8 of them, though.

9 BY MR. SWEENEY:

10 Q I'm looking -- I'm a little confused, so
11 let me -- let me catch up with you here. I'm looking
12 at the second paragraph on page 14 of your July 2004
13 report that we've marked as Exhibit 5.

14 A Uh-huh.

15 Q In it, I see reported two incidents
16 involving handguns with large capacity magazines. Am I
17 correct in reading that?

18 A Yes.

19 Q And so from that, I would conclude that of
20 the six mass shootings involving assault weapons or
21 other semi-automatics with LCMS, only two of the six

1 involved other semi-automatics with LCMS. Is that a
2 correct conclusion?

3 MR. FADER: Objection. Objection. You can
4 answer.

5 THE WITNESS: Okay. I'm not certain
6 because it doesn't look like I've described every one
7 of these incidents on page 14. I've definitely
8 described two that involve guns with large capacity
9 magazines that were not assault weapons. I've
10 described three above that were cases with assault
11 weapons. So what that suggests to me is that two or
12 three of these incidents must have involved guns with
13 large capacity magazines that were not assault weapons.

14 BY MR. SWEENEY:

15 Q All right.

16 A And of course that's just based on, you
17 know, this particular sample of cases I was looking at
18 during that period. There's more recent data available
19 on that issue from some other databases that have been
20 compiled.

21 Q Now, do you have any evidence of the

1 percent of firearms that were semi-automatics with
2 large capacity magazines during the time of this study
3 period?

4 A Just before the ban, there were estimates
5 suggesting that I believe it was 18 percent of all
6 civilian-owned firearms had large capacity magazine.
7 That's stated on page six of the 2004 report.

8 Q All right. If two or three of 15 mass
9 shooting incidents involve semi-automatics, not assault
10 weapons with large capacity magazines, would you be
11 able to say that the large capacity magazines other
12 than assault weapons are in a disproportionately high
13 share of mass public shootings?

14 MR. FADER: Objection. You can answer.

15 THE WITNESS: Yeah, I think that the
16 question -- I mean, all of those cases involved a large
17 capacity magazine of some sort, so it becomes harder to
18 say. So essentially you're saying that here in the
19 national survey you've got 18 percent of all
20 civilian-owned firearms having a large capacity
21 magazine. In that sample of those cases I'm looking

1 at, all six of them involved a large capacity magazine.
2 That was the basis for the inference.

3 BY MR. SWEENEY:

4 Q I understand what you're saying by large
5 capacity magazines while you're including the assault
6 weapons, but you have a statement here about "and other
7 firearms with large capacity magazines" in your report
8 "are used in a higher share of mass public shootings,"
9 and if I understand your data that you relied on from
10 your 2004 report, which in turn relied upon Professor
11 Kleck's data, it was two or three out of 15 incidents
12 that were other firearms with large capacity magazines;
13 am I correct?

14 A Yes.

15 Q And if I do the arithmetic, two of 15 is
16 13 percent and three of 15 is 20 percent; correct?

17 A Correct.

18 Q So if the range is 13 to 20 percent and
19 what data we know about the prevalence of other
20 firearms with large capacity magazines at the time is
21 18 percent, we would not be able to fairly conclude

1 that it was a higher -- that they showed up in a higher
2 share of mass public shootings than you would expect;
3 correct?

4 MR. FADER: Objection.

5 THE WITNESS: Again, if you calculate the
6 data in that particular way, I think that this
7 statement was also conveying some other nuances. One
8 being that this type of weaponry, assault weapons and
9 large capacity magazines, showed up more often in the
10 mass public shooting incidents, the killings of police
11 than they did in other types of gun crimes, and I think
12 it may have also been in reference to some statistics I
13 report later on the -- based on the Mother Jones data
14 that's been reported.

15 BY MR. SWEENEY:

16 Q But based upon your data in your 2004
17 report, it's not fair to say that other firearms with
18 large capacity magazines are used in a higher share of
19 mass public shootings; correct?

20 MR. FADER: Objection. You can answer.

21 THE WITNESS: They -- yes, that would be

1 fair, fair to say.

2 BY MR. SWEENEY:

3 Q Okay. Let's turn to the killings of law
4 enforcement officers part of that sentence. And what
5 data do you have to support your statement that assault
6 weapons are used in a higher share of killings of law
7 enforcement officers?

8 A On page 15, "Criminal Use of Assault
9 Weapons," one of the second to the last bullet point,
10 gun used in murders of police '92 to '94, overall for
11 that period they were seven to nine percent of the
12 weapons and they accounted for, if you look at footnote
13 12, they accounted for as many as 16 percent in 1994.

14 Q Right. And as we said before, that data
15 included assault pistols in addition to assault long
16 guns; correct?

17 A Correct.

18 Q And at least half of those were assault
19 pistols that you would want to discount for purposes of
20 looking at SB 281 which only affects assault rifles;
21 correct?

1 A Okay. Yes.

2 Q And if the prevalence of assault rifles
3 generally at the time was roughly one percent and they
4 appeared in 3.5 to 4.5 percent of some very small
5 number of murders of police during that period
6 1992/1994, is it fair to say that they have a higher
7 share of killings of law enforcement officers?

8 MR. FADER: Objection. I want to make sure
9 I understood. Did you say if assault rifles accounted
10 for approximately one percent of the stock?

11 MR. SWEENEY: Correct. Correct.

12 MR. FADER: Okay. I object to the form.
13 You can answer.

14 THE WITNESS: Yeah, 'cause we don't know,
15 you know, what percentage of the rifles in particular,
16 I mean, what percentage of the assault weapon stock at
17 that time was rifles versus -- versus pistols. But the
18 basic point remains that they seem to be more highly
19 represented, even though these are fluctuations in
20 small numbers, but they're -- they seem to be more
21 highly represented in the gun murders of police.

1 BY MR. SWEENEY:

2 Q And there were how many total cases of
3 police murders with guns in 1992 to 1994?

4 A I don't remember. You'd have to look back
5 at the '97 report.

6 Q On page 98 of the 1997 report that we
7 marked as Exhibit 7, I believe.

8 MR. FADER: Eight, I believe.

9 THE WITNESS: You said page 98?

10 MR. SWEENEY: Eight. Off the record.

11 (Off the record.)

12 BY MR. SWEENEY:

13 Q Let's go back on the record.

14 On page 98, I believe you have table 6.6
15 data there.

16 A Okay.

17 Q And if I understand the data here, you have
18 a total of four plus nine plus seven which is 20
19 officers killed with assault weapons?

20 A Yes.

21 Q And we think half of those were assault

1 pistols?

2 A Yes.

3 Q And as a percentage of all gun murders of
4 police at the time, which appear to be 276, we'd be
5 talking about ten out of 286 -- 276, I'm sorry, I
6 misspoke, or 3.6 percent. Does that sound about right
7 to you and consistent with the range we were talking
8 about from your 2004 report?

9 A No. I have seven to nine percent.

10 Q But that includes the assault pistols;
11 correct?

12 A Oh. Oh. I understand.

13 Q And we cut it in half approximately to pull
14 out the assault pistols.

15 A Okay.

16 Q Which gives you a bottom range of 3.5 to
17 4.5, and we just calculated on the actual raw numbers
18 3.6 percent.

19 A Okay.

20 Q Does that sound about right? And obviously
21 if two or three less murders with assault weapons had

1 happened during that period of time or two or three
2 more murders with assault weapons had happened during
3 that period of time, that would significantly impact
4 these percentages; correct?

5 A Yes.

6 Q So these are very small numbers and they're
7 highly susceptible to variability depending upon
8 particular incidents in a particular year; correct?

9 A Yeah. One has to be cautious, yes.

10 Q Right. Yeah. And thankfully both mass
11 public shootings and killings of law enforcement
12 officers are extremely rare events; correct?

13 A Certainly rare in a statistical sense in
14 that, you know, your likelihood of experiencing one of
15 those is very small. I guess from a policy maker's
16 perspective or the citizenry's perspective, there comes
17 a question of, you know, if, you know, how much is too
18 much? If you have a couple of these events occurring,
19 you know, every year even though it's a statistically
20 rare event, it might be of concern.

21 Q I think we can all agree that we would like

1 to see none of them occur; however, when we talk about
2 statistical probability, would you agree with me that
3 the -- a law enforcement officer is more likely to be
4 struck by lightning while on duty than murdered with an
5 assault rifle?

6 A I don't have any statistics on that. I
7 can't agree or disagree.

8 Q What is the rate at which law enforcement
9 officers are murdered by assault rifles?

10 A You mean the rates per officer?

11 Q Well, when you calculate it, number of
12 deaths per hundred thousand?

13 A Uh-huh.

14 Q To calculate a rate? Isn't that how it's
15 done?

16 A Yes.

17 Q All right. And what would be the rate
18 based upon the data you have in your 1997 report and
19 that you rely on in your -- your report in this case,
20 the rate of law enforcement officers being killed by
21 assault rifles?

1 A We never calculated that number, so I don't
2 know.

3 Q All right. It would be not a whole
4 percentage point; correct?

5 A I think it would be a very small rate, yes.

6 Q Very, very small rate; correct?

7 A Probably.

8 Q Would you agree with me that law
9 enforcement officers are far more likely to be killed
10 by motor vehicles in the line of duty than assault
11 rifles?

12 A Yes.

13 Q Vastly more likely to be killed by handguns
14 than by assault rifles?

15 A Yes.

16 Q Possibly even more likely to be killed by
17 shotguns than by assault rifles? Probably more likely?

18 A Probably.

19 Q Okay. Now, the number of mass public
20 shootings is also thankfully quite low; correct?

21 A Yes.

1 Q Even if we were to assume that all mass
2 public shootings to date had been committed with an
3 assault rifle, if we were to ban all assault rifles,
4 could we safely assume that we would not have any mass
5 public shootings?

6 A I don't think you can assume that there
7 would be no mass public shootings. One might expect
8 that if offenders are using different type of weaponry
9 that perhaps the incidents might result in fewer people
10 shot.

11 Q But we could still expect to see mass
12 public shootings?

13 A Yes. Yes.

14 Q Could we even predict with a reasonable
15 degree of scientific probability that the number of
16 incidents of mass public shootings will decrease if we
17 ban assault weapons?

18 A I guess it depends on exactly how you're
19 defining mass shootings, you know, the number of --
20 number of people who have to be shot for it to qualify
21 as a mass public shooting. I think it will be -- it

1 would certainly be challenging methodologically to look
2 at that. The data do suggest that when attacks occur
3 with these types of guns and magazines, they claim more
4 victims. So if they were less available, one might
5 expect less victims per incident. That could also I
6 guess reduce the number of incidents that qualify as a
7 mass public shooting. I think it's hard to put real
8 specific numbers on it, but --

9 Q All right. Well, let's try to examine that
10 a little bit and try to understand that a little bit
11 better. How would you define by number of individuals
12 shot a mass public shooting?

13 A Well, the criteria that people have
14 generally used in the field is four or more people
15 killed, regardless of the number wounded. So that can
16 introduce some ambiguities, too. I mean, you can have
17 an incident where hypothetically, say, ten people are
18 shot but only one is killed and people wouldn't count
19 that as a mass shooting in many of the databases that
20 are available.

21 Q All right. Taking that into consideration

1 and considering mass shootings by the number of people
2 shot as opposed to the number of people killed --

3 A Uh-huh.

4 Q -- and if you assume four or more, can you
5 state to a reasonable degree of scientific probability
6 based upon the evidence available to you that banning
7 assault rifles will reduce the number of incidents of
8 mass shootings?

9 A I can't say that based -- I mean, I can't
10 make a firm projection of that based on any particular
11 available data. There might be data to suggest that
12 there could be some reduction in that, but it's hard to
13 really clearly project what that would be or how
14 difficult it might be to detect statistically.

15 Q We have to work with a legal standard for
16 expert opinion in the reasonable probability range.

17 A Uh-huh.

18 Q I'm not sure in the legal context what, you
19 know, firm means as you mean it, but I'm trying to
20 understand whether you can state your opinion to a
21 reasonable degree of scientific probability that

1 banning assault rifles would reduce the incidents of
2 public shootings, mass shootings.

3 A Again, I mean, all I can say is attacks
4 with those sorts of weapons tend to result in more
5 victims being hit, so it stands to some reason that if
6 you reduced the use of these types of weapons, it could
7 reduce the tallies of victims hit in these incidents.
8 And it's not actually just a matter of the mass
9 shooting incidents. It's also a matter of incidents
10 with high numbers of shots fired, regardless of how
11 many people get hit. So that has to be taken into
12 account as well.

13 And I've tended to focus more on that issue
14 in my research, you know, going back to the Jersey City
15 data, for example, that suggested that about five
16 percent of gunshot victimization stemmed from incidents
17 with more than ten shots fired. And so based on that,
18 one might project a small percentage reduction in
19 shootings overall from this type of legislation.

20 Q Do you have your publication of your
21 New Jersey data? Did you publish that?

1 A Yes. Uh-huh.

2 Q And when we looked at your CV, I know we
3 talked about it briefly, and is this the Reedy and
4 Koper 2003 article?

5 A Yes.

6 Q How many incidents did you study that
7 involved more than ten shots being fired?

8 A In the sample that we had, I believe there
9 were something like maybe six incidents that involved
10 more than ten shots fired.

11 Q And do you recall what the base was of
12 total incidents?

13 A It's in the -- it's in the study.

14 Q Why don't we mark this since we're going to
15 be talking about it? Exhibit 9.

16 (Koper Exhibit 9 was marked for
17 identification.)

18 MR. FADER: And John, maybe in the next
19 five minutes if we can take a little water break.

20 MR. SWEENEY: Now. Let's break right now.

21 (Off the record.)

1 BY MR. SWEENEY:

2 Q Back on the record.

3 While we were on the break, I tried to
4 focus myself on the portions of your 2003 study which
5 we have marked as Exhibit 9. First of all, it appears
6 that there were some -- well, if I look at the data
7 tables that you have on page 153 of Exhibit 9, figure
8 one involves assault incidents with a semi-automatic
9 pistol; correct?

10 A Yes.

11 Q And you had 239 of those; right?

12 A Yes.

13 Q How many of those involved more than ten
14 shots being fired? Where would I find that number?

15 A That would be on page 154 on table one. We
16 had -- one column has minimum shots fired estimates,
17 the other has maximum shots fired estimates if there
18 happened to be a range in the data.

19 Q Am I correct in interpreting this that it's
20 six out of approximately 165 pistol incidents in which
21 more than ten shots were fired?

1 A Yes.

2 Q So that's roughly 3.6 percent? Does that
3 sound about right to you?

4 A Yes.

5 Q Okay. Let me see if I can understand this
6 study a little bit more. Going back to page 153 figure
7 one, outcomes of assault incidents involving
8 semi-automatic pistols, you state handgun type was not
9 associated with attack outcomes; correct?

10 A In this categorical tree, that's correct.

11 Q All right. So regardless of whether
12 someone was using a semi-automatic pistol or a
13 revolver, there was no difference in the outcome be it
14 injury or death?

15 A Overall for the incident, yes.

16 Q All right. And immediately below figure
17 two you state, "Although pistol cases involved higher
18 numbers of shots, they were not significantly more
19 likely to result in injuries either fatal or nonfatal
20 than were revolver cases," is that correct?

21 A Yes. I think what we're talking about

1 there is when you're looking at the likelihood that a
2 gunfire incident resulted in any victimization, you
3 know, any injury, I think there was no significant
4 difference there. We did find a difference in the
5 number of people who are wounded.

6 Q On the right-hand column, second full
7 paragraph you state, "Finally, figures one and two show
8 that gunshot injury incidents involving pistols were
9 less likely to produce a death than were those
10 involving revolvers," correct?

11 A Yes.

12 Q Had you differentiated between pistols with
13 large capacity magazines and those without large
14 capacity magazines here?

15 A There was only limited data on that, so we
16 couldn't examine that in a great deal of depth.

17 Q So is it fair to say that based upon the
18 data in this study, pistols involving larger capacity
19 magazines were less likely to produce a death than were
20 those involving revolvers?

21 A I wouldn't necessarily say that. It would

1 depend. You'd have to look specifically at the cases
2 where a large capacity magazine was involved.

3 Q All right. But we don't really have that
4 breakdown reliably, do we, or at least completely?

5 A Not completely.

6 Q Can you interpret the data here to support
7 the statement that gunshot injury incidents involving
8 pistols with large capacity magazines were more likely
9 to produce death than were those involving revolvers?
10 Does your data support that statement?

11 A More likely to produce death?

12 Q Yes.

13 A No. I can't say that based on what we have
14 here.

15 Q All right. Now, under your discussion
16 below beginning with the second sentence, you state,
17 "Gun attackers using pistols tend to fire more shots
18 than attackers using revolvers," correct?

19 A Yes.

20 Q And then you go on to say, "This shot
21 differential does not appear to influence the

1 probability that an incident will result in injury or
2 death, nor the number of wounds sustained by gunshot
3 victims." Am I reading that correctly?

4 A Yes.

5 Q And that's the conclusion of this study;
6 correct?

7 MR. FADER: Objection.

8 THE WITNESS: Well, that's -- yeah, that's
9 only one conclusion. As we go on to say, offenders
10 using pistols tend to fire -- tend to wound more
11 persons. Also, it should be noted that while this is
12 not reported in this particular article, for the 2004
13 report on assault weapons we did some additional
14 analyses of cases involving more than ten shots and
15 those cases actually had a 100 percent injury rate.
16 You know, at least one person was injured in all of
17 those cases.

18 BY MR. SWEENEY:

19 Q Now, there were only a handful of such
20 cases in this study; correct?

21 A Correct.

1 Q And did you have any other -- any more
2 cases in 2004 or you were just relying on the six
3 cases?

4 A Relying on this study, yes. There's been
5 very few -- this study was the only one I was aware of
6 at the time that had actually broken down this type of
7 statistic, and it's consistent with what I would
8 expect. I would not expect a very large share of
9 gunfire incidents to involve that many shots being
10 fired. So I think probably in many samples you'd look
11 at, you'd probably get smaller numbers.

12 Q All right. But in the -- in the six
13 incidents involving more than ten shots, at least one
14 person was shot in each of those incidents; correct?

15 A Yes. Uh-huh.

16 Q And of course if there had been eight
17 incidents and two people had been shot in those
18 incidents, you'd have a different number that you'd be
19 working with because these numbers are so small your
20 percentages would change fairly significantly; right?

21 A Could.

1 Q Have you done an analysis of the number of
2 shots and the number of injuries and deaths in mass
3 public shootings?

4 A Yes. I've done -- well, I've mostly
5 reported on analyses -- well, I've done some of my own
6 analyses, but it's usually based on things that other
7 people -- other data that other people have reported.

8 Q So just so I understand, you have not done
9 original research in that area, but you have looked at
10 other reports?

11 A And sometimes done my own tabulations from
12 those reports.

13 Q All right. And do you reference those
14 tabulations in your report?

15 A Which report are we referring to?

16 Q I'm sorry. The --

17 A Yes.

18 Q Your summary of findings --

19 A Uh-huh.

20 Q -- that you submitted in this case.

21 A Yes. I'm sorry. Are you waiting for me

1 or --

2 Q Yes. I'd asked you if you could point me
3 in your report to where you referred to that analysis
4 that you had done with respect to mass public
5 shootings.

6 A Okay. There are a couple of places. I'm
7 looking for one particular thing first. I'm not sure
8 where it -- where it was placed in the statement. All
9 right. Well, we'll just deal with them sequentially as
10 we come through. The first one is in paragraph 21 on
11 page six.

12 Q Okay.

13 A And here I'm referring to some work that
14 was done by a graduate student, George Mason.

15 Q All right.

16 A Okay. And it goes on in paragraph 22. And
17 paragraph 32 at the bottom of page eight. Paragraph
18 33. Now, this you're just asking about mass shootings;
19 correct?

20 Q That's correct.

21 A Okay. So I think that was all of them.

1 Q All right. So what I have is 21, 22, and
2 32?

3 A 32 and 33.

4 Q 33. Okay. All right. We will get back to
5 those. Thank you.

6 Am I correct in concluding, just to wrap up
7 on paragraph five, that because mass public shootings
8 and killings of law enforcement officers are so
9 extremely rare, even if we were to completely eliminate
10 all mass public shootings and killings of law
11 enforcement officers, it wouldn't significantly
12 decrease the rate of firearm-related shootings;
13 correct?

14 A I'm not sure about that. You'd have to
15 look at how many people are shot in these incidents per
16 year and express that relative to the total number of
17 firearm murders and shootings each year. I mean, it
18 would be a small share of them certainly.

19 Q Okay. And in 2012, for instance, how many
20 people were killed in mass public shootings?

21 A I'm not certain offhand.

1 Q All right. And law enforcement officers?

2 A Have to look that up, too.

3 Q All right. Assume it's less than a hundred
4 people in each category.

5 A Uh-huh.

6 Q How many firearm-related homicides were
7 there in 2012?

8 A I don't know that number off the top of my
9 head. I'm guessing several thousand, maybe in the
10 neighborhood of 9,000 or something like that.

11 Q We had an exhibit marked here which has
12 since been buried, but it had data on --

13 MR. FADER: It's Exhibit 7. And before you
14 were messing them up, I had put them in order.

15 THE WITNESS: Okay.

16 MR. SWEENEY: Just doing my job here, man.

17 THE WITNESS: I'm not too far off. Close
18 to 9,000.

19 BY MR. SWEENEY:

20 Q So if we add maybe a hundred murders out of
21 9,000, that's, what, one percent?

1 A Be a very small percent. Now, remember
2 too, you're just talking about the mass shootings and
3 shootings of police and large capacity magazines.
4 Assault weapons can come into play in other incidents
5 as well. Incidents with high numbers of shots fired
6 that just don't result in a high number of victims.

7 And what I generally projected in my work
8 is that the effects of reducing use of large capacity
9 magazines and assault weapons would be a just a small
10 percentage reduction in the overall shooting rate. I
11 sometimes used one percent as a reasonable ballpark
12 figure.

13 Q Paragraph six of your report, and this is
14 continuing on the same subject matter.

15 A Uh-huh.

16 Q You state that, "Gun attacks with
17 semi-automatics -- especially assault weapons and other
18 guns equipped with large capacity magazines -- tend to
19 result in more shots fired, more persons wounded, and
20 more wounds per victim, than do gun attacks with other
21 firearms," correct?

1 A Yes.

2 Q But your 2003 study concluded that the
3 probability of any incident involving semi-automatics
4 is -- will not increase the likelihood that the
5 incident will result in injury or death, nor the number
6 of wounds sustained by the gunshot victims; correct?

7 A In that particular study, yeah, we found
8 more shots fired, more persons wounded. There are some
9 other data sources, other studies that find more wounds
10 per victim.

11 Q All right. But your own original analysis
12 here does not support more wounds per victim; correct?

13 A That particular Jersey City study does not.
14 I've done some other analyses that do.

15 Q All right. Now, when we talked about the
16 Jersey City study, this was the only study that you
17 were aware of certainly in a peer review article that
18 involved this sort of analysis; correct?

19 A Yes.

20 Q And what other sources of information have
21 you had that support your statement about more wounds

1 per victim in paragraph six of your report?

2 A We have to go back to my 2004 report.

3 Q All right.

4 A This would be in chapter nine. So starting
5 on page 85 with table 9.1, I'm citing a series of
6 studies that compare outcomes of attacks with different
7 types of weapons. Table 9.1 gets at shots fired and
8 victims hit. Now, gunshot wounds is in table 9.2.
9 Now, as the top one shows, the study that Darin Reedy
10 and I did of the gun attacks in Jersey City did not
11 show a difference in gunshot wounds between pistol and
12 revolver victims, but there were some other studies
13 done in the next column by others looking at Iowa City;
14 Youngstown, Ohio; Bethlehem, Pennsylvania. Those
15 studies found more wounds per victim for pistol victims
16 as opposed to revolver victims.

17 And then Jeff Roth and I in our 1997
18 report, we had done some analyses of gun homicide
19 victims in Milwaukee over the period of '92 to '95. We
20 had broken out wounds per victim based on whether or
21 not the case involved an assault weapon, a gun having a

1 large capacity magazine, or other firearms. And there
2 we also found some differentials in wounds per victim.

3 Q Now, in your 2003 study that we talked
4 about --

5 A Uh-huh.

6 Q -- which you refer to in table two under
7 the first entry there, you didn't study at all assault
8 weapons, did you? There's no mention of assault weapon
9 in that report?

10 A Yeah, I don't think we have any specific.
11 The make and model information was very limited in the
12 sample, so we didn't do a lot of analysis about.

13 Q All right.

14 A Although it's limited, we did have a little
15 bit of more specific information on LCM cases in the
16 Jersey City data that I mention in footnote 104 on page
17 89. That was just a limited subsample of the cases,
18 but it showed the same type of pattern. The cases with
19 the LCMs tended to result in more shots fired and more
20 victims wounded.

21 Q Again on that page you state, "Weapons data

1 were typically missing for substantial percentages of
2 cases."

3 A Yes.

4 Q Very incomplete data you were working with;
5 correct?

6 A For determining gun makes and models, yes.

7 Q The last sentence on that page, page 89,
8 and the text says, "This still begs the question of
9 whether a 10-round limit on magazine capacity will
10 affect the outcomes of enough gun attacks to measurably
11 reduce gun injuries and deaths."

12 A Yes.

13 Q Am I correct in understanding that to mean
14 that you cannot say to a reasonable degree of
15 scientific certainty that a ten-round limit on magazine
16 capacity will affect the outcomes of enough gun attacks
17 to measurably reduce gun injuries and death?

18 A Well, actually this is -- it's a
19 transitional statement. I was introducing this issue
20 to -- to go on and look at this. Then I go on to
21 talk -- well, I talk about the limited data that's

1 available on this topic and then go on to talk about
2 the Jersey City study and the findings there and what
3 they implied. So they suggest that a small percentage
4 of gunshot victimizations involve or result from cases
5 with more than ten shots fired.

6 Q But your conclusion in that report of 2003,
7 the Jersey City report, was that the -- it -- an impact
8 on the number of shots fired does not appear to
9 influence the probability that an incident result in
10 injury or death, nor the number of wounds sustained by
11 gunshot victims. That was your conclusion there;
12 right?

13 A Yeah. Now, keep in mind when we say
14 probability, we're saying the probability that anyone
15 was wounded at all versus not. We did find again that
16 relationship between number of people shot and shots
17 fired.

18 Q But the total number of injury, the
19 likelihood anyone would be injured at all, was not
20 increased by the number of shots fired?

21 A It's not entirely true based on our -- our

1 analysis of the cases with more than ten shots fired,
2 because we did find a 100 percent injury rate in those
3 cases.

4 Q But overall looking at all your data on
5 semi-automatic pistols, even though that you found them
6 associated with more shots fired, that did not lead to
7 a likelihood that there would be more people injured?

8 A No, it did lead to more people injured. I
9 guess there's a subtle --

10 Q Take that back. It did not lead to more
11 incidents in which injury occurred?

12 A Yes. Correct.

13 Q Okay. And you state on page 91 of your
14 2004 report in reference to your Jersey City study,
15 "Caution is warranted in generalizing from these
16 results because they are based on a very small number
17 of incidents from one sample in one city," correct?

18 A Yes.

19 Q "Further, it is not known if the offenders
20 in these cases had large capacity magazines (gun model
21 and magazine information was very limited); and they

1 may have emptied small magazines, reloaded, and
2 continued firing," correct?

3 A Yes.

4 Q You then go on to say, "The Jersey City
5 study also implies that eliminating assault weapons and
6 large capacity magazines might only reduce gunshot
7 victimizations by up to five percent," correct?

8 A Yes.

9 Q And you go on to say, "And even this
10 estimate is probably overly optimistic because the
11 large capacity magazine ban cannot be expected to
12 prevent all incidents with more than ten shots,"
13 correct?

14 A Yes.

15 Q And then you go on to say, "Consequently,
16 any effects from the ban (should it be extended)," and
17 that would be the ban on assault weapons and large
18 capacity magazines; correct?

19 A Yes.

20 Q "Are likely to be smaller and perhaps quite
21 difficult to detect without -- with -- with standard

1 statistical methods, especially in the near future, if
2 recent patterns of large capacity magazine use
3 continue," correct?

4 A Yes.

5 Q All right. Turn your attention, if I may,
6 to table 9-4 on page 95 of your 2004 report, if I may,
7 Professor.

8 A Okay. Table 9-4.

9 Q 9-4 page 95.

10 A Okay.

11 Q Now, you attempted to measure changes after
12 the ban expired in the lethality and injuriousness of
13 gun violence?

14 MR. FADER: Objection. Did you mean to say
15 after the ban expired?

16 BY MR. SWEENEY:

17 Q Oh, I'm sorry. After the ban became
18 effective.

19 A Right.

20 Q Misspoke.

21 A Yes. Many of the results in this

1 particular table were taken from the 1997 report kind
2 of summarizing some different analyses that we had done
3 there.

4 Q Would it be fair to conclude from table 9-4
5 that in five out of six of the categories that you
6 measured, there was actually an increase in either
7 victims per homicide incident, wounds per victim, or
8 percent of homicide victims with multiple wounds after
9 the ban went into effect?

10 A Yes, in those early years. Now, that
11 finding should also be -- in judging that, you also
12 have to keep in mind what we found in this 2004 report
13 was that use of large capacity magazines was actually
14 still rising during this period, perhaps raising the
15 question of whether some of these patterns might have
16 been due to still growing use of large capacity
17 magazines. And didn't analyze that in any kind of
18 rigorous way, but it's something that should be kept in
19 mind, I think.

20 Q Do you have an understanding of the
21 Maryland ban on large capacity magazines resulting in

1 the same issue?

2 A You mean have I seen something like this in
3 Maryland? Have I studied this sort of thing? We
4 didn't have data of this sort on any Maryland
5 jurisdictions, as I recall.

6 Q All right. And the Maryland ban that
7 you're here to support on large capacity magazines does
8 not actually ban them; correct?

9 MR. FADER: Objection.

10 THE WITNESS: As I understand, people who
11 have them can keep them, but they're not allowed to
12 transfer them any longer. They can't sell them or
13 transfer them in other ways.

14 BY MR. SWEENEY:

15 Q Sell or transfer in the state of Maryland;
16 correct?

17 A Yes.

18 Q Maryland citizens can go outside of the
19 state of Maryland and purchase as many large capacity
20 magazines as they care to and bring them back into the
21 state of Maryland without anyone being the wiser and

1 use them for any purpose; correct?

2 A That's my understanding. Although they
3 cannot legally use them in crimes or -- or sell them,
4 transfer them in any way.

5 Q That's correct. Wouldn't you expect to see
6 the same issue that you identify here with the federal
7 ban under the Maryland State ban?

8 A You mean difficulty in reducing crimes with
9 large capacity magazines?

10 Q Right. Because they're so available?

11 A Well, the fact that people aren't allowed
12 to transfer them anymore within the state I think will
13 be significant. The fact that dealers aren't selling
14 them, the fact that people aren't allowed to transfer
15 them secondhand. So for a typical offender, certainly
16 the search costs involved in getting one are going to
17 go up. You'll either have to travel far to get one or
18 find someone who's willing to sell one illegally and
19 probably at a premium. And then it becomes an
20 empirical question as to really how many offenders will
21 be motivated enough that they want to travel to get

1 those -- those magazines out of state. But yes, that
2 could be somewhat of an offsetting factor. I mean,
3 ultimately it would require study.

4 Q Living in Northern Virginia, as I assume
5 you do or near where you work, are you familiar with
6 the geography of the state of Maryland which is a small
7 state and it's adjacent to the states of Virginia and
8 West Virginia and Pennsylvania and Delaware, all of
9 which are a short drive from virtually any part of the
10 state to get to one or the other of those outside
11 states, and obtain these large capacity magazines
12 legally without any requirement of registering them
13 when you bring them back into the state; correct?

14 MR. FADER: Objection.

15 THE WITNESS: I'm sorry. Repeat that
16 again.

17 MR. SWEENEY: Just read it back, please.

18 (Record read.)

19 MR. FADER: I'll repeat my objection to all
20 of those questions. You can answer.

21 THE WITNESS: Well, one of the keys to keep

1 in mind here, again, you know, it's an empirical
2 question as to how many people are going to go outside
3 the state to get them. One thing we do know is that
4 gun markets are in general pretty heavily localized. A
5 very substantial percentage of guns used in crime
6 originate very close to where they are ultimately
7 recovered by police, often within say 20 miles or -- or
8 less.

9 So I still think it would be a significant
10 factor that you're not going to be able to go to the
11 local gun shop and find people selling them there,
12 but -- but it, you know, it remains to be seen how this
13 will affect the availability of the magazines.

14 BY MR. SWEENEY:

15 Q Do you have any data on how prevalent large
16 capacity magazines are in Maryland?

17 A No.

18 Q Or the United States currently?

19 A The only thing I've seen on that any time
20 recently is the -- the Washington Post study that I
21 mentioned in my statement where they were looking at

1 trends in the use of large capacity magazines in
2 Virginia and they found that it's -- it was starting to
3 decline right around the time the ban expired, and then
4 after it was lifted, they increased again. I believe
5 they were up somewhere around 20 percent or so at
6 the -- at the last data point they looked at, which
7 might have been 2010 or something like that.

8 Q Are you familiar with James Curcuruto,
9 Director of Industry Research and Analysis of the
10 National Shooting Sports Foundation?

11 A No.

12 Q He submitted a report in this case
13 estimating that magazines capable of holding more than
14 ten rounds of ammunition accounted for approximately
15 75 million or 46 percent of all magazines owned. Do
16 you have any evidence that would refute that number?

17 A I'd have to look into it further.
18 Actually, I think, now that you mention that, that
19 sounds familiar to me. It might have been mentioned --
20 mentioned to me in one of the other cases that I'm
21 involved in. It sounds similar to something that was

1 sent to me in one of those cases, but I'd have to look
2 back at that again and see what my notes were on that
3 particular issue.

4 Q Do you have any different data to offer?

5 A I don't have any data on that issue.

6 Q All right. So if we assume that there
7 75 million of these magazines in circulation, what
8 impact would you expect to have on their use in
9 Maryland under the Maryland ban?

10 A Well, again, first of all, it's -- don't
11 know exactly what the number is, but taking that
12 75 million at face value, of course that's spread out
13 over the entire country. The -- what seems relevant
14 here is that in Maryland, the flow of the magazines is
15 going to be restricted. People aren't going to be
16 transferring them and selling them at the same rate
17 that they have been and --

18 Q How long does a magazine last? What's the
19 useful life?

20 A My understanding is that they can last for
21 a long time and that they're -- and they can be

1 sometimes repaired when they deteriorated so they may
2 last a long time.

3 Q Do you know of any studies that can predict
4 the useful life and predict the reduction of the total
5 population of magazines as they slowly deteriorate and
6 go out of service?

7 A I'm not aware of any specific studies on
8 that. Although, you know, again, I would refer to some
9 of the other data from the Washington Post study
10 showing that at least by the time the assault weapons
11 ban expired, some of the availability, at least to
12 offenders, was getting lower. So even if the magazines
13 themselves are still working and operable, we might
14 expect that gun enthusiasts will hold onto their
15 magazines and won't want to transfer them.

16 Q Or just go to West Virginia, Pennsylvania,
17 Delaware, Virginia and buy new ones; right?

18 A But then keep them to themselves.

19 Q Correct. Turning to your report on page --
20 still on page two, paragraph seven. You state, "In
21 addition, there is some evidence to suggest that

1 assault weapons are more attractive to criminals, due
2 to the weapons' military-style features and
3 particularly large magazines." Do you see that?

4 A Yes.

5 Q When you talk about assault weapons here,
6 you included in your analysis assault pistols; correct?

7 A Yes.

8 Q If you remove from your data assault
9 pistols, do you have any data that demonstrates that
10 assault long guns are more attractive to criminals?

11 A The best data on this issue, as I discuss
12 in the -- in the report, is with respect to handguns,
13 assault pistols. And there was particularly the
14 California study by Wintemute and colleagues. There's
15 not as much data with which to assess this issue for
16 assault rifles. There are some of the other statistics
17 that we had talked about earlier about the use of
18 assault rifles in shootings of police and mass
19 shootings, but there's not as much specific data on
20 that particular issue.

21 Q But other than those data and those

1 relatively limited incidences, you don't have any data
2 with respect to assault rifles being more attractive to
3 criminals; correct?

4 A Correct. It's -- in part, it's a matter of
5 how one interprets the California findings of Wintemute
6 and colleagues, does that demonstrate the general
7 principle with that weapon with those sorts of features
8 are at higher risk or does it only apply to assault
9 pistols and not as much to assault rifles, and it's not
10 really clear.

11 Q What military-style features do you have
12 data supporting the statement that those features make
13 the firearms more attractive to criminals?

14 A So you're saying can we show that the
15 probability of a gun with, say, a folding stock is at
16 higher risk? We don't have data breakdowns that
17 specific. I guess a couple of things that we could
18 say, we could infer, is that really pretty much every
19 assault weapon takes a large capacity magazine. They
20 all have a kind of a design to facilitate rapid fire,
21 spray fire. Other than that, I think it's becomes

1 harder to say.

2 Q When you say spray fire, what do you mean
3 exactly?

4 A Well, that the designs of the weapons are
5 intended to make the weapon easier to control during
6 rapid fire.

7 Q And what are those features precisely?

8 A Primarily the pistol grip on a rifle or
9 some kind of a forward grip. Sometimes barrel shrouds
10 allow you to, would be on an assault pistol as well,
11 and the more compact design of some of these weapons.

12 Q But you don't have any data that associates
13 those features with their attractiveness to criminals;
14 correct?

15 A Other than saying that those features are
16 common to -- to all assault weapons, nothing more
17 specific.

18 Q They're not common to all assault weapons;
19 correct? Don't different firearm manufacturers provide
20 different features on different models?

21 A There -- yeah. There are going to be some

1 variations, but I think most of them have, again, the
2 large capacity magazines detachable. If they're
3 assault rifles, they almost always have the pistol grip
4 design.

5 Q What's the basis for your information on
6 the technical features that you just described to me?
7 Where do you get that information from?

8 A A lot of it came right out of the federal
9 law. It described the features of military-style
10 weapons and the other laws do that as well. Other
11 things you read about just commonly in literature on
12 firearms.

13 Q Directing your attention to the Baltimore
14 Sun editorial --

15 A Okay.

16 Q -- that we marked as Exhibit 4. The --
17 what I think is the third paragraph just to the right
18 of the Medifast commercial, it says the law prohibits
19 certain guns having two or more military-style
20 features, but removing the guns' military features, as
21 some manufacturers have done, is sufficient to make the

1 weapons legal. So the law doesn't really ban guns, it
2 just limits accessories; correct? Was that your
3 statement there?

4 A Yes.

5 Q And the Maryland ban on assault rifles
6 operates similarly to the federal ban; correct?

7 A Well, it's a bit different. Under the
8 Maryland law, as I understand it, it's -- you can
9 necessarily make minor changes to the weapon to -- to
10 be in compliance with the law, so I think it's a bit of
11 a different situation. I think it goes farther than
12 the federal law does -- did.

13 Q The Maryland law identifies certain makes
14 and models of assault rifles that are banned; correct?

15 A Uh-huh. Yes.

16 Q And it talks about copies of those --

17 A Right.

18 Q -- also being banned; correct?

19 A Right.

20 Q But the copies, in order to be banned, have
21 to be copies that have completely interchangeable

1 working parts; correct?

2 A Yes.

3 Q And the copycat weapons that are also
4 banned require at least two out of three of the
5 military-style features that are identified; correct?

6 A Yes.

7 Q And so if not all three are present, those
8 wouldn't be banned; correct?

9 A Yes.

10 Q All right. Do you believe that the
11 features that make a pistol an assault pistol are the
12 same features that make a rifle a banned assault long
13 gun?

14 A The criteria for those are often different.
15 Going back to the federal law, there are different sets
16 of criteria for the assault pistols and the assault
17 rifles.

18 Q The definition of copycat weapon only
19 involves semi-automatic pistols with fixed magazines
20 that can accept more than ten rounds; correct?

21 MR. FADER: Objection.

1 THE WITNESS: I thought we were talking
2 about the rifle provision.

3 BY MR. SWEENEY:

4 Q Just talking about the pistols for a
5 moment, though.

6 A Okay. Okay.

7 Q I asked if the features that make a pistol
8 an assault pistol are the same features that make a
9 rifle a banned long gun.

10 A Okay.

11 Q And you said they were different. And now
12 I'm focusing on the Maryland law. And the definition
13 of copycat weapon as applied to a pistol, the only
14 criteria is that a semi-automatic pistol with a fixed
15 magazine that can accept more than ten rounds would be
16 a banned copycat weapon; right?

17 MR. FADER: Objection.

18 THE WITNESS: Okay.

19 BY MR. SWEENEY:

20 Q Now, do assault pistols come with folding
21 stocks?

1 A Not generally, no.

2 Q Do they come with flash suppressors?

3 A I guess it would depend on the model, but I
4 don't think they often do. That was not listed in the
5 federal law.

6 Q And do they come with flash suppressors?

7 MR. FADER: Objection.

8 THE WITNESS: That was what you just
9 mentioned; right? That was the last question, flash
10 suppressors?

11 BY MR. SWEENEY:

12 Q Right.

13 A Yeah. As I said, that was one of the
14 features, just going by the federal law, that was one
15 of the features that they had for I believe for assault
16 rifles but not for assault pistols.

17 Q Okay. With the difference in features
18 between assault pistols and assault rifles, it's really
19 not fair to lump them together in terms of talking
20 about what criminals prefer by way of firearms;
21 correct?

1 MR. FADER: Objection.

2 THE WITNESS: It's hard to -- to break
3 down -- once again, you know, as we mentioned earlier,
4 it's harder to break down all these specific features
5 and describe which ones put a gun at highest risk of
6 being used in crime, I think, other than noting that
7 they're -- they're large capacity magazines and
8 different aspects of their design that are designed to
9 facilitate rapid fire.

10 BY MR. SWEENEY:

11 Q And isn't it true that criminals
12 overwhelmingly choose handguns over long guns to commit
13 crimes?

14 A Yes.

15 Q And your data would indicate that to the
16 extent there's a criminal preference for using assault
17 pistols, there isn't one evident from the evidence with
18 respect to using assault rifles by criminals; correct?

19 MR. FADER: Objection.

20 THE WITNESS: It's not as clear. As we've
21 discussed earlier, there are a few statistics from

1 which one might try to infer that, but the case, yeah,
2 it's not as clear. It's fair to say.

3 BY MR. SWEENEY:

4 Q Now, in paragraph eight of your report, you
5 state in the second sentence that Maryland's
6 recently-enacted ban on assault weapons and large
7 capacity magazines has the quote "potential" close
8 quote to accomplish a couple of things; correct?

9 A Yes. Okay.

10 Q Now, when you say potential, I'm trying to
11 understand what you mean here. Would you agree with me
12 that any law would have the potential to produce a
13 benefit?

14 MR. FADER: Objection.

15 THE WITNESS: Might depend on -- on what it
16 is. In this case, you know, I'm saying potential based
17 largely on my studies of the federal assault weapons
18 ban and what -- what we found there.

19 BY MR. SWEENEY:

20 Q Can you state with a reasonable degree of
21 scientific probability that the ban on assault weapons

1 and large capacity magazines in Maryland will reduce
2 the number of crimes committed with assault weapons and
3 other firearms with large capacity magazines?

4 A I can't put a probability on that. You
5 know, all I can say is based on the experience with the
6 federal assault weapons ban, that there are grounds for
7 believing that the Maryland law could achieve that in
8 extrapolating from the results of the federal study.
9 Otherwise, one has to actually study the implementation
10 of the Maryland law to begin putting, you know,
11 probabilities on it and measuring those effects.

12 Q All right. Can you say to a reasonable
13 degree of scientific probability that the ban on
14 assault weapons and large capacity magazines in
15 Maryland will reduce the number of shots fired in gun
16 crimes?

17 A Not sure what you mean by a reasonable
18 probability 'cause I just I can't put a probability on
19 it and tell you how likely it is to occur.

20 Q Can you say to a reasonable degree of
21 scientific probability that the Maryland ban on assault

1 weapons and large capacity magazines will reduce the
2 number of gunshot victims in such crimes?

3 A Again, same answer. I can't state it with
4 an exact probability at this time.

5 Q And if I ask you the same question with
6 respect to number four, reduce the number of wounds per
7 gunshot victim, and five, reduce the lethality of
8 gunshot injuries when they do occur, and six, reduce
9 the substantial societal costs that flow from
10 shootings, would your answer be the same?

11 A Yes.

12 Q Okay. Now, the Maryland law does not
13 prohibit all semi-automatic firearms; correct?

14 A Correct.

15 Q And criminals can substitute semi-automatic
16 firearms that aren't banned; correct?

17 A Those and other guns.

18 Q Right. And isn't that variable something
19 that you can't control and one of the reasons why you
20 can't say to any probability whether or not the ban
21 will accomplish the six items that you state in

1 paragraph eight of your report?

2 MR. FADER: Objection.

3 THE WITNESS: In principle, the
4 substitution of non-banned guns and magazines has the
5 potential to lessen the lethality and injuriousness of
6 gun attack incidents. So I wouldn't say that the
7 Maryland ban is going to reduce the rate of gun crime,
8 but what I am saying is there's a possibility it could
9 reduce shots fired, people hit, wounds inflicted, those
10 sorts of things in attacks that -- that happen.

11 BY MR. SWEENEY:

12 Q If a particular banned assault rifle, a
13 Colt AR-15, can readily be substituted with a Colt AR
14 HBAR, isn't the ban unlikely to have any significant
15 impact on the use of assault rifles in crime?

16 A Well, that one particular instance, it
17 seems that the policy makers for whatever reason have
18 allowed one similar variation of the AR-15 to still be
19 legal. I don't know what all the considerations were
20 in doing that. I suppose it was part of political
21 bargaining. But it does raise the possibility that

1 that particular weapon could be substituted to some
2 degree. I guess it would depend on how common that
3 model is, what its prices are relative to other weapons
4 that are -- that are restricted.

5 Q Now, are you familiar with the A-10?

6 A Generally I've heard of it, yes.

7 Q It's -- it's a .308 caliber instead of a
8 .223 caliber that's typical of the AR-15.

9 A Okay.

10 Q And would you consider that a more powerful
11 rifle?

12 A You said it's .308 caliber?

13 Q Yes.

14 A And the other one's .223? Then yes.

15 Q And if that's available in Maryland and not
16 banned --

17 A Uh-huh.

18 Q -- would you consider it to be a readily
19 available substitute that would further undermine any
20 probability that the law has a potential to have
21 beneficial effects on firearm-related crime?

1 MR. FADER: Objection.

2 THE WITNESS: Again, it could be an
3 offsetting factor. It would depend on what
4 substitution patterns might potentially emerge, so it
5 might depend on, again, how common that weapon is, what
6 its price range is, factors like that.

7 MR. SWEENEY: Why don't we take a quick
8 break? I've gotten thirsty again.

9 (Off the record.)

10 BY MR. SWEENEY:

11 Q We referred before in your report to
12 paragraphs 20 to 22 on the Mother Jones magazine data,
13 and I promised you I'd get back to that. So let's
14 focus on those paragraphs for a moment, if we may.

15 A Okay.

16 Q Now, we made a copy of what you produced
17 earlier, which is "Mass Shootings in the United States:
18 An Exploratory Study of the Trends from 1982 to 2012"
19 by Luke Dillon. Is that the graduate student you're
20 referring to in paragraph 21?

21 A Yes.

1 Q And is this the work that you're referring
2 to there?

3 A Yes.

4 Q Did we have a clean copy somewhere here
5 that we can mark as an exhibit? Can you mark that as
6 the Exhibit Number 10? Thank you.

7 We've marked as Exhibit 10 that thesis.
8 Has this been published anywhere?

9 (Koper Exhibit 10 was marked for
10 identification.)

11 A No. This is the master's thesis. I -- I
12 believe they are -- I think you can get these through
13 the library, but it's not a publication, per se.

14 Q All right. Did you yourself review any of
15 the Mother Jones data to check the accuracy and
16 validity of this analysis?

17 A I've done very limited work with the Mother
18 Jones data myself. It's the -- in this case, it's Luke
19 Dillon's analysis. He's responsible for conducting
20 that.

21 Q All right. And do you have any information

1 on how Mother Jones itself compiled the data on which
2 Luke Dillon relies here?

3 A My understanding is that they did this
4 through extensive media searches look for mass public
5 shooting incidents over the last roughly 20-some years
6 going back to '82.

7 Q And the Mother Jones data hasn't been
8 published in any peer review journal; correct?

9 A Correct.

10 Q And --

11 A To my knowledge.

12 Q Right. And have you studied the criteria
13 by which they've selected the data?

14 A Yes. They were looking for all incidents
15 where four or more people were killed and that occurred
16 in a public location. They were -- almost all of them
17 were lone shooter cases.

18 Q Would you agree with me that mass public
19 shootings are not on the uprise? They're not
20 increasing?

21 A No. Actually their data make it seem that

1 those shootings are increasing in the last seven or so
2 years.

3 Q Yeah. I think that you might draw that
4 conclusion, but that's not the conclusion that I see in
5 Mr. Dillon's thesis. On page 15 of Exhibit 10, I see a
6 statement that says, "While there is not a real
7 consensus as to whether mass murder and mass shootings
8 are increasing or decreasing," do you see that?

9 A Yeah. Well, he's referring there to the
10 overall debate on mass shootings in general, not
11 necessarily specifically the types of mass shootings
12 that Mother Jones compiled in their database and that
13 he examines here. The debate has been over some people
14 showing that when you look at all mass shootings of any
15 sort, it's not clear that they've gone up in recent
16 years, but other people have noted that the particular
17 types of -- that these public rampage shootings do seem
18 to be more on the rise.

19 Q Again, on page 39 of Mr. Dillon's report,
20 he states at the bottom of 38, "Public mass shootings
21 have ensued at a more frequent rate with almost half of

1 the total instances in the first 31 years occurring
2 from 2005 to 2012." But then he says, "While this
3 comparison does not prove that mass shootings are
4 increasing," isn't his conclusion that mass shootings
5 are not increasing based on the evidence?

6 MR. FADER: Objection.

7 THE WITNESS: Well, I would go back to his
8 chart on page 33 and table one and figure one seems to
9 show an increase. He's probably being cautious because
10 maybe not all of the tests were -- that he might have
11 run were statistically significant, but that pattern
12 certainly seems to suggest an increase.

13 BY MR. SWEENEY:

14 Q Would you agree with me, Professor, as a
15 scientist providing expert opinion to the court that
16 you should be no less cautious in your opinions to the
17 court than you are in the works that you publish or
18 that you rely on?

19 A Yes, I would agree.

20 Q Turning your attention to paragraphs 30 to
21 33 of your report and focusing there on the statistics

1 that you reference on the use of large capacity
2 magazines in mass public shootings.

3 A This is paragraph 30?

4 Q Yes. 30 and also you kind of talk about
5 these through 33.

6 A Okay.

7 Q So I just want to see if you have that
8 generally in mind.

9 A Okay.

10 Q Are you aware of a single instance in which
11 a mass shooter used only one gun and only one large
12 capacity magazine?

13 A Not off the top of my head. I would have
14 to look back at all the different incidents.

15 Q I'm not aware of one from looking at those
16 incidents. Let's assume for a moment there isn't such
17 a report.

18 A Uh-huh.

19 Q If that's the case, how can you state
20 definitely that large capacity magazine use is a
21 controlling variable?

1 A Well, what we're pointing out here is that
2 the -- in the cases where the offender had a large
3 capacity magazine resulted in more victims being --
4 being hit and killed.

5 Q And wouldn't it be the case that an
6 individual whose goal is to kill as many people as
7 possible would simply bring more magazines or more
8 firearms?

9 A They might, but if they have to change
10 magazines, change firearms, that could -- that could
11 affect the flow of the incident. Could increase time
12 for people to get away or for bystanders to, you know,
13 overcome the person.

14 Q Isn't it true that in the vast majority of
15 these instance -- incidents, the shooter used more than
16 one firearm and/or more than one magazine?

17 A In many of them they had multiple guns.
18 The data that typically goes along with these reports
19 is not always detailed enough and quite often not
20 detailed enough to know whether they were actually
21 firing multiple guns or not.

1 Q And just because it's found on the scene,
2 you can't conclude that it was used in the shooting
3 unless you know more; correct?

4 A One has to be, yeah, cautious if there's
5 not -- it depends incident by incident. There's some
6 where the reports are more clearer than in others.

7 Q Isn't the variable most associated with the
8 number of victims of a mass shooting the intent of the
9 shooter rather than the equipment that the shooter is
10 motivated to choose?

11 A I don't know how one could actually go
12 about studying that and ever trying to prove that, that
13 issue. The inference here is that the weapon type
14 facilitates the outcome of the attack, even if the --
15 if it's the shooter's intent to shoot more people,
16 certainly having the appropriate type of weapon will
17 help them achieve that outcome.

18 Q Can you say to a reasonable degree of
19 scientific probability that large capacity magazines
20 are outcome determinative in how many people are shot
21 in a public shooting?

1 A Well, these data would seem to suggest
2 there is an association between the use of the
3 magazines and the outcomes of the incidents.

4 Q Can you say to a reasonable degree of
5 scientific probability that eliminating the
6 availability of large capacity magazines, even if you
7 could achieve that, is likely to result in a reduction
8 of the number of mass shootings?

9 A These data would seem to suggest that they
10 might reduce the number of people shot in those
11 incidents and then that in turn could result in a
12 reduction in I guess in the number of incidents that
13 end up qualifying as a -- as a mass shooting incident.
14 Again, with the caveat, too, that it's not just about
15 the mass shooting incidents. It's about other
16 incidents, too, with high numbers of shots fired, even
17 if the number of victims is smaller.

18 Q My question was carefully couched in terms
19 of reasonable degree of scientific probability.

20 A Uh-huh.

21 Q You responded in terms of seems to suggest.

1 A Uh-huh.

2 Q Is that because you cannot say to a
3 reasonable degree of scientific probability?

4 A In some of these cases, you have very small
5 numbers of incidents. It may be hard to do say
6 statistical significance tests. In some cases, there
7 are statistical significance tests showing that there
8 is a significant difference between the two sets of
9 cases. So beyond that, it's harder to say. I mean, we
10 don't -- we don't have randomized trials testing the
11 impact of weapon type on attack outcomes, so there
12 is -- there's always going to be some debate over the
13 patterns and the correlations in the data.

14 Q To press my point but without trying to,
15 and please forgive me, I don't want to sound like I'm
16 badgering you in any respect. But the limitations of
17 the scientific data are such that you simply can't say
18 to a reasonable degree of scientific probability that
19 you would be able to reduce public shootings even if
20 you were to eliminate large capacity magazines;
21 correct?

1 MR. FADER: Objection. You can answer.

2 THE WITNESS: Again, you can't say that
3 you'll eliminate all public shootings. What these data
4 suggest is that you would reduce the number of victims.
5 I can't necessarily -- it's hard to put specific
6 probabilities on it, but that's what these data
7 suggest. When you see some -- some of these
8 comparisons that were done in Luke's Dillon's thesis
9 even showed statistically significant differences
10 between the LCM cases and the non-LCM cases, that would
11 seem to provide some better degree of scientific
12 certainty.

13 BY MR. SWEENEY:

14 Q But because of the availability of multiple
15 firearms and multiple magazines that aren't large
16 capacity, can you truly say to a reasonable degree of
17 scientific probability that reducing the number of or
18 even eliminating the number of large capacity magazines
19 will reduce either the incidents of mass public
20 shootings or the number of people injured in such
21 public shootings?

1 A I guess the best way to answer that would
2 be that we'd have to -- we'd have to test that. We'd
3 have to see a circumstance where use of large capacity
4 magazines was significantly reduced and see what impact
5 that has on -- on these sorts of shootings.

6 Q And that's because we simply don't have
7 that evidence today; correct?

8 A We do have some evidence relevant to that.
9 It's just how -- how far you can push it, I guess.

10 Q Not far enough to state with a reasonable
11 degree of scientific probability; correct?

12 MR. FADER: Objection.

13 THE WITNESS: Yeah, I struggle a little bit
14 with that particular phrase because I can't put any
15 specific probability or tell you with -- with, you
16 know, five percent, one percent probability that there
17 will be this change. I can simply point to the numbers
18 that exist in these studies, and some of these
19 differences are statistically significant differences
20 and so it suggests in principle that if you could
21 reduce the use of these magazines, you could get a

1 reduction.

2 BY MR. SWEENEY:

3 Q And when we're talking about the
4 probability, in order to say more probable than not
5 it's more than 50 percent likelihood.

6 A Uh-huh.

7 Q And I take it the evidence just doesn't
8 support that right now?

9 MR. FADER: Objection.

10 THE WITNESS: I would be cautious in making
11 the inferences about, you know, how certain it is that
12 it would happen.

13 BY MR. SWEENEY:

14 Q And so you cannot say that it would be more
15 likely than not to achieve that?

16 A Not -- I would have to see more
17 observation. Have to see what happens.

18 Q All right. On page 13, footnote 26, you
19 touch on this in -- this issue of a perpetrator
20 substituting other guns for banned assault weapons, and
21 of course that would also include substituting multiple

1 magazines for banned large capacity magazines. Isn't
2 it likely in Maryland that a criminal who wants to
3 commit a crime with a firearm will still do so even
4 with the new law?

5 A Who wants to commit a?

6 Q A crime.

7 MR. FADER: Objection.

8 THE WITNESS: Would commit a crime with
9 another weapon you're saying?

10 BY MR. SWEENEY:

11 Q Yes.

12 A Yes.

13 Q And isn't it likely that in Maryland, the
14 law will have little or no impact on the frequency of
15 firearm crime in general?

16 A I would say that's a reasonable inference.

17 Q Have you -- are you familiar with the Safe
18 Streets Program?

19 A In Maryland?

20 Q Yes.

21 A Not specifically. There's a lot of

1 programs that have that -- that name.

2 Q It came out -- I know it's been used in
3 Chicago where I believe it started and Daniel Webster's
4 studied it. I just wondered if you're familiar with
5 the program. It's been implemented in Baltimore City.

6 A I'd have to know more about the specifics
7 of it, what type of intervention it is. I might know
8 of other similar programs that go by other names.

9 Q The general idea behind it, and I -- I
10 don't want to do anything but try to focus your
11 recollection, is intervention after threats are
12 communicated to prevent firearm-related crime.

13 A Okay.

14 Q And it's done on a street-based level with
15 essentially trained interveners or mediators.

16 A Okay.

17 Q And are -- are you familiar with those type
18 programs in Baltimore and other cities and their
19 effectiveness in reducing firearm-related violence?

20 A I've read some about those studies, similar
21 ones in places like Chicago and Pittsburgh.

1 Q And what is your understanding of their
2 effectiveness?

3 MR. FADER: Objection.

4 THE WITNESS: In the Chicago study, I know
5 they've had some success with that approach. They call
6 it Cease Fire in Chicago, and that -- that approach was
7 successful. I -- I'm not sure about the Pittsburgh
8 study. Actually, I think they weren't as successful in
9 that one. There's a publication in Criminology and
10 Public Policy that came out in the last -- last year or
11 two that had looked at that. I think I have read about
12 Dr. Webster's work in -- on the Baltimore program. I
13 can't quite remember what his specific findings were on
14 that particular one.

15 BY MR. SWEENEY:

16 Q All right. Are you familiar with the task
17 force on mental illness and access to firearms in
18 Maryland?

19 A No.

20 Q And are you generally familiar with efforts
21 around the country to focus on the role of mental

1 illness and substance abuse in firearm violence?

2 A Yes, in general.

3 Q And are you familiar with any programs
4 other than the ones we're just discussing that focus on
5 those issues as a means of reducing firearms-related
6 violence?

7 A I have some familiarity with -- with
8 efforts that are being made to improve the background
9 check system with respect to catching mental illness.
10 The Government Accountability Office had a report on
11 that that came out fairly recently. That's probably
12 the main thing that I'm familiar with in that area.

13 Q You -- you've done some original research
14 in the area of qualification for firearms; correct?

15 A Qualifications for firearms?

16 Q Well, the screening of individuals for
17 firearms possession, purchase.

18 A So you're saying have I done a study of,
19 say, the background check systems and how they operate?

20 Q Right.

21 A Not exactly, no.

1 Q All right. Have you written on other
2 people's studies?

3 A Yes.

4 Q All right. And would you agree with me
5 that improving the ability to keep firearms out of the
6 hands of individuals who are likely to use them in
7 criminal acts is an effective way to reduce
8 firearms-related violence?

9 A Yes.

10 Q Demonstrated to be effective; correct?

11 A If you can -- if you can prevent those
12 transfers, yes. I mean, there's mixed evidence on the
13 effects of, you know, for example, the Brady Act and
14 whether or not that actually reduced gun violence, so
15 one has to be cautious about the inferences.

16 Q But wouldn't you agree with me that in
17 studies of effective systems to control the individuals
18 who have access to firearms, it's more effective in
19 impacting firearm-related violence than trying to
20 control the firearms that they have access to?

21 A I'd have to -- I'd have to -- I guess I'd

1 have to make some more specific assessments to get a
2 sense of the different types of studies and
3 interventions that you're -- that you're speaking of.

4 Q Well, I'm talking about the ones that
5 you've studied and their effectiveness in reducing
6 individuals with criminal records and/or mental illness
7 from having access to firearms and effectively reducing
8 firearm-related violence. Those programs have turned
9 out to be effective in many instances; correct?

10 A Well, what I've studied in my work has
11 often been, say, on police interventions to try to
12 reduce gun crime and crackdowns on gun carrying in high
13 gun crime areas. Familiar with other things like
14 focused deterrence approaches and things like that,
15 those have been effective. When you look at gun law
16 literature more generally, you know, a lot of
17 complexities in that work. There is some evidence
18 suggesting that places that have, you know, more
19 comprehensive combinations of gun laws tend to have
20 lower rates of gun murders. That would suggest that
21 more stringent efforts to prevent the wrong types of

1 people from getting firearms can be effective.

2 Q Would you agree with me that the most
3 effective way to reduce firearm-related crime is to
4 keep firearms out of the hands of criminals?

5 A Sounds reasonable. Or deter them from
6 using them.

7 Q Would you agree with me that it is least
8 effective to reduce the firearms in the hands of
9 honest, law abiding citizens if your intent is to
10 reduce firearm-related violence?

11 A So you're saying what impact -- are you
12 asking about the impact of laws that limit, lessen gun
13 ownership and gun availability in general?

14 Q Yes. That impact the ability of
15 responsible, law abiding citizens to own firearms for
16 lawful purposes. Aren't they less effective than other
17 means of intervening to directly prevent access by
18 criminals to firearms?

19 MR. FADER: Objection.

20 THE WITNESS: Yeah, I don't know that
21 really any interventions are -- well, there aren't too

1 many interventions that are trying to limit firearms
2 ownership among the general law abiding population. In
3 a case like an assault weapons ban, you might be
4 limiting the types of weapons that people can own but
5 not taking away the right to firearms ownership.

6 BY MR. SWEENEY:

7 Q Where would you draw the line on taking
8 away the right to firearms ownership? How many types
9 of firearms can I be restricted from having by the
10 government while I still have an effective right left?

11 MR. FADER: Objection.

12 THE WITNESS: I mean, ultimately that's a
13 political and legal decision that policy makers and the
14 courts have to decide.

15 BY MR. SWEENEY:

16 Q Would you agree with me that there is no
17 evidence that would support, from a reasonable
18 scientific probability, drawing that line at any given
19 place?

20 MR. FADER: Objection.

21 THE WITNESS: Yeah, I'm not sure I quite

1 follow you.

2 BY MR. SWEENEY:

3 Q Sure. It was a terrible question. Let me
4 try it again.

5 Would you agree with me that the state of
6 the science does not permit an opinion to a reasonable
7 degree of scientific probability as to where the
8 government can draw the line on what firearms should be
9 prohibited or not to law abiding, responsible citizens
10 if the purpose is to reduce firearm-related violence?

11 MR. FADER: Objection.

12 THE WITNESS: Well, I would -- there you
13 get into some complexities. And, for example, take the
14 DC handgun law that resulted in the Heller decision.
15 DC passed that ban and there was research suggesting
16 that it reduced gun homicide in DC. Now, ultimately
17 the courts stepped in and they felt that despite any
18 public safety benefits the law may have had, that it
19 went too far in restricting the rights of citizens, so
20 they overturned it.

21 Another example might be some research that

1 Daniel Webster and his colleagues did looking at the
2 Maryland restrictions on guns that are often referred
3 to as Saturday Night Specials; small, inexpensive,
4 easily concealable firearms. He -- some of his
5 colleagues, they did some research suggesting that that
6 law helped to reduce gun homicide in Maryland after it
7 was passed. But again, you know, ultimately a judgment
8 has to be made between the rights of citizens and
9 the -- and the public safety issues.

10 BY MR. SWEENEY:

11 Q What regulations could a state pass to
12 lower gun crime generally? How would you go about
13 doing it if the General Assembly had asked for your
14 input?

15 A Well, there are a lot of different things
16 that can be considered. It's not just any one
17 particular law or approach. A lot of my work focuses
18 on law enforcement approaches. Those can be very
19 effective when targeted and done in the right ways.
20 Other things like requiring background checks for
21 secondhand sales and things of that sort could be

1 effective. A lot of the -- evidence of a lot of these
2 different laws is mixed. Someone has to be careful
3 but, you know, there can be some evidence that
4 increasing penalties for gun crimes might be effective
5 as well.

6 Q Aren't all those already in effect in
7 Maryland, independent of this most recent law?

8 A I do know Maryland is one of the states
9 that regulates secondhand gun transfers, although I'm
10 not sure how well that's actually enforced. But I'm
11 not sure about Maryland statutes for increasing
12 penalties for different gun crimes and what those are
13 exactly.

14 Q All right. Well, how would you advise the
15 General Assembly on what to do if it wanted to prevent
16 mass public shootings?

17 A Well, there may be no one single approach
18 that they can use. This assault weapons law is one of
19 perhaps a number of measures that they, you know, might
20 consider.

21 Q What other measures would you recommend

1 they consider?

2 A Well, could be that better mental health
3 interventions might help in some respects. Perhaps
4 targeted police efforts. You know, there are many
5 studies that look at the impact of different policy
6 interventions on this particular problem, so that's a
7 limitation that one faces.

8 Q How exactly will the Maryland assault
9 weapon ban help reduce mass shootings?

10 A Well, the idea if -- is that if assault
11 weapons and large capacity magazines are less
12 accessible and less likely to be used in crime, that it
13 can potentially reduce the number of shots fired in gun
14 attack incidents and that could lessen the number of
15 victims wounded or killed in these incidents. Not just
16 incidents that are mass shootings, but incidents more
17 generally.

18 Q That's a hope, though, not a reasonable
19 expectation based on the evidence, though; correct?

20 MR. FADER: Objection.

21 THE WITNESS: I think there is some basis

1 in the evidence for saying that it's more than just a
2 hope. It's informed by evidence. We can't say how
3 definitively, how likely it is to happen, but I think
4 it's a reasonable projection. One has to keep in mind
5 the benefits overall would be modest in percentage
6 terms, as I said in my statement. I think laws like
7 this could potentially produce a small percentage
8 reduction in gunshot victimizations, so it has to be
9 kept in perspective.

10 BY MR. SWEENEY:

11 Q In your study of mass public shootings,
12 would you agree with me that the majority of them, if
13 not all of them to the extent there is evidence,
14 involve advance planning by the shooter?

15 A I haven't studied them that closely to --
16 to -- to know for sure.

17 Q All right. You don't know one way or the
18 other?

19 A Yeah. I haven't looked into them in that
20 depth.

21 Q On paragraph 56 of your report, you

1 reference a study by the Washington Post and you
2 touched on it earlier today in your testimony. And
3 this is additional evidence that the ban may have
4 reduced crimes with large capacity magazines by the
5 time it expired in 2004 you say here; correct?

6 A Yes.

7 Q Now, the Washington Post study was -- it's
8 not peer reviewed; right?

9 A Correct.

10 Q Has -- has the data that it's collected and
11 the methodology that it used to collect that data gone
12 through peer review, to your knowledge?

13 A No.

14 Q Does the Washington Post study include any
15 data on the number of shots fired?

16 A No.

17 Q How can you use it to say that the use of a
18 large capacity magazine was meaningful in any of those
19 incidents then if you don't know the number of shots
20 fired?

21 A Well, the Washington Post study was not

1 about tracking shots fired. It was just documenting
2 trends and the percentage of guns recovered by police
3 that were equipped with large capacity magazines.

4 Q Well, the purpose of a ban is to reduce
5 crime or at least the number of shots fired, not simply
6 reducing the number of certain firearms on the street;
7 right?

8 A Well, you've accomplished one and then
9 presumably you can accomplish the other.

10 Q But it's not meaningful unless you're
11 accomplishing the other, that is the end result which
12 is the reduction of the unwanted behavior; correct?

13 A Right. And the Washington Post study
14 doesn't go that far. It doesn't show whether or not
15 this helped to, say, reduce shootings in Virginia.

16 Q And of course the presence of a firearm at
17 a crime scene, as we discussed before, doesn't mean it
18 was actually used in the crime; correct?

19 A In some cases that might not -- that might
20 not mean that.

21 Q Right. And you state in paragraph 57 it's

1 difficult to extrapolate the Virginia data to the
2 nation as a whole; correct?

3 A Yes.

4 Q And it would be equally difficult to
5 extrapolate it to Maryland; correct?

6 A Yeah. One would have to be cautious in
7 doing that.

8 Q Would you agree with me that it's possible
9 that the increased frequency with which police reported
10 recovering large capacity magazines after the ban could
11 be due to the fact that they had an increased interest
12 in reporting them at that time?

13 A I would find that very unlikely. I think
14 police have standard procedures they follow in terms of
15 recovering firearms, so the firearms they encounter are
16 the ones they encounter. I don't think they're going
17 to change their -- their decisions about whether to
18 confiscate a particular firearm necessarily based on
19 whether or not it had a large capacity magazine.

20 Q Are you familiar with any analyses and
21 studies done with respect to so-called crime guns that

1 would substantiate that opinion?

2 A I don't know of anything that would
3 substantiate the opinion actually that you had
4 mentioned, that somehow they're changing their gun
5 recovery behaviors based on that factor.

6 Q The difference is I'm not the expert. So
7 let's go back to your opinion that you just expressed,
8 and do you know of any studies that support your
9 opinion where you just attributed that law enforcement
10 can be trusted to accurately report in all instances
11 the nature of the crime guns that they find and that
12 they wouldn't be motivated by changes in federal bans
13 to report more or less of a particular category of
14 firearm?

15 MR. FADER: Objection.

16 BY MR. SWEENEY:

17 Q Do you have any evidence to support the
18 opinion? That's my only question.

19 MR. FADER: Objection. You can answer.

20 THE WITNESS: I mean, I'm not aware of any
21 study that's looked at how police behave when they find

1 someone carrying a weapon illegally and whether they're
2 going to make a decision as to whether they're, you
3 know, bust into a drug house and find weapons as to
4 whether or not their decision about recovering that
5 weapon is somehow going to be discretionary and based
6 on what the weapon is.

7 BY MR. SWEENEY:

8 Q All right. So if -- if I were to tell you
9 that law enforcement officers in Maryland may target
10 certain weapons and certain kinds of magazines and
11 report preferentially them depending upon what certain
12 criteria they have and what they're trying to
13 accomplish, that would come as a surprise to you and be
14 outside the realm of what you would expect from law
15 enforcement officers?

16 MR. FADER: Objection.

17 THE WITNESS: It might depend. If law
18 enforcement got a -- a report of, you know, a stash of
19 some particular type of weaponry, assault weapons or
20 something at a particular place, you know, that would
21 be of interest to them, that could target, you know,

1 guide some of their activities. On the other hand, if
2 they got a report of a stash of other types of weapons,
3 they're going to take that seriously, too. I'm just
4 not sure it would necessarily make a difference in
5 their behaviors. I'd have to see more documentation or
6 evidence of that.

7 BY MR. SWEENEY:

8 Q All right. What impact on firearm-related
9 violence has restrictions on fully automatic weapons
10 had?

11 A I don't think anyone has ever studied
12 whether or not let's say the shooting rate or the
13 murder rate went down because of the federal
14 restrictions on machine guns. Probably the one thing
15 that we can say about those restrictions is that
16 machine guns are very rarely used in crime.

17 Q Paragraph -- may I focus you on paragraph
18 72 of your report?

19 A Okay.

20 Q You refer in paragraph 72 to the gun
21 violence epidemic in Maryland. What are you referring

1 to?

2 A Just gun crime in general, the level of gun
3 violence.

4 Q What is an epidemic?

5 A Well, that would be just referring to
6 generally, you know, high levels. The desire to get
7 the levels lower.

8 Q What if I told you the incident of
9 firearm-related crime in Maryland has been cut in half
10 since the federal ban ended, would you call that an
11 epidemic?

12 MR. FADER: Objection.

13 THE WITNESS: When we use that language, I
14 think we're talking about the fact that gun violence is
15 still at, even though fortunately it has declined a lot
16 over the last few decades, that it's still at higher
17 levels than people would like and that it's a very
18 costly problem for society.

19 BY MR. SWEENEY:

20 Q Now, in the ten years or so since the
21 federal ban on assault weapons and large capacity

1 magazines expired --

2 A Uh-huh.

3 Q -- they've been legally available for sale
4 in Maryland; correct?

5 A Yes. Well, not assault pistols.

6 Q Assault rifles. And I'm only referring to
7 assault rifles. I apologize. I spoke too broadly.
8 Assault rifles and large capacity magazines for
9 semi-automatic firearms, both handguns and long guns,
10 up to a capacity of 20 rounds have been available in
11 Maryland for the last ten years or so.

12 A Okay.

13 Q Freely available. And we have information
14 that the number has significantly increased during that
15 period of time as many citizens chose to buy them and
16 own them for -- and use them for lawful purposes. Do
17 you understand that?

18 A Okay.

19 Q And during that same period of time,
20 firearm-related violence has been cut almost in half.

21 A Uh-huh.

1 Q Would you agree with me that there is no
2 evidence that the availability of assault rifles and
3 large capacity magazines has contributed to the rate of
4 firearm-related violence in Maryland in the last ten
5 years?

6 MR. FADER: Objection.

7 THE WITNESS: Not having studied that issue
8 myself, I would say a couple of things. One, I
9 wouldn't expect it to affect the overall rate of
10 firearm violence. I would expect it more specifically
11 to potentially effect shootings or gun murders. I
12 wouldn't expect it to necessarily have a particularly
13 large effect. I think it was something that if you
14 wanted to study it, you'd have to study it very closely
15 being mindful of the fact that you're looking for what
16 are probably going to be pretty small effects that you
17 would have to disentangle from other trends and causal
18 factors.

19 But that said, you know, I -- well, I
20 haven't studied the trends in shootings or gun murders
21 in Maryland, but I can take your word for it if they've

1 been flat or declining since -- since 2004.

2 BY MR. SWEENEY:

3 Q Cut about in half would be a significant
4 decline; correct?

5 A Good. Yeah.

6 Q Now, have there been any mass shootings, as
7 you define mass shootings, in Maryland in the last ten
8 years?

9 A I don't think any of the incidents in --
10 well, I haven't studied all of these mass shooting
11 databases, but to my knowledge, I don't think any of
12 the ones in Mother Jones were in Maryland. I don't
13 know if any of the -- any of those in other databases
14 have been in Maryland.

15 Q So as far as you know at least, the influx
16 of assault rifles and large capacity magazines into the
17 hands of Marylanders in the past ten years has not
18 resulted in any mass shootings as you define them?

19 A Not as far as I know.

20 Q All right. And do you know if there's been
21 an increase in killings or shootings of law enforcement

1 officers in the last ten years in Maryland?

2 A I haven't studied that.

3 Q All right. And if I told you that number
4 was declining, would you agree with me that there's no
5 evidence that the influx of assault rifles and large
6 capacity magazines has led to an increase incidence in
7 shootings and killings of law enforcement officers in
8 Maryland?

9 A Maybe not an increase overall, but I think
10 you probably want to look specifically at the numbers
11 and see how many involved, you know, assault rifles or
12 large capacity magazines and, you know, make a
13 determination based on that.

14 Q Although with very, very small numbers,
15 we'd have to be careful about drawing any conclusions
16 at that micro a level; correct?

17 A Yeah. You'd have to be cautious. Maybe if
18 you're, you know, pooling data over several years,
19 maybe that helps and -- yeah.

20 MR. SWEENEY: All right. Thank you. And
21 thank you for your patience. I have no other questions

1 at this time.

2 THE WITNESS: Okay.

3 MR. FADER: I don't have any questions.

4 The witness will read and sign.

5 (Deposition was concluded at 6:38 p.m.)

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

CERTIFICATE OF DEPONENT

I hereby certify that I have read and examined the foregoing transcript, and the same is a true and accurate record of the testimony given by me.

Any additions or corrections that I feel are necessary will be made on the Errata Sheet.

CHRISTOPHER S. KOPER, PH.D.

(If needed, make additional copies of the Errata Sheet on the next page or use a blank piece of paper.)

1 Commonwealth of Virginia

2 County of Fairfax:

3 I, AMANDA J. CURTISS, a Notary Public of
4 the State of Virginia, Fairfax County, do hereby
5 certify that the within-named witness personally
6 appeared before me at the time and place herein set
7 out, and after having been duly sworn by me, according
8 to law, was examined by counsel.

9 I further certify that the examination was
10 recorded stenographically by me and this transcript is
11 a true record of the proceedings.

12 I further certify that I am not of counsel
13 to any of the parties, nor in any way interested in the
14 outcome of this action.

15 As witness my hand this 5th day of
16 February, 2014.



17 _____
18 Amanda J. Curtiss, CSR
19 Notary Public

20 My Commission Expires:
21 October 31, 2015 - #7513095

A			
A-10 (1) 174:5	27:6 acquiring (1) 78:21	87:19;89:6 again (37) 15:20;25:7;26:3;33:13; 40:8;61:3;65:2;87:4;89:18; 92:13,20;94:20;95:14; 105:3;108:6;116:6;121:5; 132:3;147:21;149:15; 156:16;157:1;158:4;159:2, 10;160:8;164:1;169:3; 172:3;175:2,5,8;178:19; 183:14;185:2;196:4;197:7	Amendment (2) 74:14,20
A-2 (1) 112:8	across (2) 91:4,18	agencies (6) 40:4;43:3,4,17;66:9; 105:14	America (1) 7:14
abiding (4) 194:9,15;195:2;196:9	act (2) 65:3;192:13	Agenda (1) 36:4	American (1) 45:2
ability (3) 55:5;192:5;194:14	active (1) 78:19	ago (1) 23:9	amidst (1) 49:20
able (12) 7:21;8:12;53:19;56:19; 57:11;89:20;103:6;104:9; 119:11;120:21;157:10; 184:19	actively (1) 31:18	agree (26) 61:19;62:6;95:7;97:15; 98:19;103:4;104:2,4; 126:21;127:2,7;128:8; 170:11;177:18;179:14,19; 192:4,16;194:2,7;195:16; 196:5;200:12;203:8;209:1; 211:4	ammunition (6) 47:19;60:20;61:5,15,16; 158:14
above (2) 93:2;118:10	activities (2) 23:3;206:1	ahead (2) 27:10;46:9	among (6) 33:11;43:16;76:6;96:15; 97:4;195:2
absolutely (1) 68:11	acts (1) 192:7	AK-47 (3) 114:11,12;115:4	amount (2) 16:9;35:4
abuse (1) 191:1	actual (1) 125:17	Allen (1) 77:12	analyses (11) 43:7;47:12;89:9,13; 138:14;140:5,6;145:14; 146:18;153:2;203:20
academic (1) 81:3	actually (28) 47:9;57:20;72:18,20; 84:5;87:17,20;95:19; 110:18;114:20;116:12; 132:8;138:15;139:6; 148:18;153:6,13;154:8; 158:18;171:9;177:21; 181:20;182:11;190:8; 192:14;198:10;202:18; 204:3	allow (1) 163:10	analysis (20) 38:7;41:8;91:10,13; 92:18;93:9,14;94:16;100:8, 10;140:1;141:3;145:11,18; 147:12;150:1;158:9;161:6; 176:16,19
accept (3) 55:5;166:20;167:15	add (1) 143:20	allowed (4) 154:11;155:11,14;173:18	analyze (1) 153:17
accepted (1) 47:14	addition (6) 22:8;23:2;87:9;104:17; 122:15;160:21	allowing (1) 48:16	analyzed (1) 94:19
Access (6) 35:12;190:17;192:18,20; 193:7;194:17	additional (5) 26:1;113:9;138:13;201:3; 213:14	almost (4) 164:3;177:16;178:21; 208:20	and/or (2) 181:16;193:6
accessible (1) 199:12	additions (1) 213:7	along (3) 6:20;24:13;181:18	annual (1) 23:6
accessories (1) 165:2	address (3) 5:9,11;84:17	although (9) 28:18;49:15;68:11; 135:17;147:14;155:2; 160:8;198:9;211:14	anti-ban (1) 48:16
accomplish (4) 170:8;172:21;202:9; 205:13	adequacy (2) 92:13,21	always (10) 10:2;49:16;68:10;73:17; 89:12;109:6;111:18;164:3; 181:19;184:12	anymore (1) 155:12
accomplished (1) 202:8	adjacent (1) 156:7	ambiguities (1) 130:16	apart (2) 58:17;97:10
accomplishing (1) 202:11	advance (2) 81:12;200:14	ambiguity (1) 89:13	apologize (2) 68:9;208:7
according (1) 66:19	adversary (1) 64:18	ambiguous (1) 93:15	appear (7) 47:4;79:9;80:2;91:19; 125:4;137:21;149:8
accordingly (1) 51:2	advise (2) 78:14;198:14		appeared (4) 46:14;86:2;114:14;123:4
account (1) 132:12	advisor (1) 71:20		appears (3) 28:17,18;134:5
Accountability (1) 191:10	advocates (1) 67:13		applied (4) 33:18;37:14;86:2;167:13
accounted (5) 97:21;122:12,13;123:9; 158:14	affect (8) 48:5;51:13;84:1;148:10, 16;157:13;181:11;209:9		apply (2) 37:9;162:8
accuracy (1) 176:15	affected (2) 14:20;93:19		appointment (1) 71:17
accurate (3) 26:17;83:10;213:5	affecting (1) 13:8		appreciate (1) 86:17
accurately (3) 26:13;83:5;204:10	affects (1) 122:20		approach (5) 57:17;190:5,6;197:17; 198:17
achieve (4) 171:7;182:17;183:7; 187:15	aftermath (2)		approaches (2) 193:14;197:18
acquaintance (1)			appropriate (1)

<p>182:16 approximate (1) 102:13 approximately (6) 102:10;106:17;123:10; 125:13;134:20;158:14 AR (1) 173:13 AR-15 (3) 173:13,18;174:8 archive (1) 80:12 area (6) 23:8;73:16,17;140:9; 191:12,14 areas (3) 17:18;18:3;193:13 argument (1) 48:9 arithmetic (1) 120:15 arose (1) 13:19 around (14) 11:2;20:1;23:8,12,12,14; 43:3;52:18;66:9;102:21; 108:16;158:3,5;190:21 arrangement (1) 73:3 article (18) 7:11;8:9,10;13:15;15:18; 36:3;48:13;76:7;81:15; 82:2;85:11,18;86:14;87:8; 89:15;133:4;138:12;145:17 articles (7) 6:20;7:8;13:14;42:12; 80:1,2,15 aspect (1) 48:1 aspects (2) 58:11;169:8 Assault (257) 4:6;7:9;10:14;12:5,7; 13:17,20;14:7;19:9;21:7, 16;25:15;27:3,14;28:6,8,21; 29:1;38:2,3,9,19;39:13; 41:1,5,12,17;43:12;47:16; 48:6,8,11;51:11,21;52:21; 53:15,20;54:12,18;55:10; 56:12;58:14;62:10,17;63:1, 3;64:7;67:13;68:2,17;69:6; 70:20;71:8;72:21;82:11,20; 83:7,14;84:4,8,12,18,19; 85:13;86:19;87:9,14;88:17; 89:5,15;90:11;91:11,18; 93:6,11,19;94:17;95:3,8,17; 96:5,16;97:4,6,12,14,21; 98:1,2,3,8,9,11,12,13,13,16, 17,17,20,21;99:7,11,12; 100:16;101:9;103:12,21; 104:10,21;105:4,15;106:6, 13,18;107:2,9,13;108:3,10, 13,17,20;109:1,7,7,10,11,</p>	<p>13,14;110:4,7,8,15,16,17; 111:8,11,11,12;112:14,16; 113:3,5,15,19,21;114:6,14, 16,20;115:9,16;116:9,14; 117:4,6,20;118:9,10,13; 119:9,12;120:5;121:8; 122:5,8,15,15,18,20;123:2, 9,16;124:19,21;125:10,14, 21;126:2;127:5,9,21; 128:10,14,17;129:3,3,17; 131:7;132:1;134:8;135:7; 138:13;144:4,9,17;146:21; 147:7,8;151:5,17;160:10; 161:1,5,6,8,10,13,16,18; 162:2,8,9,19;163:10,16,18; 164:3;165:5,14;166:11,12, 16,16;167:8,20;168:15,16, 18,18;169:16,18;170:6,17, 21;171:2,6,14,21;173:12, 15;187:20;195:3;198:18; 199:8,10;205:19;207:21; 208:5,6,7,8;209:2;210:16; 211:5,11 Assault-Gun (1) 46:14 assaultive (1) 83:18 assaults (6) 51:14;83:2,15,16;84:5,14 Assembly (7) 19:8;27:2,13;28:10,14; 197:13;198:15 Assertions (2) 8:9;39:1 assess (3) 18:15;89:21;161:15 assessment (1) 77:11 assessments (1) 193:1 Assistance (2) 32:7;40:14 assistant (1) 72:7 associate (3) 5:10;22:8;71:7 Associated (9) 33:4;62:11;89:2;90:11; 91:6;101:13;135:9;150:6; 182:7 associates (1) 163:12 association (6) 15:6,11,17;17:10,17; 183:2 assume (12) 11:9,16;100:3;116:9; 129:1,4,6;131:4;143:3; 156:4;159:6;180:16 assurance (1) 80:13 asterisks (2) 91:21;92:9</p>	<p>ATF (4) 78:6,9,20;79:1 attached (1) 32:13 attack (5) 135:9;173:6;182:14; 184:11;199:14 Attackers (3) 50:10;137:17,18 attacks (15) 16:2,3,4,7;56:7;84:1; 130:2;132:3;144:16,20; 146:6,10;148:10,16;173:10 attempted (1) 152:11 attend (1) 39:19 attention (4) 28:5;152:5;164:13; 179:20 attractive (4) 161:1,10;162:2,13 attractiveness (1) 163:13 attributed (1) 204:9 August (1) 66:19 author (2) 35:20;46:19 authored (1) 85:11 automatic (1) 206:9 availability (6) 157:13;160:11;183:6; 185:14;194:13;209:2 available (19) 16:15;35:4;50:2;83:20; 97:8;107:20;108:12; 118:18;130:4,20;131:6,11; 149:1;155:10;174:15,19; 208:3,10,13 award (1) 37:11 aware (14) 34:8,10;45:16;47:3;67:6; 76:11,15;95:1;139:5; 145:17;160:7;180:10,15; 204:20 away (4) 46:5;181:12;195:5,8 awkward (1) 10:1 AWs (1) 82:19</p>	<p>36:7;39:2;58:17;59:9; 69:16;81:13;82:8;93:4; 110:6;116:6;124:4,13; 132:14;134:2;135:6;142:4; 146:2;150:10;154:20; 156:13,17;159:2;166:15; 175:13;177:6;179:7; 180:14;204:7 backed (1) 110:16 background (5) 24:17;57:6;191:8,19; 197:20 backward (1) 32:19 badgering (1) 184:16 ballistic (1) 62:9 ballistics (1) 58:5 ballpark (1) 144:11 Baltimore (13) 43:11;46:9,14,20;47:6,7, 11,12;76:7;164:13;189:5, 18;190:12 ban (120) 7:9;12:5;13:20;14:7; 18:17;19:8;21:6,15;25:3, 15;26:1,13,19;27:4,13;38:4, 20;39:13;41:1,6,12,17; 43:12;46:14;47:15,18;48:1; 49:9;51:11,16,21;52:1,1,8, 13,21;53:1,4,15,16,20;54:5; 56:14;67:19;68:1,1;69:3; 74:20;75:8,14;82:12;83:2,7, 15;84:4,8,12;87:10,12,15, 16,19;89:6,15;90:6,11; 91:11,16,19;93:7;94:17; 95:3,8,9;96:1,5;98:8,9; 100:15,19;105:15,20;119:4; 129:3,17;151:11,16,17; 152:12,15,17;153:9,21; 154:6,8;155:7,7;158:3; 159:9;160:11;165:1,5,6; 170:6,18,21;171:6,13,21; 172:20;173:7,14;195:3; 196:15;199:9;201:3;202:4; 203:10;207:10,21 banned (20) 57:8,20;64:8;82:19; 88:19;98:4;101:3;165:14, 18,20;166:4,8,12;167:9,16; 172:16;173:12;174:16; 187:20;188:1 banning (4) 67:13;68:17;131:6;132:1 bans (12) 48:4;50:4;53:9;54:12; 68:18;69:6;84:18,20;85:13; 86:10,19;204:12 ban's (5)</p>
		B	
		<p>bachelor's (1) 12:21 back (32) 6:12;7:7;11:1;29:19;</p>	

<p>28:20;48:17;52:18;88:7; 95:20 bargaining (1) 173:21 barrel (1) 163:9 barrels (1) 55:14 base (2) 18:8;133:11 based (42) 12:4;13:14;18:11,19; 21:11;25:16;41:12;50:17; 53:18;66:6;87:21;89:11,19; 90:8;94:15,19;96:15;97:3; 103:5;111:16;118:16; 121:13,16;127:18;131:6,9, 10;132:17;136:17;137:13; 140:6;146:20;149:21; 150:16;170:16;171:5; 179:5;199:19;203:18; 204:5;205:5;211:13 basic (7) 13:11;16:16;45:13;58:13; 75:5;93:17;123:18 basically (3) 14:4;26:8;92:6 basis (5) 52:13;81:15;120:2;164:5; 199:21 became (3) 72:1;97:16;152:17 becomes (5) 54:12,16;119:17;155:19; 162:21 Began (1) 56:16 begin (1) 171:10 beginning (3) 21:17;24:8;137:16 begs (1) 148:8 behave (1) 204:21 behavior (1) 202:12 behaviors (2) 204:5;206:5 behind (1) 189:9 believing (1) 171:7 below (8) 28:13;38:21;44:8;90:15; 92:9;110:15;135:16;137:16 beneficial (1) 174:21 benefit (1) 170:13 benefits (2) 196:18;200:5 best (7)</p>	<p>9:21;45:19;46:7;104:5; 108:12;161:11;186:1 Bethlehem (1) 146:14 better (3) 130:11;185:11;199:2 beyond (1) 184:9 big (2) 21:4;43:3 Bit (15) 41:1;54:8;70:13;80:19; 86:12;93:8;104:14;107:20; 130:10,10;135:6;147:15; 165:7,10;186:13 blank (1) 213:15 blinded (1) 81:4 Bloomberg (3) 21:20;22:1;34:9 Bloomberg's (1) 21:13 body (1) 65:9 book (12) 7:13;20:10;26:5;39:12, 12;44:14;45:3;80:16,18,20; 81:5,6 both (7) 9:11;15:15;20:5;38:20; 47:16;126:10;208:9 bottom (4) 40:16;125:16;141:17; 178:20 Brady (1) 192:13 break (12) 10:4,6;69:11;101:7,9; 109:6;133:19,20;134:3; 169:2,4;175:8 breakdown (3) 101:7;105:10;137:4 breakdowns (3) 102:17;109:3;162:16 Breaking (1) 42:6 breakout (1) 109:1 breakouts (1) 109:9 brief (5) 41:11;42:20;43:19;45:3; 72:3 briefings (1) 23:6 briefly (5) 24:16;25:6;26:9;46:8; 133:3 bring (4) 6:4;154:20;156:13;181:7 brings (2) 22:16;23:6</p>	<p>broadly (4) 97:6;98:12,14;208:7 broke (1) 99:4 broken (2) 139:6;146:20 brought (6) 6:8,20;7:17;9:1;20:11; 36:11 bullet (6) 107:9;108:19;109:5,15; 110:14;122:9 burden (1) 53:5 Bureau (2) 32:7;40:14 buried (1) 143:12 business (2) 5:9;86:9 bust (1) 205:3 buy (2) 160:17;208:15 Buyer (1) 33:3 bystanders (1) 181:12</p> <p style="text-align: center;">C</p> <p>calculate (5) 101:16;102:7;121:5; 127:11,14 calculated (2) 125:17;128:1 calculator (2) 101:15;102:1 caliber (7) 14:19;15:2,6;62:17; 174:7,8,12 calibers (4) 43:5;61:5;62:17,21 California (4) 10:19,19;161:14;162:5 call (6) 58:7;64:7;88:13,14; 190:5;207:10 called (9) 5:4;14:11;21:15;34:20; 37:12;40:12;45:1;71:21; 72:19 calls (1) 19:9 came (12) 16:17;20:19;21:9;36:8; 39:3;77:6;80:16;86:14; 164:8;189:2;190:10;191:11 Campbell (6) 34:20;35:3;37:1,2;44:2; 70:21 campus (1) 5:12</p>	<p>can (105) 9:15;10:1;18:18;19:2,21; 20:15;24:13;28:15;32:9; 33:5;34:17;42:21;45:19; 46:7;48:9;49:4,19;52:3; 54:2,3;55:4;62:19;63:13; 64:14;65:5,10,16,19;74:3, 20;75:1,8,16,21;80:5;82:18; 88:21;97:10,11,18,19;99:7; 106:16;107:7;113:18,20; 116:4;118:3;119:14; 121:20;123:13;126:21; 129:6;130:15,16;131:4,20; 132:3;133:19;135:5;137:6; 144:4;154:11,18;156:20; 159:20,21;160:3;162:14; 165:8;166:20;167:15; 170:20;171:5,12,20;172:15; 173:13;176:5,5,12;180:19; 182:18;183:4;185:1,16; 186:9,17;192:11,11;194:1; 195:4,9;196:8;197:16,18; 198:3,18;199:13;201:17; 202:9;204:10,19;206:15; 209:21 capable (1) 158:13 capacity (142) 16:9,11,13,15;17:3,5,15; 19:9;21:8,16;27:4,14;28:7; 47:16,18;48:4,8,10;50:4; 51:3;52:2;53:4,9,16;54:14; 60:2;67:14;68:2,18;69:7; 75:21;76:8,12,16;82:12,20; 83:8,14;84:4,9,13;87:15; 88:9;89:8;91:12;93:6,13, 20;94:17;95:3,9,18;96:6; 106:7,19;113:16;114:1; 115:11,14,16,21;116:2,10, 11,13,15,16,18;117:5,16; 118:8,13;119:2,6,10,11,17, 20;120:1,5,7,12,20;121:9, 18;136:13,14,18;137:2,8; 144:3,8,18;147:1;148:9,16; 150:20;151:6,11,18;152:2; 153:13,16,21;154:7,19; 155:9;156:11;157:16; 158:1;162:19;164:2;169:7; 170:7;171:1,3,14;172:1; 180:1,12,20;181:3;182:19; 183:6;184:20;185:16,18; 186:3;188:1;199:11;201:4, 18;202:3;203:10,19; 207:21;208:8,10;209:3; 210:16;211:6,12 capped (1) 17:5 captioned (1) 5:14 carbine (1) 114:5 care (1) 154:20</p>
---	--	---	---

<p>careful (3) 111:18;198:2;211:15</p> <p>carefully (2) 104:14;183:18</p> <p>carry (1) 44:10</p> <p>Carrying (7) 34:16;36:17;40:10;44:1; 71:1;193:12;205:1</p> <p>case (25) 5:16;10:12,14,21;11:11; 12:2,4,16;27:21;78:15; 91:2;103:17;111:7;114:11; 117:1;127:19;140:20; 146:21;158:12;170:1,16; 176:18;180:19;181:5;195:3</p> <p>cases (48) 12:7;16:15,21;30:17; 31:1;76:2;77:6,8;99:11; 107:21;109:14;110:4; 112:20;115:6;116:9;117:6; 118:10,17;119:16,21;124:2; 135:17,20;137:1;138:14,15, 17,20;139:2,3;147:15,17, 18;148:2;149:4;150:1,3,20; 158:20;159:1;177:17; 181:2;184:4,6,9;185:10,10; 202:19</p> <p>catch (3) 68:10,12;117:11</p> <p>catching (1) 191:9</p> <p>categorical (1) 135:10</p> <p>categories (1) 153:5</p> <p>category (3) 99:14;143:4;204:13</p> <p>causal (1) 209:17</p> <p>cause (4) 17:14;49:21;123:14; 171:18</p> <p>caused (5) 25:12;46:19;73:15;76:4; 96:10</p> <p>Caution (1) 150:15</p> <p>cautious (9) 111:21;126:9;179:9,16; 182:4;187:10;192:15; 203:6;211:17</p> <p>caveat (1) 183:14</p> <p>Cease (1) 190:6</p> <p>center (9) 22:6,10,13,15;23:3,13; 34:9;35:6;70:16</p> <p>Center-fire (1) 61:15</p> <p>central (1) 65:9</p>	<p>certain (14) 12:14;24:7;74:21;90:18; 105:6;118:5;142:21; 164:19;165:13;187:11; 202:6;205:10,10,11</p> <p>certainly (8) 45:15;126:13;130:1; 142:18;145:17;155:15; 179:12;182:16</p> <p>certainty (2) 148:15;185:12</p> <p>CERTIFICATE (1) 213:1</p> <p>certify (1) 213:3</p> <p>chairman (1) 72:2</p> <p>challenge (3) 21:4;98:7,8</p> <p>challenging (3) 18:17;21:2;130:1</p> <p>change (10) 51:10;83:19;90:12;92:7; 110:16;139:20;181:9,10; 186:17;203:17</p> <p>changes (9) 13:6;51:2,5;83:21;91:6,7; 152:11;165:9;204:12</p> <p>changing (1) 204:4</p> <p>chapter (11) 20:11;26:5,8;39:12; 42:18;80:16,20;81:5;94:3; 109:8;146:4</p> <p>chapters (4) 39:12;79:14;80:18;81:11</p> <p>Characteristics (2) 33:4;41:2</p> <p>chart (1) 179:8</p> <p>charting (1) 43:7</p> <p>check (4) 112:5;176:15;191:9,19</p> <p>checks (2) 57:6;197:20</p> <p>Chicago (4) 189:3,21;190:4,6</p> <p>choose (4) 64:11;65:13;169:12; 182:10</p> <p>chose (4) 47:11;57:17;73:18; 208:15</p> <p>chosen (2) 64:2,6</p> <p>Christopher (4) 4:2;5:3,10;213:12</p> <p>circulation (1) 159:7</p> <p>circumstance (1) 186:3</p> <p>circumstances (1)</p>	<p>64:19</p> <p>citation (2) 28:11,12</p> <p>cite (1) 28:17</p> <p>cited (1) 28:13</p> <p>cities (2) 10:18;189:18</p> <p>citing (3) 28:20;52:16;146:5</p> <p>citizenry's (1) 126:16</p> <p>citizens (8) 52:20;154:18;194:9,15; 196:9,19;197:8;208:15</p> <p>City (21) 15:1;43:3;59:12,15; 60:10;71:2;77:1,2,4; 132:14;145:13,16;146:10, 13;147:16;149:2,7;150:14, 17;151:4;189:5</p> <p>civilian-owned (2) 119:6,20</p> <p>claim (1) 130:3</p> <p>clarify (2) 30:16;96:17</p> <p>class (5) 30:7,8;54:21;55:17;56:2</p> <p>clean (1) 176:4</p> <p>clear (7) 9:11;15:13;83:1;162:10; 169:20;170:2;178:15</p> <p>clearer (3) 9:18;11:21;182:6</p> <p>clearest (1) 15:1</p> <p>clearly (4) 20:21;59:19;93:12; 131:13</p> <p>clients (1) 98:7</p> <p>Close (4) 70:3;143:17;157:6;170:7</p> <p>closed (1) 91:20</p> <p>closely (3) 99:2;200:15;209:14</p> <p>coauthored (2) 13:15;15:18</p> <p>coefficient (2) 92:2,7</p> <p>Colin (1) 117:3</p> <p>collaborating (1) 35:19</p> <p>Collaboration (6) 34:20;35:4;37:1,2;44:2; 70:21</p> <p>colleague (1) 19:18</p>	<p>colleagues (8) 35:11,20;37:18;40:11; 161:14;162:6;197:1,5</p> <p>collect (1) 201:11</p> <p>collected (1) 201:10</p> <p>college (2) 30:10;78:8</p> <p>Colt (2) 173:13,13</p> <p>column (3) 134:16;136:6;146:13</p> <p>combinations (1) 193:19</p> <p>combine (1) 55:4</p> <p>comment (1) 79:18</p> <p>commentary (1) 45:4</p> <p>comments (3) 81:13,19;89:19</p> <p>commercial (1) 164:18</p> <p>commissions (1) 34:21</p> <p>commit (4) 169:12;188:3,5,8</p> <p>committed (4) 48:7;88:19;129:2;171:2</p> <p>common (7) 91:4;101:3,3;163:16,18; 174:2;175:5</p> <p>commonly (3) 75:10,14;164:11</p> <p>communicated (1) 189:12</p> <p>community (1) 73:14</p> <p>compact (2) 55:8;163:11</p> <p>company (1) 71:21</p> <p>compare (1) 146:6</p> <p>comparing (1) 16:2</p> <p>comparison (1) 179:3</p> <p>comparisons (1) 185:8</p> <p>competitive (2) 24:2;37:11</p> <p>compilation (1) 113:11</p> <p>compiled (3) 118:20;177:1;178:12</p> <p>complete (2) 17:14;26:18</p> <p>completely (5) 26:13;137:4,5;142:9; 165:21</p>
---	--	--	---

<p>completing (1) 67:5</p> <p>complexities (2) 193:17;196:13</p> <p>compliance (1) 165:10</p> <p>comprehensive (1) 193:19</p> <p>compromise (2) 51:18;52:6</p> <p>concealable (1) 197:4</p> <p>concealed (2) 44:10;85:12</p> <p>concern (1) 126:20</p> <p>conclude (7) 96:4;104:9;112:14; 117:19;120:21;153:4;182:2</p> <p>concluded (2) 145:2;212:5</p> <p>concludes (1) 86:18</p> <p>concluding (3) 15:5;90:14;142:6</p> <p>conclusion (18) 16:1,11,51:5,12;83:6; 85:5;95:4,5;107:2;108:2; 118:2;138:5,9;149:6,11; 178:4,4;179:4</p> <p>conclusions (14) 14:13;17:14;18:11;20:18; 21:6;26:12,18;28:19;82:10; 94:8;95:20;111:3,19; 211:15</p> <p>conducting (3) 31:4,7;176:19</p> <p>conference (4) 36:6;39:19;41:21;81:10</p> <p>conferences (1) 20:5</p> <p>confidence (1) 92:17</p> <p>confidently (1) 88:21</p> <p>confiscate (1) 203:18</p> <p>confused (1) 117:10</p> <p>Congress (1) 53:12</p> <p>Congressional (1) 23:5</p> <p>Connecticut (1) 10:16</p> <p>connection (7) 10:21;12:11,16;66:2; 68:17;78:15;97:16</p> <p>consensus (2) 21:10;178:7</p> <p>Consequently (1) 151:15</p> <p>consider (8) 17:18;21:10;36:5;53:12; 174:10,18;198:20;199:1</p> <p>consideration (2) 56:12;130:21</p> <p>considerations (4) 12:7;46:1;57:17;173:19</p> <p>considered (1) 197:16</p> <p>considering (3) 19:8;27:13;131:1</p> <p>consist (1) 66:7</p> <p>consistent (5) 86:21;87:3,5;125:7;139:7</p> <p>constant (1) 91:3</p> <p>constellation (1) 55:2</p> <p>consulting (4) 11:14;12:11;35:21;66:12</p> <p>contact (2) 10:3;19:12</p> <p>contacted (2) 10:20;11:1</p> <p>context (6) 17:4;20:2;55:20;61:12; 62:5;131:18</p> <p>contingent (3) 92:13,14,20</p> <p>continue (5) 33:9;34:14;35:9;63:21; 152:3</p> <p>Continued (4) 4:1;49:13;51:11;151:2</p> <p>continuing (1) 144:14</p> <p>continuously (1) 98:4</p> <p>contributed (1) 209:3</p> <p>Control (18) 44:15,18;45:6,9,17;51:3; 55:9;71:21;72:9,13;73:1; 81:1;91:1;115:15;163:5; 172:19;192:17,20</p> <p>controlling (3) 91:4,7;180:21</p> <p>conveying (2) 28:19;121:7</p> <p>copies (7) 6:11,16;8:8;165:16,20, 21;213:14</p> <p>Cops (1) 71:10</p> <p>copy (16) 5:18;6:9,13;7:9,11,16,17; 8:3,5,16;24:13;28:2;32:16; 96:13;175:16;176:4</p> <p>copycat (4) 166:3,18;167:13,16</p> <p>Cornwell (1) 77:19</p> <p>Corporation (1) 70:5</p> <p>corrections (1) 213:7</p> <p>correctly (4) 83:3,5;106:10;138:3</p> <p>correlations (1) 184:13</p> <p>costly (1) 207:18</p> <p>costs (2) 155:16;172:9</p> <p>couched (1) 183:18</p> <p>counsel (1) 85:21</p> <p>count (2) 18:18;130:18</p> <p>country (7) 23:12,15;43:3;66:9; 74:16;159:13;190:21</p> <p>couple (7) 47:9;112:17;126:18; 141:6;162:17;170:8;209:8</p> <p>course (15) 29:6,8,11,16,21;47:16; 58:14;63:11;107:19; 110:21;118:16;139:16; 159:12;187:21;202:16</p> <p>courses (3) 29:4;30:3,9</p> <p>court (7) 9:7;30:12,14,15,19; 179:15,17</p> <p>courts (4) 31:1;46:4;195:14;196:17</p> <p>covered (3) 8:21;43:1;47:16</p> <p>covers (1) 28:6</p> <p>crack (1) 97:17</p> <p>Crackdowns (3) 36:17;71:1;193:12</p> <p>crime (64) 13:7;14:17,19;18:1; 22:10,14;23:1;29:8,12,16; 30:8;33:2;34:2,4;40:18; 41:3;42:6,17;44:11;53:21; 55:3,13;56:6,10;71:21;72:9, 12;73:1;74:12;83:7;84:20; 97:5,21;98:1;99:6,15; 100:4;101:4;108:4;109:2,4; 157:5;169:6;173:7,15; 174:21;188:3,6,8,15; 189:12;193:12,13;194:3; 197:12;199:12;202:5,17,18; 203:21;204:11;206:16; 207:2,9</p> <p>crimes (23) 48:5,7;56:4;88:19;94:1; 96:6;97:7;98:15;99:1; 103:10;105:18;107:14; 108:1;121:11;155:3,8;</p> <p>169:13;171:2,16;172:2; 198:4,12;201:4</p> <p>criminal (14) 13:1;29:2;37:6;38:14; 55:18;58:3;71:15;78:8; 107:9;122:8;169:16;188:2; 192:7;193:6</p> <p>criminals (12) 97:16;161:1,10;162:3,13; 163:13;168:20;169:11,18; 172:15;194:4,18</p> <p>Criminologist (1) 45:1</p> <p>Criminology (10) 7:1;13:1;22:16;35:7; 45:2;70:16;71:15;72:2; 73:16;190:9</p> <p>criteria (8) 75:9;113:13;130:13; 166:14,16;167:14;177:12; 205:12</p> <p>critical (2) 45:4;88:17</p> <p>critically (1) 89:21</p> <p>Curcuruto (2) 103:16;158:8</p> <p>Currently (4) 29:6;31:4;32:3;157:18</p> <p>curriculum (1) 69:17</p> <p>cut (4) 125:13;207:9;208:20; 210:3</p> <p>CV (6) 32:11,21;46:13;66:19; 79:9;133:2</p>	<p>D</p> <p>damage (3) 61:14;62:1;76:4</p> <p>damaging (1) 55:4</p> <p>Dan (1) 7:14</p> <p>dangerous (4) 55:1,16;56:3;64:19</p> <p>Daniel (6) 19:15,17;26:6;27:6; 189:3;197:1</p> <p>Darin (5) 13:16;15:18;38:1;71:2; 146:9</p> <p>data (113) 15:13;16:9,13;17:15; 18:14;25:18;47:13;49:8; 56:4,7;69:2;76:21;77:1,2,4, 8,10;78:21;86:18;91:21; 92:4,5;94:19;95:2;97:8; 99:16;100:3,7,21;104:5,9; 105:10,12,16;107:11,19; 108:7,10,19;110:19;111:3;</p>
---	--

<p>112:13;113:9;115:19; 116:3,16;118:18;120:9,11, 19;121:6,13,16;122:5,14; 124:15,17;127:18;130:2; 131:11,11;132:15,21;134:6, 18;136:15,18;137:6,10; 140:7;143:12;145:9; 147:16,21;148:4,21;150:4; 154:4;157:15;158:6;159:4, 5;160:9;161:8,9,11,15,19, 21;162:1,12,16;163:12; 169:15;175:12;176:15,18; 177:1,7,13,21;181:18; 183:1,9;184:13,17;185:3,6; 201:10,11,15;203:1;211:18</p> <p>database (3) 14:21;111:19;178:12</p> <p>databases (4) 118:19;130:19;210:11,13</p> <p>date (1) 129:2</p> <p>days (1) 24:1</p> <p>DC (5) 66:7,10;196:14,15,16</p> <p>dead (2) 61:20;63:21</p> <p>deadly (3) 62:2,5,7</p> <p>deal (5) 64:17,20;71:19;136:16; 141:9</p> <p>Dealers (2) 35:12;155:13</p> <p>dealing (1) 31:18</p> <p>dealings (1) 78:10</p> <p>death (14) 15:7;17:11;62:11;94:1,2; 135:14;136:9,19;137:9,11; 138:2;145:5;148:17;149:10</p> <p>deaths (11) 48:17;49:9;84:2;89:11; 93:15;95:16,21;96:9; 127:12;140:2;148:11</p> <p>debate (3) 178:10,13;184:12</p> <p>debated (1) 20:18</p> <p>decades (1) 207:16</p> <p>decide (1) 195:14</p> <p>decision (9) 56:9;74:17;75:3,18;76:4; 195:13;196:14;205:2,4</p> <p>decisions (1) 203:17</p> <p>declaration (2) 10:10;12:4</p> <p>decline (2) 158:3;210:4</p>	<p>declined (2) 88:21;207:15</p> <p>declining (3) 49:13;210:1;211:4</p> <p>decrease (2) 129:16;142:12</p> <p>decreasing (1) 178:8</p> <p>defendants (3) 5:16;11:1;27:21</p> <p>defense (2) 12:12;85:21</p> <p>defensive (1) 75:12</p> <p>define (5) 54:11;97:12;130:11; 210:7,18</p> <p>defined (1) 48:11</p> <p>defining (1) 129:19</p> <p>definitely (2) 118:7;180:20</p> <p>definition (4) 98:13;108:17;166:18; 167:12</p> <p>definitive (3) 50:9;95:20;104:14</p> <p>definitively (1) 200:3</p> <p>degree (21) 22:19;53:19;73:19;96:4; 129:15;131:5,21;148:14; 170:20;171:13,20;174:2; 182:18;183:4,19;184:3,18; 185:11,16;186:11;196:7</p> <p>degrees (1) 18:12</p> <p>Delaware (2) 156:8;160:17</p> <p>demonstrate (2) 88:20;162:6</p> <p>Demonstrated (1) 192:10</p> <p>demonstrates (1) 161:9</p> <p>Density (3) 14:11;41:13;72:16</p> <p>Department (12) 6:10,14;22:15;23:20,21; 25:19;32:5;41:5;47:2; 71:15;72:2,6</p> <p>Depend (10) 62:14;92:3;99:5;137:1; 168:3;170:15;174:2;175:3, 5;205:17</p> <p>depending (3) 86:12;126:7;205:11</p> <p>depends (3) 80:4;129:18;182:5</p> <p>DEPONENT (1) 213:1</p> <p>Deposition (4)</p>	<p>4:2;5:19;9:5;212:5</p> <p>depth (3) 115:6;136:16;200:20</p> <p>deputy (1) 69:21</p> <p>describe (2) 45:8;169:5</p> <p>described (5) 118:6,8,10;164:6,9</p> <p>describing (1) 12:5</p> <p>descriptive (1) 93:17</p> <p>design (8) 36:1;55:8,8;60:15; 162:20;163:11;164:4;169:8</p> <p>designed (1) 169:8</p> <p>designs (1) 163:4</p> <p>desire (1) 207:6</p> <p>despite (1) 196:17</p> <p>detachable (2) 55:6;164:2</p> <p>detailed (2) 181:19,20</p> <p>detect (2) 131:14;151:21</p> <p>deter (1) 194:5</p> <p>deteriorate (1) 160:5</p> <p>deteriorated (1) 160:1</p> <p>determination (1) 211:13</p> <p>determinative (1) 182:20</p> <p>determine (1) 76:3</p> <p>determining (1) 148:6</p> <p>deterrence (1) 193:14</p> <p>Developing (1) 40:12</p> <p>difference (9) 79:13;135:13;136:4,4; 146:11;168:17;184:8; 204:6;206:4</p> <p>differences (4) 91:2;185:9;186:19,19</p> <p>different (54) 24:4;31:21;35:1;36:12; 44:9;45:12;47:9;57:16,17; 58:15;59:16;61:5;62:19,21; 70:8,14;73:13;75:10;80:9; 81:2,9;91:2;93:21;94:5; 95:4;102:18;105:1,9,13,16; 107:10,11;108:7;109:4; 129:8;139:18;146:6;153:2;</p>	<p>159:4;163:19,20,20;165:7, 11;166:14,15;167:11; 169:8;180:14;193:2; 197:15;198:2,12;199:5</p> <p>differential (1) 137:21</p> <p>differentials (1) 147:2</p> <p>differentiated (1) 136:12</p> <p>differently (1) 80:19</p> <p>difficult (5) 54:13;131:14;151:21; 203:1,4</p> <p>difficulties (1) 88:1</p> <p>difficulty (1) 155:8</p> <p>Dillon (2) 175:19;177:2</p> <p>Dillon's (5) 7:18;176:19;178:5,19; 185:8</p> <p>direct (1) 28:5</p> <p>Directing (1) 164:13</p> <p>direction (1) 65:21</p> <p>deter (2) 34:10;194:17</p> <p>director (4) 66:15;69:21;78:7;158:9</p> <p>disagree (2) 104:3;127:7</p> <p>Disassembling (1) 46:13</p> <p>discernable (1) 94:12</p> <p>discount (1) 122:19</p> <p>discounted (1) 88:8</p> <p>discrete (1) 32:9</p> <p>discretionary (1) 205:5</p> <p>discuss (4) 12:8;24:16;36:12;161:11</p> <p>discussed (5) 24:21;36:19;43:18; 169:21;202:17</p> <p>discussing (1) 191:4</p> <p>discussion (1) 137:15</p> <p>disentangle (1) 209:17</p> <p>disproportionately (9) 56:6;97:5,6;98:14,21; 99:14;103:7;104:11;119:12</p> <p>dispute (1)</p>
---	---	---	---

<p>104:1 dissertation (10) 13:6,9,11,18;14:2,5,6,14; 24:21;44:12 dissertations (2) 13:3,12 distal (2) 88:15;89:1 distinguish (2) 53:15;116:14 divide (2) 101:21;102:9 division (1) 52:6 doctoral (5) 13:3,18;14:1,14;24:20 documentation (1) 206:5 documented (1) 112:4 documenting (1) 202:1 DOJ (2) 41:11,20 done (37) 13:18,21;20:20;31:15; 32:10;34:19;36:9;41:5; 42:19;47:1,12;52:1;68:16; 69:5;80:5;87:14;105:19; 127:15;140:1,4,5,8,11; 141:4,14;145:14;146:13,18; 153:2;164:21;176:17; 185:8;189:14;191:13,18; 197:19;203:21 doubt (1) 67:16 Douglas (1) 35:10 down (20) 15:17;17:7;32:17;33:10; 37:16;39:7;40:16;41:1,13; 43:14,21;49:5,21;89:5; 92:9;110:11;139:6;169:3,4; 206:13 downs (2) 49:18;93:19 Dr (2) 81:8;190:12 dramatic (2) 51:2,4 draw (5) 16:10;18:11;178:3;195:7; 196:8 drawing (2) 195:18;211:15 drawn (2) 26:18;111:3 drive (1) 156:9 driving (1) 90:13 drop (1) 110:11</p>	<p>Drug (3) 39:9;64:19;205:3 dry (1) 69:11 due (5) 88:3;92:15;153:16;161:1; 203:11 duly (1) 5:4 During (16) 71:18;72:17;87:15;90:6; 101:12;103:11;104:6; 118:18;119:2;123:5;126:1, 2;153:14;163:5;208:14,19 duties (1) 63:11 duty (2) 127:4;128:10 Dynamics (1) 41:3</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>earlier (21) 24:21;26:7;30:17;36:18, 19;38:1;39:13;40:19;42:11; 43:17,18,20;72:15;79:9; 91:13;94:21;161:17;169:3, 21;175:17;201:2 early (6) 23:21;73:12;89:7;99:11; 110:3;153:10 easier (2) 9:11;163:5 easily (2) 54:10;197:4 easy (1) 54:10 ebb (1) 86:12 Economics (1) 86:3 edited (1) 7:14 editor (3) 79:17;80:20,20 editorial (3) 43:11;46:8;164:14 editors (1) 80:21 education (2) 12:20,20 Edward (1) 77:18 effect (9) 30:20;54:15;82:11;87:12; 91:17;153:9;198:6;209:11, 13 effective (16) 65:14;152:18;192:7,10, 17,18;193:9,15;194:1,3,8, 16;195:10;197:19;198:1,4 effectively (1)</p>	<p>193:7 effectiveness (3) 189:19;190:2;193:5 effects (15) 25:3;35:1;49:17;85:12; 90:16,21;95:15,20,21; 144:8;151:16;171:11; 174:21;192:13;209:16 efforts (4) 190:20;191:8;193:21; 199:4 eight (7) 41:10;124:8,10;139:16; 141:17;170:4;173:1 either (6) 96:10;109:2;135:19; 153:6;155:17;185:19 elaborate (1) 42:21 eliminate (4) 115:16;142:9;184:20; 185:3 eliminating (3) 151:5;183:5;185:18 else (4) 8:21;59:12;81:14,20 else's (1) 95:2 elsewhere (1) 108:15 emerge (1) 175:4 emphasis (2) 32:1;45:11 Empirical (4) 8:9;39:1;155:20;157:1 employed (1) 73:1 emptied (1) 151:1 encounter (2) 203:15,16 end (6) 21:9;40:16;45:20;48:13; 183:13;202:11 ended (1) 207:10 ends (1) 63:15 enforced (1) 198:10 enforcement (30) 23:14;39:10;43:15,17; 63:7,10;65:13,18;66:8; 67:9;106:9,21;122:4,7; 123:7;126:11;127:3,8,20; 128:9;142:8,11;143:1; 197:18;204:9;205:9,15,18; 210:21;211:7 engaged (2) 31:18;86:11 enough (8) 38:10;84:16;148:10,16;</p>	<p>155:21;181:19,20;186:10 ensued (1) 178:21 enthusiasts (1) 160:14 entire (1) 159:13 entirely (2) 16:12;149:21 entries (1) 112:13 entry (2) 41:18;147:7 environment (1) 45:16 epidemic (4) 97:17;206:21;207:4,11 epidemiological (1) 45:13 equally (1) 203:4 equipment (1) 182:9 equipped (4) 64:17;116:11;144:18; 202:3 Errata (2) 213:8,14 especially (3) 90:12;144:17;152:1 essay (4) 44:13,20,21;45:3 Essentially (6) 14:15;77:5;85:4;91:5; 119:18;189:15 established (1) 74:18 estimate (2) 88:5;151:10 estimates (6) 76:21;104:20;108:12; 119:4;134:16,17 estimating (2) 90:19;158:13 Eugene (1) 77:18 evaluated (1) 76:19 evaluating (1) 17:4 evaluation (6) 18:3;25:19;29:7;30:7; 71:10;88:11 Evan (1) 40:9 even (23) 31:16;51:3;55:2;56:3; 75:4;90:2;123:19;126:19; 128:16;129:1,14;142:9; 150:5;151:9;160:12; 182:14;183:6,16;184:19; 185:9,18;188:3;207:15 event (1)</p>
--	---	---	---

<p>126:20 events (4) 23:3;29:2;126:12,18 evidence (32) 15:1;21:11;22:21;45:20; 50:2;53:18;76:15;89:7; 98:20;118:21;131:6; 158:16;160:21;169:17; 179:5;186:7,8;187:7; 192:12;193:17;195:17; 198:1,3;199:19;200:1,2,13; 201:3;204:17;206:6;209:2; 211:5 Evidence-Based (5) 22:10,13;23:11,17;31:19 evident (1) 169:17 exact (3) 101:16;104:20;172:4 exactly (10) 30:5;77:9;83:17;86:13; 129:18;159:11;163:3; 191:21;198:13;199:8 EXAMINATION (2) 5:7;85:12 examine (3) 88:20;130:9;136:16 examined (3) 5:6;99:2;213:4 examines (1) 178:13 examining (2) 89:1;109:11 example (10) 23:9;65:20;77:1;80:5; 86:14;92:4;132:15;192:13; 196:13,21 excuse (2) 29:17;102:21 Executive (9) 40:12,15;42:5,8,17;66:3, 5,6;69:20 executives (1) 66:8 exercise (1) 81:1 Exhibit (41) 4:5,7;5:18,20;8:1,6,12; 24:9,10;27:16;28:2;32:14; 46:10,16;82:2,4,10;85:9,10, 14;87:1;94:8;99:19,21; 106:5;112:6,9;117:13; 124:7;133:15,16;134:5,7; 143:11,13;164:16;176:5,6, 7,9;178:5 exist (1) 186:18 existence (1) 85:21 existing (1) 57:2 expect (22) 51:2,4,10;83:14,18;84:3,</p>	<p>8,12;100:18;121:2;129:7, 11;130:5;139:8,8;155:5; 159:8;160:14;205:14; 209:9,10,12 expectation (1) 199:19 expected (3) 87:21;90:8;151:11 expecting (1) 83:2 expenses (1) 39:18 experience (2) 69:2;171:5 experiencing (1) 126:14 expert (11) 17:19;30:12,18;31:2; 58:5,7,8,9;131:16;179:15; 204:6 expertise (1) 18:3 expiration (4) 48:17;52:18;100:15; 105:20 expired (8) 43:12;49:9;152:12,15; 158:3;160:11;201:5;208:1 Exploratory (3) 4:8;7:19;175:18 express (1) 142:16 expressed (1) 204:7 extended (1) 151:16 extensive (1) 177:4 extensively (1) 86:11 extent (4) 100:19;108:10;169:16; 200:13 extra (4) 8:3,5,8;28:2 extrapolate (2) 203:1,5 extrapolating (2) 111:19;171:8 extremely (2) 126:12;142:9</p>	<p>18:16;51:9;80:9;89:20; 101:6;113:5;155:11,13,14; 203:11;207:14;209:15 Factor (5) 37:6;156:2;157:10;175:3; 204:5 Factors (4) 33:3;40:18;175:6;209:18 faculty (1) 71:16 Fader (66) 11:4,8,13;12:1,16;19:2; 28:2,15;44:4;49:3;52:3; 54:2;63:13;64:14;65:5,16; 68:5,9;69:13;75:1,16;78:12, 14;87:2;90:3;104:12; 116:20;118:3;119:14; 121:4,20;123:8,12;124:8; 133:18;138:7;143:13; 152:14;154:9;156:14,19; 166:21;167:17;168:7; 169:1,19;170:14;173:2; 175:1;179:6;185:1;186:12; 187:9;188:7;190:3;194:19; 195:11,20;196:11;199:20; 204:15,19;205:16;207:12; 209:6;212:3 fair (12) 17:9;23:13;38:9;84:16; 121:17;122:1,1;123:6; 136:17;153:4;168:19;170:2 Fairfax (1) 5:12 fairly (4) 100:21;120:21;139:20; 191:11 fall (2) 11:2;29:18 falling (1) 58:2 familiar (21) 27:1;49:8;62:9;77:12,18; 78:2;85:17;103:15;156:5; 158:8,19;174:5;188:17; 189:4,17;190:16,20;191:3, 12;193:13;203:20 familiarity (1) 191:7 family (4) 73:20;74:1,9,11 far (9) 128:9;143:17;155:17; 186:9,10;196:19;202:14; 210:15,19 Farther (2) 43:21;165:11 fashion (1) 55:18 fatal (1) 135:19 FBI (2) 100:5,6 feature (1)</p>	<p>48:11 features (25) 55:2,12;58:16;97:14; 161:2;162:7,11,12;163:7, 13,15,20;164:6,9,20,20; 166:5,11,12;167:7,8; 168:14,15,17;169:4 February (1) 4:3 federal (53) 7:9;12:5;17:5;25:3;26:13, 19;38:3,12,13,19;41:1; 47:15;52:1;55:19;56:14; 57:16,16,19;67:19;68:1; 71:10;82:12;83:7;87:9,12, 14,16;89:15;90:6,11;91:11, 18;93:6;94:17;95:3,8;96:5; 100:15;105:20;155:6; 164:8;165:6,12;166:15; 168:5,14;170:17;171:6,8; 204:12;206:13;207:10,21 feedback (2) 79:2;81:2 feel (1) 213:7 fellow (1) 22:9 fellowship (1) 37:13 felt (5) 56:2;88:6;95:19,21; 196:17 Ferguson (1) 117:3 few (12) 9:10;16:14;29:13,14; 84:19;93:8,16,21;114:3; 139:5;169:21;207:16 fewer (1) 129:9 field (2) 73:18;130:14 figure (6) 115:20;134:7;135:6,16; 144:12;179:8 figures (1) 136:7 file (1) 6:5 filed (1) 103:17 finally (2) 82:3;136:7 find (19) 15:11;34:1;46:12;62:17; 79:21;80:5;81:9;105:12; 134:14;136:4;145:9; 149:15;150:2;155:18; 157:11;203:13;204:11,21; 205:3 finding (5) 16:17;88:2;89:12;92:15; 153:11</p>
	F		
	<p>face (2) 48:16;159:12 faces (1) 199:7 facilitate (4) 55:9;79:3;162:20;169:9 facilitates (1) 182:14 fact (12)</p>	<p>feature (1)</p>	

<p>findings (12) 12:6,8;17:16;47:3;88:7,9; 94:4;97:1;140:18;149:2; 162:5;190:13</p> <p>finish (1) 9:17</p> <p>finished (1) 70:20</p> <p>finishing (2) 67:3;71:1</p> <p>fire (14) 50:12;55:9;59:14;61:13; 65:8,9;137:17;138:10; 162:20,21;163:2,6;169:9; 190:6</p> <p>Firearm (19) 33:3;36:4;53:21;58:17; 60:17;63:10;64:11;74:15; 102:3;142:17;163:19; 181:16;188:3,15;191:1; 202:16;203:18;204:14; 209:10</p> <p>firearm-related (20) 76:18;83:7;84:5,10; 95:10;104:8;142:12;143:6; 174:21;189:12,19;192:19; 193:8;194:3,10;196:10; 206:8;207:9;208:20;209:4</p> <p>firearms (99) 17:20,20;20:6;24:17; 28:7;30:4,6,10,13;31:8,12, 16,21;32:8,10;33:10;34:16; 36:13;37:5;38:14;44:1; 58:9,9,11,20;59:1,3,7,14; 60:12,14;61:10;62:7;63:7; 64:2;65:14;72:14;73:20; 74:3,21;75:4,5,8,14;76:1; 84:14;86:10;100:19;101:7, 8;103:20;104:6;106:7,19; 107:4;115:11;116:16,17; 119:1,6,20;120:7,12,20; 121:17;144:21;147:1; 162:13;164:12;168:20; 171:3;172:13,16;181:8,10; 185:15;190:17;191:14,15, 17;192:5,18,20;193:7; 194:1,4,8,15,18;195:1,5,8,9; 196:8;197:4;202:6;203:15, 15;208:9</p> <p>firearms-related (4) 70:10,18;191:5;192:8</p> <p>fired (40) 16:6,19;17:1;59:3,6,18, 20;60:5,7;77:7,9;95:14; 132:10,17;133:7,10;134:14, 16,17,21;139:10;144:5,19; 145:8;146:7;147:19;149:5, 8,17,20;150:1,6;171:15; 173:9;183:16;199:13; 201:15,20;202:1,5</p> <p>fires (1) 61:15</p> <p>firing (4)</p>	<p>55:5;59:11;151:2;181:21</p> <p>firm (4) 50:3,7;131:10,19</p> <p>first (22) 5:4;7:8;10:20;14:3,8; 19:21;23:19;34:11;42:13; 79:11;82:13;85:17;88:20; 90:2;112:5;116:8;134:5; 141:7,10;147:7;159:10; 179:1</p> <p>five (17) 28:8;46:10;50:14;77:5; 82:3;92:10;96:14,20;106:5; 115:8;132:15;133:19; 142:7;151:7;153:5;172:7; 186:16</p> <p>Fixed (4) 90:15,21;166:19;167:14</p> <p>flash (4) 55:14;168:2,6,9</p> <p>flat (1) 210:1</p> <p>Florida (1) 113:12</p> <p>flow (4) 86:12;159:14;172:9; 181:11</p> <p>fluctuation (1) 88:4</p> <p>fluctuations (1) 123:19</p> <p>focus (10) 17:2;31:13;50:19;132:13; 134:4;175:14;189:10; 190:21;191:4;206:17</p> <p>focused (2) 30:8;193:14</p> <p>focuses (1) 197:17</p> <p>focusing (2) 167:12;179:21</p> <p>folding (3) 55:13;162:15;167:20</p> <p>follow (5) 12:14;16:16;24:13;196:1; 203:14</p> <p>follows (1) 5:6</p> <p>follow-up (1) 13:21</p> <p>footnote (8) 16:13;85:8;86:21;107:16; 111:6;122:12;147:16; 187:18</p> <p>force (3) 62:3,4;190:17</p> <p>foregoing (1) 213:4</p> <p>forget (1) 51:20</p> <p>forgive (1) 184:15</p> <p>form (7)</p>	<p>13:10;19:2;28:15;52:3; 64:14;65:5;123:12</p> <p>formal (2) 11:15;60:21</p> <p>former (2) 21:12;78:6</p> <p>formerly (1) 101:3</p> <p>forth (2) 26:14;75:9</p> <p>Fortunately (2) 101:17;207:15</p> <p>Forum (7) 40:15;42:5,8,17;66:3,5; 69:21</p> <p>Forums (1) 40:12</p> <p>forward (2) 68:10;163:9</p> <p>found (23) 14:15;15:1;16:4;28:20; 87:18;88:10;89:4,6;96:15; 97:3;99:12;105:4;106:6; 109:13;111:16;145:7; 146:15;147:2;150:5; 153:12;158:2;170:18;182:1</p> <p>foundation (10) 22:1;33:15,15,17,20,21; 37:8;73:10;103:16;158:10</p> <p>fountain (1) 69:12</p> <p>four (14) 23:10;70:1,3;87:8; 106:17;107:17;110:12; 111:7;113:5;124:18; 130:14;131:4;172:6;177:15</p> <p>fourth (1) 87:8</p> <p>Francisco (1) 10:19</p> <p>freely (2) 100:20;208:13</p> <p>frequency (2) 188:14;203:9</p> <p>frequent (1) 178:21</p> <p>front (6) 32:12;46:11;86:17; 102:17;114:2,18</p> <p>full (4) 82:13;114:2,18;136:6</p> <p>fully (2) 96:2;206:9</p> <p>functionally (1) 48:10</p> <p>functions (1) 64:4</p> <p>funded (20) 32:4,5,7;33:7,13,14,15; 34:17;35:13,15;37:18;38:4, 15;39:3,10;40:14;41:16; 42:9,10,14</p> <p>funding (11)</p>	<p>23:21;24:7;25:21;26:1; 33:6;34:2,4,6;35:4,15;38:8</p> <p>Further (11) 39:7;41:1,13;43:14; 56:17;85:3;93:13;101:5; 150:19;158:17;174:19</p> <p>future (2) 36:13;152:1</p> <hr/> <p style="text-align: center;">G</p> <hr/> <p>gain (1) 77:11</p> <p>Gary (1) 113:11</p> <p>gather (1) 12:10</p> <p>gave (1) 16:14</p> <p>general (23) 14:18;19:8;27:2,13; 28:10,13;58:6;61:14;97:5; 98:17;102:14;108:11; 157:4;162:6;178:10; 188:15;189:9;191:2; 194:13;195:2;197:13; 198:15;207:2</p> <p>generalizing (1) 150:15</p> <p>generally (19) 31:20;46:5;49:10;66:8; 79:21;97:21;103:8;109:6; 123:3;130:14;144:7;168:1; 174:6;180:8;190:20; 193:16;197:12;199:17; 207:6</p> <p>Geographic (1) 35:11</p> <p>geography (1) 156:6</p> <p>George (7) 5:11,12;22:2,9,10;30:3; 141:14</p> <p>gets (3) 24:5;74:2;146:7</p> <p>Gius (2) 79:4;85:11</p> <p>Gius' (1) 89:15</p> <p>G-I-U-S (1) 85:11</p> <p>given (6) 9:7;10:10;52:6;95:17; 195:18;213:5</p> <p>gives (1) 125:16</p> <p>giving (2) 45:4;56:17</p> <p>Glenn (2) 37:17;41:2</p> <p>goal (1) 181:6</p> <p>goes (3)</p>
---	--	--	--

<p>141:16;165:11;181:18 good (5) 25:20;69:13;71:19;79:20; 210:5 government (14) 40:4;56:14;57:19;74:20; 75:2,3,8,14,21;76:3;95:7; 191:10;195:10;196:8 graduate (7) 29:7,10;30:7;71:20;72:6; 141:14;175:19 grant (16) 14:3,8;23:10,19;24:2; 33:16;36:20;37:7,10,11; 40:14,17;41:3;67:3;72:15; 80:7 Great (5) 7:21;8:3;10:10;64:20; 136:16 greater (5) 61:14,21,21;63:2;92:18 greatest (1) 18:2 grip (3) 163:8,9;164:3 grips (1) 55:8 ground (2) 9:10;42:6 grounds (1) 171:6 group (6) 21:9;35:19;36:11;40:11; 66:11;109:10 growing (1) 153:16 guess (12) 51:16;126:15;129:18; 130:6;150:9;162:17;168:3; 174:2;183:12;186:1,9; 192:21 guessing (1) 143:9 guide (1) 206:1 Gun (133) 4:5;7:13;13:8,17;14:11, 12;15:3;17:12,14;26:6; 29:8,8,11,12,16;30:8;33:2, 11;34:2,4,5,9;35:12;36:17; 37:6,16;38:12,14;39:9; 40:10,13,18;41:3,13,13,18; 43:15,15,19;44:14,18;45:6, 9,13,14,17;46:2;48:5,15,17; 49:8;53:5;56:4,20;57:8,14; 67:10;71:1,9,13;72:16,16; 74:6;87:19;88:8;89:10,11; 90:6,20;91:7,16;93:21; 94:13;95:15,16,20;102:19, 21;107:14;108:16;109:12; 111:12;121:11;122:10; 123:21;125:3;137:17; 144:16,20;146:10,18,21;</p>	<p>148:6,10,11,16,17;150:20; 152:13;157:4,11;160:14; 162:15;166:13;167:9; 169:5;171:15;173:6,7; 180:11;192:14;193:12,12, 13,15,19,20;194:12,13; 196:16;197:6,12;198:4,9, 12;199:13;204:4;206:20; 207:2,2,14;209:11,20 gunfire (2) 136:2;139:9 gun-related (2) 90:16;91:10 guns (70) 13:7;14:16,19;15:3,6; 42:5;43:5;44:11;48:7,11; 51:10,13;54:13;55:20;56:5, 5,7,10,15;57:20;59:11; 82:18;83:3,15,19,19,21; 88:19;89:8;93:13;96:7,10; 98:1;101:8;103:1;104:1; 107:15;109:2,2,3,15; 110:17;111:1;114:16; 115:13;116:11;117:4; 118:8,12;122:16;124:3; 130:3;144:18;157:5; 161:10;164:19;165:1; 169:12;172:17;173:4; 181:17,21;187:20;197:2; 202:2;203:21;204:11; 206:14,16;208:9 guns' (1) 164:20 gunshot (20) 16:18;42:19;43:1;54:15; 77:6;94:2;132:16;136:8; 137:7;138:2;145:6;146:8, 11;149:4,11;151:6;172:2,7, 8;200:8</p>	<p>handled (1) 80:18 hands (5) 58:3;192:6;194:4,8; 210:17 Hang (1) 116:5 happen (4) 37:9;173:10;187:12; 200:3 happened (4) 117:2;126:1,2;134:18 happens (1) 187:17 hard (8) 21:3;49:19;90:10;130:7; 131:12;169:2;184:5;185:5 harder (7) 15:16;54:8,16;119:17; 163:1;169:4;184:9 HBAR (1) 173:14 head (3) 102:20;143:9;180:13 heading (1) 69:12 Health (2) 21:20;199:2 heard (3) 34:11;79:5;174:6 heart (1) 28:4 heavily (4) 58:1;99:8;107:21;157:4 heavy (1) 32:1 held (2) 36:6;45:5 Heller (5) 74:17;75:2,10,18;196:14 help (3) 182:17;199:3,9 helped (4) 78:21;79:2;197:6;202:15 helps (1) 211:19 hereby (1) 213:3 hesitate (2) 10:2;58:7 hidiers (1) 55:14 high (15) 48:15;61:8,10;67:14; 80:6;95:13;107:15,16; 119:12;132:10;144:5,6; 183:16;193:12;207:6 higher (18) 87:11;90:7;106:8;107:3, 14;115:9,12;116:18;120:8; 121:1,1,18;122:6;123:6; 135:17;162:8,16;207:16 highest (1)</p>	<p>169:5 highlights (1) 71:13 highly (7) 50:8;56:1;63:19;105:5; 123:18,21;126:7 hiring (2) 70:11;71:12 hit (7) 16:6;132:5,7,11;146:8; 173:9;181:4 hold (3) 7:10;45:17;160:14 holding (1) 158:13 holler (1) 10:5 home (1) 84:10 homicide (12) 15:3;35:11;42:19,21; 43:6;44:13;93:5;146:18; 153:7,8;196:16;197:6 homicides (3) 83:16;100:10;143:6 honest (1) 194:9 hoops (1) 57:14 hope (3) 65:10;199:18;200:2 Hopkins (6) 19:19;20:8;26:7;34:9; 40:1;80:17 house (2) 64:19;205:3 Huberty (1) 114:4 Huh (1) 102:6 Huh-uh (1) 67:17 hundred (3) 127:12;143:3,20 hunting (1) 74:4 hypothesizing (1) 83:20 hypothetically (1) 130:17</p>
H			
<p>half (14) 99:12;109:13;110:7,8,11, 12;114:15;122:18;124:21; 125:13;178:21;207:9; 208:20;210:3 Hall (1) 5:12 hand (5) 6:12;7:7;99:18;106:18; 206:1 handful (1) 138:19 Handgun (12) 4:5;13:16;16:2,3,4;38:2; 63:2;64:12;102:21;112:19; 135:8;196:14 handguns (14) 15:12;55:11;59:16;61:14; 62:10;97:13;101:7;102:19; 103:9;117:16;128:13; 161:12;169:12;208:9</p>		<p>help (3) 182:17;199:3,9 helped (4) 78:21;79:2;197:6;202:15 helps (1) 211:19 hereby (1) 213:3 hesitate (2) 10:2;58:7 hidiers (1) 55:14 high (15) 48:15;61:8,10;67:14; 80:6;95:13;107:15,16; 119:12;132:10;144:5,6; 183:16;193:12;207:6 higher (18) 87:11;90:7;106:8;107:3, 14;115:9,12;116:18;120:8; 121:1,1,18;122:6;123:6; 135:17;162:8,16;207:16 highest (1)</p>	<p style="text-align: center;">I</p> <p>idea (4) 22:20;25:20;189:9; 199:10 ideally (2) 65:8,10 identification (10) 5:21;24:11;27:17;46:17; 82:5;85:15;100:1;112:10; 133:17;176:10 identified (1)</p>

166:5 identifies (1) 165:13 identify (2) 32:9;155:6 identifying (1) 74:2 Illegal (9) 34:15;36:17;37:16;39:9; 40:10;44:1;63:20;71:1; 110:21 illegally (2) 155:18;205:1 illness (4) 190:17;191:1,9;193:6 immediate (2) 74:1;89:6 immediately (2) 110:14;135:16 Impact (34) 4:5;7:8;13:16;26:12; 28:20;29:1;38:1;50:3; 53:21;68:1,18;69:7;76:17; 83:6;86:10;87:14;88:3,8; 93:5;94:16;95:2;100:21; 126:3;149:7;159:8;173:15; 184:11;186:4;188:14; 194:11,12,14;199:5;206:8 impacting (1) 192:19 impacts (7) 18:1;25:15;41:11;45:12; 54:9,11;93:14 imperative (1) 9:18 implementation (1) 171:9 implemented (1) 189:5 implications (3) 12:6,8;17:16 implied (1) 149:3 implies (1) 151:5 important (6) 16:21;17:6,16;47:17; 48:10;52:9 imports (1) 51:17 imposes (1) 46:2 improve (4) 10:2;23:17;81:14;191:8 improving (1) 192:5 incidence (1) 211:6 incidences (1) 162:1 incident (19) 16:6;114:4,12;115:4; 117:3;130:5,17;135:15;	136:2;138:1;145:3,5;149:9; 153:7;181:11;182:5,5; 183:13;207:8 incidents (69) 16:18;56:1;95:13;99:15; 105:2,6,7;112:4;113:11,13, 17,21;116:1;117:1,4,15; 118:7,12;119:9;120:11; 121:10;126:8;129:9,16; 130:6;131:7;132:1,7,9,9,16; 133:6,9,12;134:8,20;135:7; 136:8;137:7;139:9,13,14, 17,18;142:15;144:4,5; 150:11,17;151:12;173:6; 177:5,14;180:14,16;181:15; 183:3,11,12,15,16;184:5; 185:19;199:14,15,16,16; 201:19;210:9 include (5) 83:15;98:8;108:20; 187:21;201:14 included (4) 110:15,17;122:15;161:6 includes (1) 125:10 including (3) 98:12;104:10;120:5 incomplete (1) 148:4 inconclusive (1) 17:10 incorporate (1) 30:5 incorporated (1) 81:17 increase (11) 14:17;17:11;55:12;145:4; 153:6;179:9,12;181:11; 210:21;211:6,9 increased (5) 149:20;158:4;203:9,11; 208:14 increasing (7) 177:20;178:1,8;179:4,5; 198:4,11 independent (1) 198:7 independently (1) 54:4 INDEX (1) 4:1 indicate (1) 169:15 indicating (1) 87:10 individual (1) 181:6 individuals (5) 130:11;191:16;192:6,17; 193:6 individual's (1) 74:15 Industry (1)	158:9 inexpensive (1) 197:3 infer (2) 162:18;170:1 inference (4) 99:13;120:2;182:13; 188:16 inferences (2) 187:11;192:15 inflict (2) 55:11;61:18 inflicted (1) 173:9 inflicts (1) 61:21 influence (2) 137:21;149:9 influx (2) 210:15;211:5 inform (3) 22:20;45:19;46:6 informal (1) 61:1 information (17) 17:15;27:2,12;30:21; 43:4;46:21;101:2;114:20; 115:10;145:20;147:11,15; 150:21;164:5,7;176:21; 208:13 informed (1) 200:2 initial (5) 72:21;88:13,17;89:12; 93:9 injured (6) 29:2;138:16;149:19; 150:7,8;185:20 injuries (13) 48:17;49:9;84:2;89:11; 93:14;95:16,21;96:10; 135:19;140:2;148:11,17; 172:8 injuriousness (3) 94:13;152:12;173:5 injury (15) 15:7;17:11;61:21;62:11; 135:14;136:3,8;137:7; 138:1,15;145:5;149:10,18; 150:2,11 input (1) 197:14 Inquiry (2) 8:10;39:1 instance (6) 58:12;100:11;142:19; 173:16;180:10;181:15 instances (4) 109:18;179:1;193:9; 204:10 instead (1) 174:7 Institute (18)	14:4;32:6;33:8;37:18; 38:4,15;40:17;71:5,21;72:9, 13,17;73:1,2,5,7;80:6,8 instruction (1) 11:18 intended (1) 163:5 intense (1) 52:6 intensive (1) 34:21 intent (5) 65:2,7;182:8,15;194:9 intention (2) 63:14,16 interacted (1) 19:19 interchangeable (1) 165:21 interest (6) 24:5;25:18;47:10;95:8; 203:11;205:21 interested (2) 47:13;73:17 interests (1) 22:17 interim (1) 41:4 intermediate (3) 88:13,18;93:10 intern (1) 73:8 international (1) 34:21 Interpersonnel (1) 72:19 interpret (3) 89:16;92:3;137:6 interpreting (2) 89:13;134:19 interprets (1) 162:5 interrupt (1) 9:16 interveners (1) 189:15 intervening (1) 194:17 intervention (2) 189:7,11 interventions (6) 193:3,11;194:21;195:1; 199:3,6 into (22) 12:13;30:6;31:7,12; 35:18;58:3;64:18;73:15; 91:16;115:6,6;130:21; 132:11;144:4;153:9; 154:20;156:13;158:17; 196:13;200:19;205:3; 210:16 introduce (1) 130:16
--	---	--	---

<p>introducing (1) 148:19</p> <p>invasions (1) 84:10</p> <p>invited (2) 20:7;80:19</p> <p>involve (8) 36:14;39:14;84:1;118:8; 119:9;139:9;149:4;200:14</p> <p>involved (40) 16:19;56:4;67:4,21; 70:11,13;71:9;99:8,14; 101:20;109:19;110:4; 111:8;112:15;113:16,21; 114:5,12,14;115:9,21; 116:2,9,10,13;117:4;118:1, 12;119:16;120:1;133:7,9; 134:13;135:17;137:2; 145:18;146:21;155:16; 158:21;211:11</p> <p>involves (2) 134:8;166:19</p> <p>involving (15) 12:11;16:5,7;117:16,20; 135:7;136:8,10,18,20; 137:7,9;138:14;139:13; 145:3</p> <p>Iowa (1) 146:13</p> <p>IPA (1) 72:19</p> <p>issue (26) 15:20;25:7;26:3;28:21; 31:17;46:1;50:20;57:18; 73:14;99:2;107:20;110:20; 111:1;118:19;132:13; 148:19;154:1;155:6;159:3, 5;161:11,15,20;182:13; 187:19;209:7</p> <p>issues (14) 11:13,14;14:5;18:2; 22:18,19;24:18;30:6;31:12; 36:12;45:14;70:11;191:5; 197:9</p> <p>items (1) 172:21</p>	<p>9:14,15;64:18;143:16</p> <p>John (2) 5:13;133:18</p> <p>Johns (6) 19:19;20:8;26:7;34:9; 40:1;80:16</p> <p>Jon (1) 7:15</p> <p>Jones (9) 110:21;121:13;175:12; 176:15,18;177:1,7;178:12; 210:12</p> <p>Joseph (2) 78:2;114:11</p> <p>Journal (6) 6:21;79:17,17;81:3;86:5; 177:8</p> <p>journals (1) 80:1</p> <p>Joyce (3) 33:14,17,19</p> <p>judge (1) 95:15</p> <p>judging (2) 88:1;153:11</p> <p>judgment (7) 45:21;46:3;53:7;54:20; 55:16;104:15;197:7</p> <p>July (1) 117:12</p> <p>jumped (1) 57:13</p> <p>jurisdictions (2) 66:9;154:5</p> <p>Justice (23) 6:10,15;13:1;14:4;23:20, 21;25:19;32:5,6,7;33:8; 37:19;38:5,16;40:14,17; 41:5;47:2;71:15;73:7;78:8; 80:6,8</p>	<p>117:2</p> <p>killings (1) 63:16</p> <p>killings (11) 106:8,20;121:10;122:3,6; 123:7;126:11;142:8,10; 210:21;211:7</p> <p>kind (11) 37:12;38:8;42:12;52:17; 74:12;108:8;153:1,17; 162:20;163:9;180:4</p> <p>kinds (1) 205:10</p> <p>Kleck (1) 113:11</p> <p>Kleck's (1) 120:11</p> <p>knew (1) 78:9</p> <p>knowledge (7) 58:6,13;86:6;99:3; 177:11;201:12;210:11</p> <p>known (1) 150:19</p> <p>Kolbe (2) 5:15;10:12</p> <p>Koper (17) 4:2;5:3,10,20;24:10; 27:10,16;46:16;82:4,10; 85:14;99:21;112:9;133:4, 16;176:9;213:12</p>	<p>199:11;201:4,18;202:3; 203:10,19;207:21;208:8; 209:3,13;210:16;211:5,12</p> <p>largely (1) 170:17</p> <p>larger (4) 15:6;66:8;102:3;136:18</p> <p>last (22) 26:11;42:4,12;48:14; 86:14;115:8;122:9;148:7; 158:6;159:18,20;160:2; 168:9;177:5;178:1;190:10, 10;207:16;208:11;209:4; 210:7;211:1</p> <p>late (1) 20:1</p> <p>later (3) 25:21;88:6;121:13</p> <p>law (65) 12:9;17:5;22:16;23:14; 43:16;46:2;63:6,10;64:8; 65:13,18;66:7;67:9;76:20; 88:17;89:3;106:9,21;122:3, 6;123:7;126:11;127:3,8,20; 128:8;142:8,10;143:1; 164:9,18;165:1,8,10,12,13; 166:15;167:12;168:5,14; 170:12;171:7,10;172:12; 174:20;188:4,14;193:15; 194:9,15;195:2;196:9,14, 18;197:6,17,18;198:7,18; 204:9;205:9,14,17;210:21; 211:7</p> <p>lawful (4) 74:16;75:15;194:16; 208:16</p> <p>Lawrence (1) 71:19</p> <p>laws (8) 44:10;54:10;85:12; 164:10;193:19;194:12; 198:2;200:6</p> <p>law's (1) 47:18</p> <p>LCM (2) 147:15;185:10</p> <p>LCMs (4) 82:19;117:21;118:1; 147:19</p> <p>lead (4) 35:20;150:6,8,10</p> <p>leading (1) 83:16</p> <p>learn (2) 34:3;58:15</p> <p>learning (2) 61:3,4</p> <p>least (23) 7:10;12:20;17:8;35:15; 59:21;98:5;104:5;112:19; 113:17;114:13,13;117:6,7; 122:18;137:4;138:16; 139:13;160:10,11;166:4;</p>
J	K	L	
<p>James (3) 103:15;114:4;158:8</p> <p>January (1) 20:8</p> <p>Jeff (8) 6:14,20;38:19;41:10,17; 72:20;99:9;146:17</p> <p>Jerry (2) 35:6;70:16</p> <p>Jersey (14) 71:2;77:1,2,4;132:14,21; 145:13,16;146:10;147:16; 149:2,7;150:14;151:4</p> <p>job (4)</p>	<p>Kansas (4) 14:21;59:12,15;60:10</p> <p>keep (11) 57:10;86:9,15;149:13; 153:12;154:11;156:21; 160:18;192:5;194:4;200:4</p> <p>kept (2) 153:18;200:9</p> <p>key (3) 12:5;16:17;93:9</p> <p>keys (1) 156:21</p> <p>kill (4) 63:11;64:13;65:3;181:6</p> <p>killed (14) 29:2;113:14;124:19; 127:20;128:9,13,16;130:15, 18;131:2;142:20;177:15; 181:4;199:15</p> <p>Killeen (1)</p>	<p>lab (4) 59:6,11,15;60:9</p> <p>labeled (1) 90:15</p> <p>language (1) 207:13</p> <p>large (130) 15:2;19:9;21:7,16;23:10; 27:3,14;28:7,47;16,18;48:4, 7,9;50:4;52:1;53:4,15; 54:14;55:6;68:2,17;69:7; 82:12,20;83:8,14;84:4,9,13; 87:15;88:9;89:8;90:12; 91:12;93:6,13,20;94:17; 95:3,9,17;96:6;106:7,19; 113:16;114:1;115:11,14,16, 21;116:2,10,11,13,15,16,18; 117:5,16;118:8,13;119:2,6, 10,11,16,20;120:1,4,7,12, 20;121:9,18;136:13,13; 137:2,8;139:8;144:3,8,18; 147:1;150:20;151:6,11,17; 152:2;153:13,16,21;154:7, 19;155:9;156:11;157:15; 158:1;161:3;162:19;164:2; 169:7;170:6;171:1,3,14; 172:1;180:1,11,20;181:2; 182:19;183:6;184:20; 185:15,18;186:3;188:1;</p>	

194:7;202:5;210:15 leaves (1) 75:3 led (4) 40:11;41:2;71:16;211:6 Lee (2) 35:6;70:16 left (2) 67:4;195:10 legal (5) 131:15,18;165:1;173:19; 195:13 legally (3) 155:3;156:12;208:3 Legislation (3) 38:12;54:19;132:19 legislators (1) 48:16 legislatures (2) 57:15,16 less (18) 15:13;51:4;65:14;92:10, 10,16;125:21;130:4,5; 136:9,19;143:3;157:8; 179:16;194:16;199:11,12; 204:13 lessen (3) 173:5;194:12;199:14 Lessons (1) 39:9 lethal (10) 13:8;14:20;55:1,11; 61:13,15,17,20;64:12;65:14 lethality (6) 44:12;56:7;94:12;152:12; 172:7;173:5 Letters (1) 86:3 level (5) 83:18;92:17;189:14; 207:2;211:16 levels (3) 207:6,7,17 library (1) 176:13 Licensing (1) 38:14 life (2) 159:19;160:4 lifted (1) 158:4 light (1) 77:3 lightning (1) 127:4 likelihood (7) 92:15;126:14;136:1; 145:4;149:19;150:7;187:5 likely (20) 76:3;127:3;128:9,13,16, 17;135:19;136:9,19;137:8, 11;151:20;171:19;183:7; 187:15;188:2,13;192:6;	199:12;200:3 limit (5) 75:7;148:9,15;194:12; 195:1 limitation (1) 199:7 limitations (1) 184:16 limited (14) 16:13;17:13;31:9;50:2; 58:13;109:10;136:15; 147:11,14,17;148:21; 150:21;162:1;176:17 limiting (1) 195:4 limits (1) 165:2 line (4) 128:10;195:7,18;196:8 lines (1) 93:17 link (1) 15:2 list (7) 32:18;39:7;79:10,15; 80:15;114:2,18 listed (3) 36:3;42:4;168:4 literature (3) 86:9;164:11;193:16 litigation (2) 10:11;12:12 little (14) 53:5;56:4;69:11;70:13; 74:2;86:12;117:10;130:10, 10;133:19;135:6;147:14; 186:13;188:14 Living (1) 156:4 lobby (1) 48:15 Local (3) 33:11;43:16;157:11 localities (1) 105:16 localized (1) 157:4 location (1) 177:16 logarithms (1) 92:5 lone (1) 177:17 long (17) 57:8;103:1,21;109:1; 110:8,17;111:12;114:16; 122:15;159:18,21;160:2; 161:10;166:12;167:9; 169:12;208:9 longer (2) 25:19;154:12 look (41) 18:14;25:14;26:17,19;	40:3;54:18;76:20;77:10; 80:14;89:9,14;91:5;103:3; 104:14,17;105:1,8;109:9; 111:1,13;112:1,12;115:5; 118:6;122:12;124:4;130:1; 134:6;137:1;139:10; 142:15;143:2;148:20; 158:17;159:1;177:4; 178:14;180:14;193:15; 199:5;211:10 looked (15) 13:6,7;14:19;94:5; 102:18;105:15;107:12,19; 112:13;133:2;140:9;158:6; 190:11;200:19;204:21 looking (33) 17:21;25:16;38:1;44:11; 45:12,13;52:16;56:12; 62:15;88:12;92:4;93:17,20; 99:10;103:5;105:11; 107:10;110:2;112:18; 117:10,11;118:17;119:21; 122:20;136:1;141:7; 146:13;150:4;157:21; 177:14;180:15;197:1; 209:15 looks (1) 100:2 lost (1) 96:13 lot (18) 23:3,7,14,16;32:4;35:5; 48:5;58:15;73:13;147:12; 164:8;188:21;193:16; 197:15,17;198:1,1;207:15 Louis (3) 40:13,15;43:20 low (1) 128:20 lower (5) 87:20;160:12;193:20; 197:12;207:7 lowering (1) 76:16 Lucy (1) 77:12 Luke (4) 7:18;175:19;176:18; 177:2 Luke's (1) 185:8 lump (1) 168:19	54:5,12;60:2;75:21;76:16; 82:12;83:14;87:15;93:7; 95:9;110:21;115:21; 116:10;119:6,17,21;120:1; 137:2;147:1;148:9,15; 150:21;151:11;152:2; 159:18;162:19;167:15; 175:12;180:12,20;181:3,16; 201:18;203:19 magazines (129) 16:10;19:10;21:8,16; 27:14;28:7;47:17,19;48:4, 8;52:2;53:4;54:14;55:6,7; 67:14;68:2,18;69:7;76:5,8, 12;82:19,20;83:8,20,21; 84:4,9,13;88:10,19;89:9; 91:12;93:13,20;94:18;95:4, 18;96:6;106:7,19;113:16; 114:1;115:11,16;116:2,11, 13,15,16,18;117:5,16; 118:9,13;119:2,10,11; 120:5,7,12,20;121:9,18; 130:3;136:13,14,19;137:8; 144:3,9,18;150:20;151:1,6, 18;153:13,17,21;154:7,20; 155:9;156:1,11;157:13,16; 158:1,13,15;159:7,14; 160:5,12,15;161:3;164:2; 166:19;169:7;170:7;171:1, 3,14;172:1;173:4;180:2; 181:7,10;182:19;183:3,6; 184:20;185:15,18;186:4,21; 188:1,1;199:11;201:4; 202:3;203:10;205:10; 208:1,8;209:3;210:16; 211:6,12 magic (1) 17:3 main (3) 65:9;71:11;191:12 majority (2) 181:14;200:12 makers (10) 21:10;23:5,7;45:20;47:2; 54:20;55:15,21;173:17; 195:13 maker's (1) 126:15 makes (5) 58:15;59:17;105:17; 148:6;165:13 making (6) 46:7;54:20;55:16;64:16; 113:10;187:10 man (1) 143:16 management (1) 66:12 manufacture (1) 60:15 manufacturers (2) 163:19;164:21 many (33)
M			
		machine (11) 55:19;56:5,5,7,10,14,20; 57:14,20;206:14,16 magazine (52) 16:11,13,15;17:3,5,11,15; 27:4;44:21;48:10;50:4; 51:3,16;52:8,13,21;53:9,16;	

<p>9:21;22:18;25:15;48:7; 56:4;88:7;107:12;109:18; 113:20;122:13;124:2; 130:19;132:11;133:6; 134:13;139:9,10;142:15,19; 143:6;152:21;154:19; 155:20;157:2;181:6,17; 182:20;193:9;195:1,8; 199:4;208:15;211:11</p> <p>mark (10) 27:10;46:9;79:4;82:2; 85:9,11;112:6;133:14; 176:5,5</p> <p>marked (25) 5:18,20;8:6;24:9,10; 27:16;28:1;32:13;46:16; 82:4,10;85:10,14;94:7; 99:18,21;112:9;117:13; 124:7;133:16;134:5; 143:11;164:16;176:7,9</p> <p>market (1) 71:13</p> <p>markets (5) 37:17;38:13;39:9;41:3; 157:4</p> <p>Martin (1) 5:15</p> <p>Maryland (63) 12:9;13:2;19:8;27:13; 52:20;57:9,15;64:3,4;71:15, 20;72:2;78:9;98:5;153:21; 154:3,4,6,15,18,19,21; 155:7;156:6;157:16;159:9, 9,14;165:5,8,13;167:12; 171:1,7,10,15,21;172:12; 173:7;174:15;188:2,13,19; 190:18;197:2,6;198:7,8,11; 199:8;203:5;205:9;206:21; 207:9;208:4,11;209:4,21; 210:7,12,14;211:1,8</p> <p>Marylanders (1) 210:17</p> <p>Maryland's (2) 76:11;170:5</p> <p>Mason (7) 5:11,12;22:2,9,10;30:3; 141:14</p> <p>Mass (79) 4:7;7:18;28:21;99:15; 105:7;106:8,20;107:3,18; 110:14,20;111:7,15;112:3, 15;113:4,11;114:21;115:9, 12;116:1,19;117:20;119:8, 13;120:8;121:2,10,19; 126:10;128:19;129:1,4,7, 11,16,19,21;130:7,12,19; 131:1,8;132:2,8;140:2; 141:4,18;142:7,10,20; 144:2;161:18;175:17; 177:4,18;178:7,7,10,11,14, 20;179:3,4;180:2,11;182:8; 183:8,13,15;185:19;198:16; 199:9,16;200:11;210:6,7,</p>	<p>10,18</p> <p>master's (2) 12:21;176:11</p> <p>materials (1) 19:7</p> <p>matter (9) 5:14;6:5;53:1;80:11; 101:6;132:8,9;144:14; 162:4</p> <p>matters (1) 93:1</p> <p>maximum (1) 134:17</p> <p>may (23) 9:10;31:11,20;50:13; 62:12;65:11;66:18;67:6; 70:1;99:5;109:21;121:12; 151:1;152:5,6;160:1; 175:14;184:5;196:18; 198:17;201:3;205:9;206:17</p> <p>Maybe (17) 11:2;25:17;27:20;51:21; 52:8,9;64:19;80:21;114:15; 133:9,18;143:9,20;179:10; 211:9,17,19</p> <p>Mayor (1) 21:12</p> <p>Mayors (1) 110:21</p> <p>Mayo-Wilson (1) 40:9</p> <p>mean (39) 12:15;44:5;50:8,11;53:5; 54:4;58:10;61:10,17;62:3; 73:21;84:11;85:4;90:17; 91:21;92:11;97:19;119:16; 123:16;127:10;130:16; 131:9,19;132:3;142:17; 148:13;152:14;154:2; 155:8;156:2;163:2;170:11; 171:17;184:9;192:12; 195:12;202:17,20;204:20</p> <p>meaning (3) 82:19;88:2,10</p> <p>meaningful (2) 201:18;202:10</p> <p>means (5) 61:20;89:17;131:19; 191:5;194:17</p> <p>measurably (2) 148:10,17</p> <p>measure (2) 54:16;152:11</p> <p>measured (1) 153:6</p> <p>measures (14) 25:16;88:8,12,14,15,18; 89:1,10;93:10,14,18;94:6; 198:19,21</p> <p>measuring (1) 171:11</p> <p>media (1) 177:4</p>	<p>mediators (1) 189:15</p> <p>Medifast (1) 164:18</p> <p>meeting (1) 21:19</p> <p>meetings (2) 19:20;79:3</p> <p>member (3) 67:9;74:9,11</p> <p>members (3) 66:7;73:20;74:1</p> <p>membership (1) 66:6</p> <p>mental (5) 190:17,21;191:9;193:6; 199:2</p> <p>mention (4) 85:21;147:8,16;158:18</p> <p>mentioned (17) 23:19;26:7;30:17;40:18; 43:20;62:16;66:2;85:20; 90:2;91:13;112:2;157:21; 158:19,20;168:9;169:3; 204:4</p> <p>messing (1) 143:14</p> <p>met (3) 19:21;20:3,4</p> <p>methodologically (1) 130:1</p> <p>methodology (1) 201:11</p> <p>methods (1) 152:1</p> <p>metrics (1) 92:5</p> <p>Michael (1) 22:1</p> <p>micro (1) 211:16</p> <p>microforms (1) 13:13</p> <p>might (41) 55:12;64:18;75:4;80:19; 81:11;86:12;88:13;93:18; 96:1;99:13;105:1;114:16; 126:20;129:7,9;130:4; 131:11,14;132:18;151:6; 153:15;158:7,19;160:13; 170:1,15;175:4,5;178:3; 179:10;181:9;183:10; 189:7;195:3;196:21;198:4, 19;199:3;202:19,19;205:17</p> <p>miles (1) 157:7</p> <p>military (2) 97:13;164:20</p> <p>military-style (5) 161:2;162:11;164:9,19; 166:5</p> <p>million (4) 108:14;158:15;159:7,12</p>	<p>Milwaukee (1) 146:19</p> <p>mind (7) 110:3;149:13;153:12,19; 157:1;180:8;200:4</p> <p>mindful (1) 209:15</p> <p>mine (1) 81:12</p> <p>minimum (1) 134:16</p> <p>minor (1) 165:9</p> <p>minutes (1) 133:19</p> <p>missing (1) 148:1</p> <p>Missouri (1) 15:1</p> <p>misspoke (2) 125:6;152:20</p> <p>mixed (3) 93:10;192:12;198:2</p> <p>model (9) 17:15;40:13;90:19;92:14, 21;147:11;150:20;168:3; 174:3</p> <p>modeling (1) 91:15</p> <p>models (6) 58:15;59:17;105:17; 148:6;163:20;165:14</p> <p>modest (2) 53:8;200:5</p> <p>moment (9) 31:10,15,18;32:1;44:17; 96:12;167:5;175:14;180:16</p> <p>money (1) 37:10</p> <p>more (138) 15:7;16:5,6,19,21;25:17; 31:20;45:11;48:5;50:13; 52:10;53:9;54:13;55:7,8, 11;57:1;61:13,15,17,18; 64:12;76:12,13;77:7,9; 80:1;88:3,14;89:1;93:1; 95:12,15;97:6;98:2,11,14; 99:8,13;102:5,7;104:14,18, 20;105:5;107:19,21; 110:19;111:7;113:5,14,14; 115:6;118:18;121:9; 123:18,20;126:2;127:3; 128:9,13,16,17;130:3,14; 131:4;132:4,13,17;133:7, 10;134:13,21;135:6,18; 137:8,11,17;138:10,14; 139:1,13;144:19,19,20; 145:8,8,9,12,21;146:15; 147:15,19,19;149:5;150:1, 6,7,8,10;151:12;158:13; 161:1,10;162:2,13;163:11, 16;164:19;166:20;167:15; 174:10;177:15;178:18,21;</p>
--	---	--	---

181:3,7,7,15,16;182:3,6,15; 187:4,5,14,16;189:6; 192:18;193:1,16,18,21; 199:16;200:1;204:13; 206:5;209:10	name (5) 5:8,13;78:12;79:5;189:1	185:10	168:7;169:1,19;170:14; 173:2;175:1;179:6;185:1; 186:12;187:9;188:7;190:3; 194:19;195:11,20;196:11; 199:20;204:15,19;205:16; 207:12;209:6
most (17) 26:13,17;31:9;32:18; 47:17;48:1,10;52:9,12; 54:10,10;104:7;107:13; 164:1;182:7;194:2;198:7	names (1) 189:8	nonlethal (1) 65:19	observation (1) 187:17
Motor (9) 110:21;121:13;175:12; 176:15,17;177:1,7;178:12; 210:12	NARDONE (3) 7:2,5;8:16	nor (3) 138:2;145:5;149:10	observed (1) 95:18
motivated (3) 155:21;182:10;204:12	nation (1) 203:2	Northern (1) 156:4	obtain (2) 33:16;156:11
motor (1) 128:10	National (19) 14:3;32:6;33:8;37:18; 38:4,15;40:17;67:9,13; 70:14;71:10;73:6;80:6,8; 100:3;103:16;109:15; 119:19;158:10	note (4) 38:7;49:15;84:17;111:14	obtained (1) 23:20
Motorola (2) 33:15;42:14	nature (2) 92:3;204:11	noted (6) 39:13;94:21;95:16; 109:12;138:11;178:16	obvious (1) 10:1
move (1) 68:10	near (3) 40:16;152:1;156:5	notes (1) 159:2	obviously (4) 31:11;55:10;115:15; 125:20
movement (2) 65:18,21	necessarily (9) 80:4;99:4;136:21;165:9; 178:11;185:5;203:18; 206:4;209:12	notice (2) 5:19;9:2	occasionally (1) 23:5
much (15) 9:18;38:13;45:14;61:14; 76:8;93:1;99:16;102:5,7; 126:17,18;161:15,19;162:9, 18	necessary (1) 213:8	noting (1) 169:6	occur (4) 127:1;130:2;171:19; 172:8
Multiple (8) 37:5;80:21;153:8;181:17, 21;185:14,15;187:21	need (1) 78:21	notwithstanding (2) 18:16;74:19	occurred (2) 150:11;177:15
murder (24) 85:13;86:20;87:11,15,18, 20;88:4;89:10;90:6,12,16, 20;91:7,10;97:7;98:15; 99:1;100:2,11;101:1;105:1; 110:14;178:7;206:13	needed (3) 61:4;79:1;213:14	November (2) 11:2;86:15	offending (2) 126:18;179:1
murdered (2) 127:4,9	neighborhood (2) 103:3;143:10	nuances (1) 121:7	Off (10) 69:14;82:6;102:19; 124:10,11;133:21;143:8,17; 175:9;180:13
murderer (1) 115:1	nevermind (1) 93:3	number (75) 16:21;17:6;34:7;35:3,8; 43:2;47:12;72:1,14;84:5, 14;87:4;96:9;100:14; 101:20,21;104:1;105:8,16; 116:1;123:5;127:11;128:1, 19;129:15,19,20;130:6,11, 15;131:1,2,7;134:14;136:5; 138:2;139:18;140:1,2; 142:16;143:8;144:6;145:5; 149:8,10,16,18,20;150:16; 158:16;159:11;171:2,15; 172:2,6,6;176:6;182:8; 183:8,10,12,17;185:4,17,18, 20;198:19;199:13,14; 201:15,19;202:5,6;208:14; 211:3	offender (2) 155:15;181:2
murders (33) 91:16;99:8,10;101:12,20, 21;102:3;103:7;104:8,11; 105:6;106:13;107:15,18; 109:12,16;111:7,16;112:15; 113:4;114:21;122:10; 123:5,21;124:3;125:3,21; 126:2;142:17;143:20; 193:20;209:11,20	New (7) 10:13;42:6;57:1;64:8; 132:21;160:17;188:4	number (75) 16:21;17:6;34:7;35:3,8; 43:2;47:12;72:1,14;84:5, 14;87:4;96:9;100:14; 101:20,21;104:1;105:8,16; 116:1;123:5;127:11;128:1, 19;129:15,19,20;130:6,11, 15;131:1,2,7;134:14;136:5; 138:2;139:18;140:1,2; 142:16;143:8;144:6;145:5; 149:8,10,16,18,20;150:16; 158:16;159:11;171:2,15; 172:2,6,6;176:6;182:8; 183:8,10,12,17;185:4,17,18, 20;198:19;199:13,14; 201:15,19;202:5,6;208:14; 211:3	offenders (6) 82:18;129:8;138:9; 150:19;155:20;160:12
must (2) 52:17;118:12	newspaper (1) 111:17	numerals (1) 91:19	offer (5) 29:11,16;47:8;51:17; 159:4
myself (5) 57:14;58:7;134:4;176:18; 209:8	newspapers (1) 47:10	numerically (1) 109:18	offered (4) 11:11,15;29:13,21
N	next (19) 29:15;33:10;36:2,3,15, 16;37:4,15,16,20,21;38:12, 18;40:2;46:10;82:2;133:18; 146:13;213:15	object (1) 123:12	offering (1) 52:5
nail (2) 15:17;17:7	Night (1) 197:3	Objection (48) 19:2;28:15;52:3;54:2; 63:13;64:14;65:5,16;75:1, 16;87:2;104:12;116:20; 118:3,3;119:14;121:4,20; 123:8;138:7;152:14;154:9; 156:14,19;166:21;167:17;	offhand (2) 110:18;142:21
	NIJ (5) 39:3;41:16;42:2;72:15; 80:11	O	office (2) 66:10;191:10
	nine (6) 42:3;94:3;122:11;124:18; 125:9;146:4		officer (3) 63:20;127:3,10
	nod (1) 68:12		officers (20) 63:10;65:13;84:14;106:9, 21;122:4,7;123:7;124:19; 126:12;127:9,20;128:9; 142:8,11;143:1;205:9,15; 211:1,7
	non-banned (2) 82:18;173:4		official (4) 64:3;78:6,10,20
	none (1) 127:1		offsetting (2) 156:2;175:3
	nonetheless (1) 93:16		often (15) 29:15;63:9;65:18;80:18; 88:11;98:2;101:4;105:3;

<p>121:9;157:7;166:14;168:4; 181:19;193:11;197:2</p> <p>Ohio (1) 146:14</p> <p>O'Malley (1) 5:15</p> <p>once (1) 169:3</p> <p>one (131) 8:6,17;9:15;10:13,16,17; 24:16;25:17;28:5,20;29:11; 30:21;35:15;36:3;37:16; 38:12,21;41:9;42:5,11; 44:10,10;47:11;48:9;50:17; 53:8;54:19;57:1,3,10;59:13, 21;60:1;66:2,15;69:1,17; 72:15;76:20;77:7,10;87:8; 90:7,9,15;91:18;92:10,16; 99:6;106:18;108:4,14,16; 110:19;111:1,7,18,21; 112:1,14;113:3;114:3; 117:2;118:6;121:7;122:9; 123:3,10;126:9,14;129:7; 130:4,18;132:18;134:8,15, 16;135:7;136:7;138:9,16; 139:5,13;141:7,10;143:21; 144:11;146:9;150:17,17; 155:16,17,18;156:10,21; 157:3;158:20;159:1;162:5; 168:13,14;169:17;170:1; 171:9;172:19;173:16,18; 179:8,8;180:11,11,15; 181:16,16;182:4,11;186:16; 190:9,14;192:15;197:16; 198:8,17,18;199:7;200:4, 17;202:8;203:6;206:14; 209:8</p> <p>ones (13) 24:7;38:18;62:19;79:10, 16;115:5;160:17;169:5; 189:21;191:4;193:4; 203:16;210:12</p> <p>one's (1) 174:14</p> <p>ongoing (1) 67:2</p> <p>online (1) 46:12</p> <p>only (30) 9:15;25:14;28:5,10,13, 17;33:21;34:1;55:3;110:8, 17;111:7;115:15;117:21; 122:20;130:18;136:15; 138:9,19;139:5;145:16; 151:6;157:19;162:8; 166:18;167:13;180:11,11; 204:18;208:6</p> <p>onto (1) 160:14</p> <p>open (1) 75:3</p> <p>opening (1) 21:13</p>	<p>operable (1) 160:13</p> <p>operate (2) 45:16;191:19</p> <p>operates (1) 165:6</p> <p>operating (1) 60:11</p> <p>opinion (15) 11:10,11,15;47:21;52:17, 20;131:16,20;179:15; 196:6;204:1,3,7,9,18</p> <p>opinions (4) 45:5,8,17;179:16</p> <p>opposed (5) 53:9;98:21;113:21;131:2; 146:16</p> <p>optimistic (1) 151:10</p> <p>option (1) 52:10</p> <p>orally (1) 20:13</p> <p>order (3) 143:14;165:20;187:4</p> <p>organization (5) 34:1,19,21;66:6;67:1</p> <p>organizational (1) 18:2</p> <p>original (16) 25:5,13;35:17;36:9,14; 39:15;41:16;44:2;67:21; 68:4,16,19;69:5;140:9; 145:11;191:13</p> <p>originate (1) 157:6</p> <p>others (4) 79:1;114:17;146:13; 182:6</p> <p>otherwise (2) 90:8;171:9</p> <p>ours (1) 91:15</p> <p>out (45) 8:19;13:17,19;16:17; 24:4;36:8;39:3;43:7;46:21; 49:16,20;56:17;79:18; 80:16;82:1;86:14;99:4; 101:7,9;106:16;108:14; 109:7;110:3,6,16;113:20; 120:11;125:5,14;134:20; 143:20;146:20;153:5; 156:1;159:12;160:6;164:8; 166:4;181:1;189:2;190:10; 191:11;192:5;193:9;194:4</p> <p>outcome (11) 88:12,14,15,18;89:1; 93:10;94:6;135:13;182:14, 17,20</p> <p>Outcomes (10) 4:6;13:17;38:2;135:7,9; 146:6;148:10,16;183:3; 184:11</p>	<p>outgrowth (2) 36:5;38:3</p> <p>outreach (1) 23:4</p> <p>outside (4) 154:18;156:10;157:2; 205:14</p> <p>over (20) 9:10;13:6;14:16;19:19; 32:10;35:3;41:10;73:19; 79:8;90:20;91:3;103:20; 146:19;159:13;169:12; 177:5;178:13;184:12; 207:16;211:18</p> <p>overall (12) 51:13;54:14;83:18; 122:10;132:19;135:15; 144:10;150:4;178:10; 200:5;209:9;211:9</p> <p>overcome (1) 181:13</p> <p>overlap (1) 40:5</p> <p>overly (1) 151:10</p> <p>overturned (1) 196:20</p> <p>Overview (1) 43:19</p> <p>overwhelmingly (1) 169:12</p> <p>own (12) 58:20;73:20;74:3,15; 99:4;105:3;140:5,11; 145:11;194:15;195:4; 208:16</p> <p>owned (5) 57:4;59:1;75:11,14; 158:15</p> <p>owners (1) 53:5</p> <p>ownership (7) 74:20;75:5;76:6;194:13; 195:2,5,8</p>	<p>panel (1) 24:6</p> <p>paper (5) 35:21;40:18;43:18;79:18; 213:15</p> <p>papers (2) 44:8,8</p> <p>paragraph (31) 26:12;28:6;48:14;50:1; 82:14;96:14,20;106:5; 114:3;115:8;117:2,12; 136:7;141:10,16,17,17; 142:7;144:13;146:1; 160:20;164:17;170:4; 173:1;175:20;180:3; 200:21;202:21;206:17,17, 20</p> <p>paragraphs (3) 175:12,14;179:20</p> <p>parentheses (2) 91:20,20</p> <p>parse (1) 106:16</p> <p>part (16) 20:10;26:6;29:9;42:10, 13,20;43:20;52:9;65:9; 66:11;81:10;91:14;122:4; 156:9;162:4;173:20</p> <p>partial (2) 82:16;83:9</p> <p>partially (1) 33:14</p> <p>particular (37) 18:20;35:14;38:7;54:21; 62:14;75:4;99:14,16;106:6; 107:21;115:4;116:21; 118:17;121:6;123:15; 126:8,8;131:10;138:12; 141:7;145:7,13;153:1; 159:3;161:20;173:12,16; 174:1;178:16;186:14; 190:14;197:17;199:6; 203:18;204:13;205:19,20</p> <p>particularly (9) 17:21;27:19;47:13;55:1, 16;56:3;161:3,13;209:12</p> <p>parties (1) 18:17</p> <p>partly (1) 33:15</p> <p>Partnership (2) 67:10,13</p> <p>parts (1) 166:1</p> <p>pass (1) 197:11</p> <p>passed (2) 196:15;197:7</p> <p>past (2) 62:13;210:17</p> <p>patience (1) 211:21</p> <p>Patrick (2)</p>
P			
		<p>page (58) 24:16;28:8;32:20,21; 40:7,16,21;41:10;42:3,16; 44:13;69:17;82:9;84:17; 87:1,7;94:7;96:14,18,19; 106:4;107:8,8;108:18; 109:5;112:2,16;113:1,10, 10;116:6;117:12;118:7; 119:7;122:8;124:6,9,14; 134:7,15;135:6;141:11,17; 146:5;147:16,21;148:7,7; 150:13;152:6,9;160:19,20; 178:5,19;179:8;187:18; 213:15</p> <p>paid (2) 39:18,21</p>	

<p>114:12;115:3 patrol (1) 64:7 pattern (3) 16:16;147:18;179:11 patterns (5) 18:14;152:2;153:15; 175:4;184:13 pause (2) 33:5;44:17 peer (19) 24:6;79:10,13,16;80:1,3, 9,10,14,15;81:4,6,8,15; 86:5;145:17;177:8;201:8, 12 penalties (2) 198:4,12 Pennsylvania (6) 35:8;36:7;70:17;146:14; 156:8;160:16 people (50) 15:7,7;16:6;24:6;36:11; 47:2;51:13;64:20;66:11; 79:18;81:10;113:14;129:9, 20;130:13,14,17,18;131:1, 2;132:11;136:5;139:17; 140:7,7;142:15,20;143:4; 149:16;150:7,8;154:10; 155:11,14;157:2,11;159:15; 173:9;177:15;178:13,16; 181:6,12;182:15,20;183:10; 185:20;194:1;195:4;207:17 people's (1) 192:2 per (21) 15:12;16:6;30:8;36:14; 45:15;58:7;127:10,12; 130:5;142:15;144:20; 145:10,12;146:1,15,20; 147:2;153:7,7;172:6; 176:13 percent (49) 50:14;77:5;87:11,20; 90:7;92:10,11,16,18;102:1, 10,21;103:20;104:7;107:17, 18;108:4,16;110:12,12; 119:1,5,19;120:16,16,18, 21;122:11,13;123:3,4,10; 125:6,9,18;132:16;135:2; 138:15;143:21;144:1,11; 150:2;151:7;153:8;158:5, 15;186:16,16;187:5 percentage (24) 16:18;49:17;93:21;94:1; 98:1;101:13;102:2,4,14; 103:12;105:4;109:2,3; 123:15,16;125:3;128:4; 132:18;144:10;149:3; 157:5;200:5,7;202:2 percentages (4) 101:16;126:4;139:20; 148:1 PERF (3)</p>	<p>40:15;66:7;67:7 P-E-R-F (1) 67:7 performance (1) 60:18 performed (1) 91:9 perhaps (13) 27:20;49:19;57:21;65:20; 76:20;99:15;101:2;117:7; 129:9;151:20;153:14; 198:19;199:3 period (25) 66:18;71:18;72:3;86:18; 100:12,14;101:12;102:15; 103:6,12;104:7;105:19; 111:8;112:21;113:4; 118:18;119:3;122:11; 123:5;126:1,3;146:19; 153:14;208:15,19 perish (1) 65:11 permit (1) 196:6 permits (2) 56:18;57:1 perpetrator (2) 63:19;187:19 perpetrators (3) 63:12;65:3,15 person (4) 58:16;138:16;139:14; 181:13 personal (1) 74:2 persons (5) 111:7;113:5;138:11; 144:19;145:8 perspective (3) 126:16,16;200:9 Peter (1) 39:8 PhD (3) 4:2;5:3;213:12 PhDs (1) 12:21 phrase (2) 62:2;186:14 piece (5) 42:20;47:4;79:20;81:1; 213:15 Pierce (2) 37:17;41:2 pistol (24) 15:19;55:8;60:1,3,11; 111:11;112:16;113:5; 114:6;134:9,20;135:12,17; 146:11,15;163:8,10;164:3; 166:11,11;167:7,8,13,14 pistols (43) 16:3,5,10;96:16;97:4,12; 98:1,4,9,12,17,21;108:20; 109:7;110:7,15,17;122:15,</p>	<p>19;123:17;125:1,10,14; 135:8;136:8,12,18;137:8, 17;138:10;150:5;161:6,9, 13;162:9;166:16,19;167:4, 20;168:16,18;169:17;208:5 Pittsburgh (2) 189:21;190:7 place (5) 59:12;75:21;112:12; 195:19;205:20 placed (1) 141:8 places (4) 40:7;141:6;189:21; 193:18 plaintiffs (1) 5:14 planning (1) 200:14 play (1) 144:4 Please (10) 5:8;9:20;27:11;33:9; 34:14;35:9;37:4;85:9; 156:17;184:15 plus (2) 124:18,18 pm (1) 212:5 point (18) 18:21;44:20;49:16;50:1; 66:15;88:5;89:7;95:19; 107:7;108:14;116:4;122:9; 123:18;128:4;141:2;158:6; 184:14;186:17 pointing (1) 181:1 points (4) 107:9;108:19;109:5; 111:20 police (55) 18:1,2;23:11;31:16,19; 33:11;34:15;36:16;40:9,12, 15;42:5,7,16,17;43:3,3,21; 59:6,15;60:9;64:3;66:3,5,5, 8;69:20;70:11;71:1,12; 73:10;84:14;99:9,10;105:6, 14;107:15;109:13,16; 115:21;121:10;122:10; 123:5,21;124:3;125:4; 144:3;157:7;161:18; 193:11;199:4;202:2;203:9, 14;204:21 policies (2) 35:2;45:12 policing (14) 17:21;22:18;23:11,17,17; 30:4,6,13;31:10,12,19;32:3; 43:19;73:14 policy (32) 17:21;21:10;22:11,14,20; 23:4,7;29:8,12,16;30:4,10, 13;31:8;34:9;37:13;45:19,</p>	<p>20;46:2,6;47:2;54:20; 55:15,21;58:9;71:9;88:3; 126:15;173:17;190:10; 195:13;199:5 political (4) 48:14;52:7;173:20; 195:13 politically (1) 52:9 Politics (5) 44:14,18;45:6,9,15 poll (2) 52:15,17 polls (1) 52:20 pooling (1) 211:18 popularly (1) 97:16 population (7) 46:3;75:11;76:6;102:14; 108:11;160:5;195:2 portion (1) 102:18 portions (1) 134:4 positive (3) 87:10;89:16,17 possessed (2) 114:21;115:2 Possession (4) 34:16;40:10;44:1;191:17 possibility (3) 75:3;173:8,21 possible (4) 52:6;54:11;181:7;203:8 Possibly (1) 128:16 Post (7) 157:20;160:9;201:1,7,14, 21;202:13 post-ban (1) 25:18 potential (9) 48:5;64:17;76:4;170:7, 10,12,16;173:5;174:20 potentially (8) 62:4,7;77:10;93:18; 175:4;199:13;200:7;209:11 power (3) 61:8,11;63:2 powerful (2) 48:15;174:10 practice (1) 22:20 Practices (2) 33:11;43:16 practitioners (3) 23:4,7,12 precise (1) 50:9 precisely (1) 163:7</p>
--	---	--	--

<p>predict (3) 129:14;160:3,4</p> <p>pre-existing (2) 87:21;90:8</p> <p>prefer (1) 168:20</p> <p>preference (1) 169:16</p> <p>preferentially (1) 205:11</p> <p>premature (1) 95:19</p> <p>premium (1) 155:19</p> <p>prepare (1) 26:8</p> <p>preparing (2) 12:2,17</p> <p>presence (1) 202:16</p> <p>present (3) 20:13;108:11;166:7</p> <p>presentation (2) 20:20;41:20</p> <p>presentations (1) 79:15</p> <p>presented (1) 21:11</p> <p>presenting (2) 21:2,4</p> <p>press (1) 184:14</p> <p>presumably (1) 202:9</p> <p>pretty (3) 157:4;162:18;209:16</p> <p>prevalence (3) 104:21;120:19;123:2</p> <p>prevalent (1) 157:15</p> <p>Prevent (7) 67:10;151:12;189:12; 192:11;193:21;194:17; 198:15</p> <p>Prevention (3) 33:11;34:6;43:16</p> <p>previously (4) 72:5;90:3,4;100:19</p> <p>price (1) 175:6</p> <p>prices (1) 174:3</p> <p>primarily (2) 38:8;163:8</p> <p>primary (2) 31:13;103:9</p> <p>principle (3) 162:7;173:3;186:20</p> <p>principles (1) 18:9</p> <p>prior (3) 39:16;50:1;86:21</p> <p>Priori (2)</p>	<p>8:9;39:1</p> <p>probabilities (3) 18:15;171:11;185:6</p> <p>probability (36) 18:12;53:19;76:17;96:5; 127:2;129:15;131:5,16,21; 138:1;145:3;149:9,14,14; 162:15;170:21;171:4,13,18, 18,21;172:4,20;174:20; 182:19;183:5,19;184:3,18; 185:17;186:11,15,16;187:4; 195:18;196:7</p> <p>probable (1) 187:4</p> <p>Probably (31) 20:1,4;27:18;28:3;55:20; 56:3,6;63:20;76:3;87:4; 91:3;103:2;104:18;105:8, 13;108:13,14;116:8,12; 128:7,17,18;139:10,11; 151:10;155:19;179:9; 191:11;206:14;209:16; 211:10</p> <p>problem (2) 199:6;207:18</p> <p>problematic (2) 90:9;93:16</p> <p>procedures (2) 57:6;203:14</p> <p>PROCEEDINGS (1) 5:1</p> <p>process (4) 24:3;80:9,12;81:3</p> <p>produce (6) 136:9,19;137:9,11; 170:12;200:7</p> <p>produced (2) 115:20;175:16</p> <p>produces (1) 102:10</p> <p>product (1) 11:16</p> <p>professional (4) 12:20;19:18,20;20:4</p> <p>professionalization (1) 29:9</p> <p>professor (13) 5:10;19:18;22:9;28:10; 71:19;81:12,14;89:14; 96:13;113:12;120:10; 152:7;179:14</p> <p>program (12) 18:3;29:6;30:6;34:5; 37:12;41:19;71:10;78:8; 88:11;188:18;189:5;190:12</p> <p>programs (6) 35:2;189:1,8,18;191:3; 193:8</p> <p>Progress (1) 41:19</p> <p>prohibit (1) 172:13</p> <p>prohibited (1)</p>	<p>196:9</p> <p>prohibits (1) 164:18</p> <p>project (18) 32:6,10;33:7,10,13; 35:10;36:1,5;37:6;39:10, 11;40:11;42:11;43:20;54:8; 72:4;131:13;132:18</p> <p>projected (1) 144:7</p> <p>projection (2) 131:10;200:4</p> <p>projections (4) 49:16;50:3,7,8</p> <p>projects (9) 23:10;31:17,21;32:5; 61:4;67:3;71:11;72:14; 73:13</p> <p>promised (1) 175:13</p> <p>proper (1) 57:6</p> <p>proposal (3) 24:3,5;25:21</p> <p>proposals (1) 24:4</p> <p>protected (1) 11:15</p> <p>protects (1) 74:15</p> <p>protocol (1) 44:2</p> <p>prove (2) 179:3;182:12</p> <p>provide (3) 27:12;163:19;185:11</p> <p>provided (11) 5:15;10:12;22:2,5;27:8, 15,18,21;28:10;33:5;79:2</p> <p>providing (4) 10:21;34:1,4;179:15</p> <p>provision (1) 167:2</p> <p>provisions (1) 56:13</p> <p>public (52) 12:6;21:20;37:13;41:10; 45:21;46:4;52:13,17,19; 106:8,20;107:3;115:10,12; 116:19;119:13;120:8; 121:2,10,19;126:11;128:19; 129:2,5,7,12,16,21;130:7, 12;132:2;140:3;141:4; 142:7,10,20;177:4,16,18; 178:17,20;180:2;182:21; 184:19;185:3,19,21;190:10; 196:18;197:9;198:16; 200:11</p> <p>publication (20) 13:12;14:9,10;36:8,16, 19;37:21;39:8;40:8;41:2; 42:4,20;43:15,18;47:5,8; 79:14;132:20;176:13;190:9</p>	<p>publications (7) 31:17;38:18,20;40:4; 71:3;79:10,16</p> <p>publicized (1) 56:1</p> <p>publicly (2) 47:1;80:12</p> <p>publish (5) 13:9,13;81:15;132:21; 179:17</p> <p>published (14) 6:21;13:12;37:7;41:11; 42:12;45:1;46:20;72:21; 79:6,8,20;80:11;176:8; 177:8</p> <p>pull (4) 8:19;82:1;97:10;125:13</p> <p>Purchase (5) 37:5;56:20;57:3;154:19; 191:17</p> <p>Purdy (2) 114:12;115:4</p> <p>purpose (5) 64:12;74:16;155:1; 196:10;202:4</p> <p>purposes (6) 75:12,15;93:17;122:19; 194:16;208:16</p> <p>push (1) 186:9</p> <p>put (19) 10:18;12:3;24:4;27:2; 46:11,21;58:17;75:9;86:17; 92:17;93:16;113:12;130:7; 143:14;169:5;171:4,18; 185:5;186:14</p> <p>puts (1) 53:4</p> <p>putting (1) 171:10</p> <p>P-value (1) 92:10</p>
Q			
			<p>qualification (1) 191:14</p> <p>qualifications (2) 94:21;191:15</p> <p>qualified (3) 30:12;31:2;89:11</p> <p>qualifiers (1) 85:7</p> <p>qualify (4) 30:18;89:19;129:20; 130:6</p> <p>qualifying (2) 97:14;183:13</p> <p>quality (3) 80:7,13;81:1</p> <p>Quantitative (1) 6:21</p> <p>quick (3)</p>

69:11;86:15;175:7 quite (9) 20:19,21;60:4;76:13; 128:20;151:20;181:19; 190:13;195:21 quote (4) 51:4;82:17;170:7,8	81:12;85:19;89:20;90:3; 156:17,18;164:11;189:20; 190:11;212:4;213:3 readily (2) 173:13;174:18 reading (7) 75:18;83:3;84:20;86:16; 106:9;117:17;138:3 real (3) 88:3;130:7;178:6 realities (1) 52:7 really (15) 10:17;27:19;28:19;36:14; 41:20;45:10;62:13;131:13; 137:3;155:20;162:10,18; 165:1;168:18;194:21 realm (1) 205:14 reason (7) 9:19;10:4;67:16;104:1,2; 132:5;173:17 reasonable (26) 18:12;53:19;96:4;129:14; 131:5,16,21;144:11;148:14; 170:20;171:12,17,20; 182:18;183:4,19;184:3,18; 185:16;186:10;188:16; 194:5;195:17;196:6; 199:18;200:4 reasons (2) 15:16;172:19 recall (13) 19:14,21;21:1,18;43:2; 59:17,20;60:4;77:9;81:21; 99:7;133:11;154:5 receive (2) 35:15;81:13 received (1) 30:19 recent (10) 10:14;31:17;32:18;38:13; 107:19;110:19;118:18; 152:2;178:15;198:7 recently (3) 10:17;157:20;191:11 recently-enacted (1) 170:6 recognize (1) 99:20 recognizing (1) 52:7 recollection (1) 189:11 recommend (1) 198:21 recommendations (2) 21:10;36:13 record (16) 5:9;9:11,18;68:13;69:14, 16;82:6,8;124:10,11,13; 133:21;134:2;156:18; 175:9;213:5	records (1) 193:6 recounting (1) 112:3 recovered (3) 105:5;157:7;202:2 recovering (3) 203:10,15;205:4 recovery (1) 204:5 Reduce (40) 34:15;40:10;83:2,15; 84:5,9,13;86:20;96:9; 130:6;131:7;132:1,7; 148:11,17;151:6;171:1,15; 172:1,6,7,8;173:7,9;183:10; 184:19;185:4,19;186:21; 192:7;193:12;194:3,8,10; 196:10;197:6;199:9,13; 202:4,15 Reduced (8) 38:14;84:20;96:6;132:6; 186:4;192:14;196:16;201:4 Reducing (16) 7:13;22:21;36:4;40:13; 41:18;43:21;53:8,21;144:8; 155:8;185:17;189:19; 191:5;193:5,7;202:6 reduction (16) 89:8;91:16;93:11,12; 94:12;95:9,12;131:12; 132:18;144:10;160:4; 183:7,12;187:1;200:8; 202:12 reductions (1) 89:2 Reedy (6) 13:16;15:19;38:1;71:2; 133:3;146:9 reexamining (2) 25:7;26:4 refer (8) 67:7;90:21;92:9;110:8; 112:21;147:6;160:8;206:20 reference (11) 24:20;42:11;98:16; 106:12;113:10;114:4; 121:12;140:13;150:14; 180:1;201:1 referenced (3) 46:13;47:15;112:15 references (2) 28:13;114:3 referred (4) 108:20;141:3;175:11; 197:2 referring (14) 28:13;50:3;53:4;82:13; 90:18;109:16;140:15; 141:13;175:20;176:1; 178:9;206:21;207:5;208:6 reflect (1) 100:21	Reforms (1) 38:13 refute (1) 158:16 regard (3) 18:20;65:21;105:9 regarding (2) 28:21;88:9 regardless (3) 130:15;132:10;135:11 region (1) 23:12 registering (2) 56:16;156:12 regression (3) 90:16;91:10;92:2 regulate (1) 58:1 regulates (1) 198:9 regulations (1) 197:11 related (11) 22:2;31:12,21;32:8;42:1; 51:10;53:21;71:9;73:13; 96:7;104:8 relationship (3) 66:21;91:11;149:16 relative (3) 108:1;142:16;174:3 relatively (1) 162:1 relatives (1) 74:3 relaying (1) 107:10 released (1) 52:18 relevance (2) 14:6;112:2 relevant (4) 23:16;113:9;159:13; 186:8 reliable (1) 80:2 reliably (1) 137:4 relied (2) 120:9,10 relies (1) 177:2 relied (1) 151:1 rely (3) 100:7;127:19;179:18 relying (2) 139:2,4 remains (2) 123:18;157:12 remarks (1) 21:13 remember (11) 20:2,19,21;52:15;59:11,
R			
raid (1) 64:19 raise (1) 173:21 raised (1) 14:5 raising (1) 153:14 rampage (1) 178:17 ran (1) 71:20 RAND (1) 70:5 random (2) 88:4;92:16 randomized (1) 184:10 range (8) 22:18;108:8;120:18; 125:7,16;131:16;134:18; 175:6 rapid (4) 55:9;162:20;163:6;169:9 rapidly (1) 50:12 rare (4) 126:12,13,20;142:9 rarely (3) 55:3;56:10;206:16 rate (23) 51:13;62:11;90:12,16; 91:7,11;127:8,14,17,20; 128:5,6;138:15;142:12; 144:10;150:2;159:16; 173:7;178:21;206:12,13; 209:3,9 rates (14) 49:21;85:13;86:20;87:11, 15,18,20;88:4;89:10;90:7, 20;93:5;127:10;193:20 rather (3) 49:4;73:21;182:9 rationale (1) 83:1 raw (2) 92:5;125:17 reached (1) 95:4 reacting (1) 55:21 read (16) 28:12;77:16;79:2,6;80:1;			

<p>13;62:13;70:10;124:4; 144:1;190:13 remembering (1) 21:3 reminder (1) 49:3 remove (1) 161:8 removing (1) 164:20 render (1) 79:19 rendering (1) 80:10 renewal (1) 51:16 repaired (1) 160:1 Repeat (2) 156:15,19 rephrase (2) 9:21;11:20 replication (1) 14:4 report (102) 5:16;6:9,13;8:5;10:11,12, 21;12:2,13,14;11:16;14; 24:8;25:7;26:4,10;27:19; 28:11,14,18;33:2;35:18; 36:10;38:21;40:17,21;41:4, 4;47:12;68:21;70:20;72:16; 78:11,18;79:2;82:9;87:17; 89:4;91:14;94:3,4,7;95:16; 96:12;97:20;99:9;103:15; 106:4;107:6;108:18;109:8, 21;111:14;112:5,16;113:1, 3;115:7,18;116:4;117:13; 119:7;120:7,10;121:13,17; 124:5,6;125:8;127:18,19; 138:13;140:14,15;141:3; 144:13;146:1,2,18;147:9; 149:6,7;150:14;152:6; 153:1,12;158:12;160:19; 161:12;170:4;173:1; 175:11;178:19;179:21; 180:17;191:10;200:21; 204:10,13;205:11,18;206:2, 18 reported (9) 68:19;103:20;106:2; 117:15;121:14;138:12; 140:5,7;203:9 reporter (1) 49:4 reporting (1) 203:12 reports (19) 19:7;26:14,19;27:19; 40:4;49:16;62:12;77:16; 79:15;80:6,7;99:4;100:4; 105:15;111:17;140:10,12; 181:18;182:6 represent (3)</p>	<p>5:13;52:20;103:19 representation (3) 104:6;108:2,3 representative (1) 111:15 represented (4) 107:21;108:13;123:19,21 representing (1) 18:17 requested (2) 6:4;7:17 require (3) 64:18;156:3;166:4 requirement (1) 156:12 requiring (1) 197:20 Research (59) 5:12;18:9;23:2,18;30:5; 31:5,7,13,16;32:2,9,9;34:2, 4,18;35:1,13,18;36:4,9,13, 14;39:15;40:12,15;41:19; 42:5,8,17;61:4;66:3,5,6,10, 11,15;67:21;68:4,16,19; 69:6,21;70:10,11;71:7,13, 16;72:10;76:19;86:12; 96:15;97:3;132:14;140:9; 158:9;191:13;196:15,21; 197:5 researchers (3) 20:5;22:17;23:7 respect (23) 11:10,14,14;17:8,10; 19:13;32:8;46:13;57:8; 68:1;69:6;82:11;83:6; 91:10;95:2;141:4;161:12; 162:2;169:18;172:6; 184:16;191:9;203:21 respects (1) 199:3 responded (1) 183:21 response (1) 9:1 responsible (4) 50:14;176:19;194:15; 196:9 rest (1) 85:8 restrict (3) 56:9;58:1;75:4 restricted (3) 159:15;174:4;195:9 restricting (3) 56:2,16;196:19 restriction (5) 47:18;51:17;53:7;76:12, 16 restrictions (9) 46:1;48:6;49:18;55:19; 75:21;197:2;206:9,14,15 result (15) 15:8;84:2;129:9;132:4;</p>	<p>135:19;138:1;144:6,19; 145:5;147:19;149:4,9; 183:7,11;202:11 resulted (6) 14:9;16:5;136:2;181:3; 196:14;210:18 resulting (3) 94:1,2;153:21 results (6) 26:9;93:10;107:11; 150:16;152:21;171:8 résumé (1) 66:14 retention (1) 71:12 return (1) 115:7 Returning (2) 96:12;106:4 Reuter (1) 39:8 review (20) 28:9;36:18;39:15;40:8; 44:3,13,21;79:10,14,16,18; 80:1,15,21;81:4,10;145:17; 176:14;177:8;201:12 reviewed (8) 24:6;42:12;80:3,9;81:6,8; 86:5;201:8 reviewers (2) 80:10,14 reviewing (1) 45:3 reviews (2) 35:1;70:21 revisit (1) 26:3 revisited (1) 25:6 revolver (6) 59:21;60:10;135:13,20; 146:12,16 revolvers (7) 16:4,7;59:20;136:10,20; 137:9,18 Richardson (1) 37:8 rifle (17) 60:5;62:21;63:2,3; 112:19,20;114:8,9,14; 127:5;129:3;163:8;166:12; 167:2,9;173:12;174:11 rifles (69) 55:10;61:13,13;62:17; 64:7;98:2,18,20;99:8,12; 101:8,10,13,20;102:14,19; 103:2,2,7,8,12,13;104:8,10, 19,21;105:4,11;109:7,10, 11,14;110:9;112:14,17; 113:19;114:20;122:20; 123:2,9,15,17;127:9,21; 128:11,14,17;129:3;131:7; 132:1;161:16,18;162:2,9;</p>	<p>164:3;165:5,14;166:17; 168:16,18;169:18;173:15; 208:6,7,8;209:2;210:16; 211:5,11 right (192) 6:7,11,16;7:3,7;8:20;9:4; 12:19;13:15,21;14:13; 15:10;17:8,18;18:16;20:9; 21:1,5,19;22:5;25:10; 26:11;27:1;29:4;30:9;32:2, 17;33:9;34:14;35:9,13,17; 36:2,15;37:15,20;38:6,17; 39:2,6,14,18;40:20;42:2; 43:13;44:17;48:3;50:6,13; 51:1,9,15;52:18,19;53:3,11; 57:7,11,13,14,19;58:8; 59:14;61:1,7,19;62:16;63:6, 18;64:6;67:6,18;68:13; 69:1,10;70:4,12,15;72:5,7; 73:9;74:4,15;75:5,20;76:5; 78:2;81:5,7,19;82:1,17; 83:10;85:6;86:2,3,8,16; 87:7;93:2;95:1;98:19; 101:4,18;102:11;103:4,11, 19;104:4,5;107:7;108:9,17; 110:6;112:7,12;113:3; 114:10,19;116:7;118:15; 119:8;122:14;125:6,20; 126:10;127:17;128:3; 130:9,21;133:20;134:11; 135:3,11,16;137:3,15; 139:12,20;140:13;141:9,15; 142:1,4;143:1,3;145:11,15; 146:3;147:13;149:12; 152:5,19;154:6;155:10; 158:3;159:6;160:17;164:8, 17;165:17,19;166:10; 167:16;168:9,12;171:12; 172:18;176:14,21;177:12; 187:8,18;190:16;191:20; 192:1,4;195:5,8,10;197:19; 198:14;200:17;201:8; 202:7,13,21;205:8;206:8; 210:20;211:3,20 right-hand (1) 136:6 rights (3) 46:2;196:19;197:8 rigorous (1) 153:18 rim-fire (1) 61:16 rise (3) 13:17;48:18;178:18 risen (1) 49:11 rising (1) 153:14 Risk (7) 33:2;37:6;40:18;55:12; 162:8,16;169:5 risks (1) 48:16</p>
--	---	---	---

<p>robberies (3) 51:14;83:2;84:6</p> <p>role (4) 45:18;78:17,19;190:21</p> <p>Roth (9) 6:14,21;38:19;41:10,18; 72:20;73:4;99:9;146:17</p> <p>roughly (7) 70:1;108:16;110:12,13; 123:3;135:2;177:5</p> <p>rounds (9) 55:7;61:13,15;76:9,13; 158:14;166:20;167:15; 208:10</p> <p>rules (1) 9:10</p> <p>run (1) 179:11</p> <p>rush (1) 68:10</p>	<p>scheme (1) 53:8</p> <p>School (2) 21:20;71:20</p> <p>school's (1) 34:9</p> <p>science (3) 18:19;71:16;196:6</p> <p>scientific (21) 18:9;22:21;96:5;129:15; 131:5,21;148:15;170:21; 171:13,21;182:19;183:5,19; 184:3,17,18;185:11,17; 186:11;195:18;196:7</p> <p>scientist (6) 18:5,8,12;45:18;72:10; 179:15</p> <p>Scratch (1) 93:3</p> <p>screening (1) 191:16</p> <p>se (6) 15:12;30:8;36:14;45:15; 58:7;176:13</p> <p>search (1) 155:16</p> <p>searches (1) 177:4</p> <p>second (11) 7:10;42:4;74:14,20; 116:5;117:2,12;122:9; 136:6;137:16;170:5</p> <p>secondhand (3) 155:15;197:21;198:9</p> <p>section (1) 43:15</p> <p>security (1) 70:14</p> <p>seem (10) 75:17;107:20;113:7; 123:18,20;177:21;178:17; 183:1,9;185:11</p> <p>seemed (2) 16:16;17:6</p> <p>seems (6) 106:17;159:13;173:17; 179:8,12;183:21</p> <p>select (2) 24:7;33:19</p> <p>selected (2) 47:7;177:13</p> <p>sell (4) 154:12,15;155:3,18</p> <p>Seller (1) 33:3</p> <p>selling (3) 155:13;157:11;159:16</p> <p>semester (1) 29:18</p> <p>semi-automatic (19) 15:11,19;16:3,5,10;55:5; 57:8;60:1,3,10;134:8;135:8, 12;150:5;166:19;167:14;</p>	<p>172:13,15;208:9</p> <p>semi-automatics (12) 14:18;16:19;50:11; 112:19;113:16;114:1; 117:21;118:1;119:1,9; 144:17;145:3</p> <p>seminar (1) 29:9</p> <p>send (1) 81:3</p> <p>sends (1) 79:18</p> <p>senior (1) 22:9</p> <p>sense (4) 55:15;57:21;126:13; 193:2</p> <p>sent (2) 47:9;159:1</p> <p>sentence (9) 26:11;87:9;94:11;106:16; 115:8;122:4;137:16;148:7; 170:5</p> <p>separate (1) 113:20</p> <p>separately (1) 79:15</p> <p>September (1) 46:15</p> <p>sequentially (1) 141:9</p> <p>series (3) 88:12;107:9;146:5</p> <p>serious (4) 61:18;97:7;98:15;99:1</p> <p>seriously (1) 206:3</p> <p>served (1) 95:8</p> <p>service (1) 160:6</p> <p>session (1) 23:11</p> <p>set (1) 26:13</p> <p>sets (2) 166:15;184:8</p> <p>seven (7) 40:21;87:20;122:11; 124:18;125:9;160:20;178:1</p> <p>Several (3) 59:9;143:9;211:18</p> <p>Shall (1) 102:7</p> <p>share (18) 27:7;54:13;84:1;106:8; 107:3,14;115:9,12,20; 116:19;119:13;120:8; 121:2,18;122:6;123:7; 139:8;142:18</p> <p>shed (1) 77:2</p> <p>Sheet (2)</p>	<p>213:8,14</p> <p>Sherman (1) 71:19</p> <p>shift (1) 14:18</p> <p>shifts (1) 14:16</p> <p>shoot (4) 15:7;63:15,21;182:15</p> <p>shooter (6) 177:17;180:11;181:15; 182:9,9;200:14</p> <p>shooter's (1) 182:15</p> <p>shooting (27) 49:21;50:14;60:9;99:15; 103:16;105:7;112:4; 113:11,17;116:1;119:9; 121:10;129:21;130:7,12,19; 132:9;144:10;158:10; 177:5;182:2,8,21;183:13, 15;206:12;210:10</p> <p>Shootings (74) 4:7;7:18;29:1;89:2; 95:13;106:8,20;107:4; 110:20;115:10,12,20; 116:19;117:20;119:13; 120:8;121:2,19;126:11; 128:20;129:2,5,7,12,16,19; 131:1,8;132:2,2,19;140:3; 141:5,18;142:7,10,12,17, 20;144:2,3;161:18,19; 172:10;175:17;177:19; 178:1,7,10,11,14,17,20; 179:3,4;180:2;183:8; 184:19;185:3,20,21;186:5; 198:16;199:9,16;200:11; 202:15;209:11,20;210:6,7, 18,21;211:7</p> <p>shop (1) 157:11</p> <p>short (1) 156:9</p> <p>short-term (2) 25:15;87:19</p> <p>shot (13) 113:15;129:10,20; 130:12,18;131:2;137:20; 139:14,17;142:15;149:16; 182:20;183:10</p> <p>shotgun (1) 60:7</p> <p>shotguns (3) 101:8;103:2;128:17</p> <p>shots (41) 16:5,19,21;17:2;50:13; 77:7;95:13;132:10,17; 133:7,10;134:14,16,17,21; 135:18;137:17;138:14; 139:9,13;140:2;144:5,19; 145:8;146:7;147:19;149:5, 8,16,20;150:1,6;151:12; 171:15;173:9;183:16;</p>
S			
<p>safe (2) 116:8;188:17</p> <p>safely (1) 129:4</p> <p>safety (4) 12:7;45:21;196:18;197:9</p> <p>sale (1) 208:3</p> <p>sales (1) 197:21</p> <p>same (16) 10:17;15:15;16:16;38:21; 144:14;147:18;154:1; 155:6;159:16;166:12; 167:8;172:3,5,10;208:19; 213:4</p> <p>sample (12) 77:6;91:5;107:18;110:2; 111:15,16;112:18;118:17; 119:21;133:8;147:12; 150:17</p> <p>samples (1) 139:10</p> <p>San (1) 10:19</p> <p>Saturday (1) 197:3</p> <p>saw (2) 93:11;112:13</p> <p>saying (19) 17:9;30:19;52:2;83:17; 89:18;90:5;97:11;115:13; 119:18;120:4;149:14; 162:14;163:15;170:16; 173:8;188:9;191:18; 194:11;200:1</p> <p>SB (2) 27:7;122:20</p> <p>scene (2) 182:1;202:17</p>			

<p>199:13;201:15,19;202:1,5 show (9) 6:7;28:1;85:10;92:7; 136:7;146:11;162:14; 179:9;202:14 showed (6) 77:4;93:10;121:1,9; 147:18;185:9 showing (4) 92:15;160:10;178:14; 184:7 shown (2) 90:1;117:1 shows (1) 146:9 shrouds (1) 163:9 sign (1) 212:4 significance (3) 93:1;184:6,7 significant (17) 22:19;48:1;53:21;87:10; 88:2;89:16,17;92:8;136:3; 155:13;157:9;173:14; 179:11;184:8;185:9; 186:19;210:3 significantly (6) 126:3;135:18;139:20; 142:11;186:4;208:14 similar (12) 15:11;27:20;47:4;55:19, 20;91:9,14;94:5;158:21; 173:18;189:8,20 similarly (1) 165:6 simply (6) 114:21;181:7;184:17; 186:6,17;202:5 single (2) 180:10;198:17 sit (2) 96:3;111:10 situation (1) 165:11 six (25) 40:7,16;87:20;108:4; 109:8;113:13,17,21;114:15; 116:12;117:4,20,21;119:7; 120:1;133:9;134:20;139:2, 12;141:11;144:13;146:1; 153:5;172:8,21 size (1) 17:11 slightly (1) 25:17 slowly (1) 160:5 small (32) 16:17,20;35:4;36:6; 49:17;82:19;91:15;98:1; 101:13;105:4;107:13; 111:19;123:4,20;126:6,15;</p>	<p>128:5,6;132:18;139:19; 142:18;144:1,9;149:3; 150:16;151:1;156:6;184:4; 197:3;200:7;209:16;211:14 smaller (3) 139:11;151:20;183:17 Smith (1) 37:8 so-called (8) 21:7,7;27:3;53:20;62:10; 97:17;101:9;203:21 social (4) 18:5,8;35:1;45:18 societal (1) 172:9 Society (3) 22:16;45:2;207:18 sold (3) 100:20;103:21;104:6 solicitations (1) 24:4 somebody (1) 57:4 somehow (4) 30:18;57:2;204:4;205:5 someone (7) 63:15;65:8;78:21;135:12; 155:18;198:2;205:1 sometime (2) 11:1,2 sometimes (7) 31:20;80:4;88:14;140:11; 144:11;160:1;163:9 somewhat (5) 81:2;93:15;102:3,5;156:2 somewhere (5) 78:8;102:20;103:3;158:5; 176:4 sorry (10) 28:9;49:6;68:7;96:17,18; 125:5;140:16,21;152:17; 156:15 sort (12) 21:15;49:19;58:16;64:21; 66:13;79:3;119:17;145:18; 154:3,4;178:15;197:21 sorts (9) 46:6;54:9;61:16;77:10; 109:4;132:4;162:7;173:10; 186:5 sound (5) 102:11;125:6,20;135:3; 184:15 sounds (3) 158:19,21;194:5 sources (6) 97:8;107:11;108:7; 110:19;145:9,20 speaking (3) 79:21;109:6;193:3 Specials (1) 197:3 specific (19)</p>	<p>28:21;52:15;97:19; 102:17;105:17;110:1; 115:19;130:8;147:10,15; 160:7;161:19;162:17; 163:17;169:4;185:5; 186:15;190:13;193:1 specifically (16) 11:10;21:18;62:13;63:8; 64:9;81:11;95:12,15;103:1; 109:10;115:13;137:1; 178:11;188:21;209:10; 211:10 specification (1) 92:14 specifics (2) 104:19;189:6 specified (1) 92:21 spoke (1) 208:7 sponsors (1) 23:3 sporting (1) 75:11 Sports (2) 103:16;158:10 spray (4) 50:11,11;162:21;163:2 spread (2) 65:19;159:12 spring (1) 29:18 St (3) 40:13,15;43:20 staff (2) 66:10;72:4 stage (1) 73:12 stakes (1) 48:15 stamp (1) 56:19 stand (1) 10:2 standard (3) 131:15;151:21;203:14 stands (2) 110:3;132:5 start (2) 9:17;32:18 started (3) 35:5;73:18;189:3 starting (2) 146:4;158:2 stash (2) 205:18;206:2 state (52) 5:8;10:13,16;24:17;25:5; 26:12;47:17;48:16;50:2; 52:1;64:3;82:10,17;83:5; 84:18;94:11;95:5;97:3; 98:4;106:5;108:15;113:12; 131:5,20;135:8,17;136:7;</p>	<p>137:16;144:16;147:21; 150:13;154:15,19,21;155:7, 12;156:1,6,7,10,13;157:3; 160:20;170:5,20;172:3,21; 180:19;186:10;196:5; 197:11;202:21 stated (3) 85:7;101:8;119:7 state-level (6) 84:19;85:13;86:19,20; 87:18;90:20 statement (23) 8:4;12:18;52:14;61:7; 82:16;83:9;89:14;97:18; 108:15;116:17;120:6; 121:7;122:5;137:7,10; 141:8;145:21;148:19; 157:21;162:12;165:3; 178:6;200:6 statements (2) 10:18;30:17 States (13) 4:7;7:19;33:12;35:12; 87:9;91:2;100:20;156:7,11; 157:18;175:17;178:20; 198:8 statistic (4) 92:6,12;109:20;139:7 statistical (10) 15:16;90:19,21;92:18; 93:1;126:13;127:2;152:1; 184:6,7 statistically (7) 88:2;92:8;126:19;131:14; 179:11;185:9;186:19 statistics (8) 16:14;97:20;109:9; 121:12;127:6;161:16; 169:21;179:21 statutes (1) 198:11 stay (1) 46:5 stemmed (2) 42:13;132:16 stemming (1) 38:20 step (1) 11:8 Stephen (1) 5:14 stepped (1) 196:17 still (23) 24:3;47:21;50:6;51:7; 67:2,4;85:2;94:15,20;96:1, 1;129:11;148:8;153:14,16; 157:9;160:13,20;173:18; 188:3;195:10;207:15,16 stock (6) 102:19,21;108:16; 123:10,16;162:15 stocks (2)</p>
--	--	---	---

<p>55:13;167:21 stop (6) 10:5;63:11,15,16;64:12; 65:2 stopped (2) 56:17;63:19 stopping (2) 63:2;65:14 strategies (4) 18:1;34:15;40:9;43:21 strategy (1) 91:15 street (1) 202:6 street-based (1) 189:14 Streets (1) 188:18 strict (1) 57:21 strikes (1) 90:9 stringent (2) 53:9;193:21 struck (1) 127:4 struggle (1) 186:13 stuck (1) 73:19 student (2) 141:14;175:19 students (5) 22:17;29:7,10;30:7;31:21 studied (14) 14:7;63:8;87:13;154:3; 177:12;189:4;193:5,10; 200:15;206:11;209:7,20; 210:10;211:2 studies (32) 50:19;62:9,16;66:3,10, 12;69:8;71:8,9;80:13,14; 84:19;85:3;86:21;101:5; 105:3;110:20;145:9;146:6, 12,15;160:3,7;170:17; 186:18;189:20;192:2,17; 193:2;199:5;203:21;204:8 Study (79) 4:8;7:19;14:4;16:11;17:7, 9,20,21;18:5;22:18;25:3,6, 13,14;37:16;39:4;41:12,14, 17;42:17;44:12;45:11;47:1; 50:17;63:6;67:18;71:12; 72:21;73:16,18;78:18,19; 87:18;93:4;94:16;106:2; 108:4,9;111:3;119:2;133:6, 13;134:4;135:6;136:18; 138:5,20;139:4,5;145:2,7, 13,16,16;146:9;147:3,7; 149:2;150:14;151:5;156:3; 157:20;160:9;161:14; 171:8,9;175:18;190:4,8; 191:18;200:11;201:1,7,14,</p>	<p>21;202:13;204:21;209:14, 14 studying (4) 24:17;88:16;95:2;182:12 style (1) 97:13 subcontracts (1) 72:18 subject (3) 94:20;100:19;144:14 submit (2) 19:6;79:17 submitted (4) 25:21;80:8;140:20; 158:12 subsample (1) 147:17 subsequent (1) 105:20 substance (1) 191:1 substantial (3) 148:1;157:5;172:9 substantiate (2) 204:1,3 substitute (3) 82:18;172:15;174:19 substituted (2) 173:13;174:1 substituting (2) 187:20,21 substitution (2) 173:4;175:4 success (1) 190:5 successful (2) 190:7,8 suffering (1) 15:7 sufficient (2) 16:9;164:21 suggest (14) 16:20;78:12;84:19;130:2; 131:11;149:3;160:21; 179:12;183:1,9,21;185:4,7; 193:20 suggested (2) 91:15;132:15 suggesting (4) 119:5;193:18;196:15; 197:5 suggestions (1) 81:16 suggests (3) 92:12;118:11;186:20 suitable (1) 81:15 summarize (1) 12:19 summarized (2) 26:9;94:3 summarizing (2) 107:11;153:2</p>	<p>summary (3) 94:8;97:1;140:18 summer (1) 73:8 summit (1) 26:6 Sun (9) 43:11;46:9,14,20;47:6,8, 11;76:7;164:14 Sunnyvale (1) 10:19 Suppliers (1) 38:15 support (24) 18:18;21:6;22:2,5;23:14; 27:3,7;34:8;36:10;38:9; 52:21;98:20;99:13;116:17; 122:5;137:6,10;145:12,21; 154:7;187:8;195:17;204:8, 17 supported (3) 35:6;36:20;37:7 supporting (1) 162:12 supports (2) 52:13;76:15 suppose (1) 173:20 Suppressing (1) 39:9 suppressors (3) 168:2,6,10 Sure (22) 8:2;12:15;45:7;52:16; 59:12;64:16;67:12;102:8; 103:1;110:18;123:8; 131:18;141:7;142:14; 171:17;190:7;195:21; 196:3;198:10,11;200:16; 206:4 surprise (1) 205:13 survey (3) 42:19;43:1;119:19 surveyed (1) 43:2 surveys (1) 102:18 susceptible (1) 126:7 sustained (3) 138:2;145:6;149:10 suttle (1) 150:9 SWEENEY (70) 5:7,13;7:3,6;8:18;11:19; 19:5;29:3;44:6,16;49:7; 52:11;54:6;63:17;65:1,12; 66:1;68:8;69:10,15;75:6, 19;82:1,7;87:6;104:16; 117:9;118:14;120:3; 121:15;122:2;123:11; 124:1,10,12;133:20;134:1;</p>	<p>138:18;143:16,19;152:16; 154:14;156:17;157:14; 167:3,19;168:11;169:10; 170:3,19;173:11;175:7,10; 179:13;185:13;187:2,13; 188:10;190:15;195:6,15; 196:2;197:10;200:10; 204:16;205:7;206:7; 207:19;210:2;211:20 sworn (1) 5:4 symposium (7) 20:7,14;21:6,13,17;23:6; 80:17 System (2) 38:14;191:9 Systematic (1) 36:17 systems (2) 191:19;192:17</p> <hr/> <p style="text-align: center;">T</p> <hr/> <p>Table (15) 90:15;91:18;100:11; 105:10;124:14;134:15; 146:5,7,8;147:6;152:6,8; 153:1,4;179:8 tables (1) 134:7 tabulations (2) 140:11,14 talk (10) 25:2;48:14;74:1;112:7; 127:1;148:21,21;149:1; 161:5;180:4 talked (9) 37:21;67:18;72:15;76:7; 115:7;133:3;145:15;147:3; 161:17 talking (14) 55:10;61:12;99:6;125:5, 7;133:15;135:21;144:2; 167:1,4;168:19;187:3; 193:4;207:14 talks (1) 165:16 tallies (1) 132:7 target (3) 65:10;205:9,21 targeted (2) 197:19;199:4 tasers (1) 65:20 task (1) 190:16 taught (3) 29:7;30:3,9 tax (1) 56:19 teach (1) 29:4</p>
---	---	--	--

teaching (1) 29:6	48:13;94:11;164:17	23:10;60:11,14,17,20,21; 61:1	69:17;93:4;160:19; 179:20
Technical (2) 58:11;164:6	thirsty (1) 175:8	Transaction (1) 33:3	Twice (2) 29:17;30:1
technically (1) 73:1	though (13) 56:3;75:5;90:2;99:6; 107:14;117:8;123:19; 126:19;150:5;167:5; 199:18,19;207:15	transcript (1) 213:4	two (39) 6:20;7:8;23:9;25:17,17; 26:19;30:2;32:21;38:18; 44:8,8;69:8;87:8;91:21; 92:9;96:14,18,19;106:4; 112:20;117:7,15,21;118:8, 11;119:8;120:11,15; 125:21;126:1;135:17; 136:7;139:17;147:6; 160:20;164:19;166:4; 184:8;190:11
technique (1) 91:1	thought (6) 15:5;51:20;93:18;114:8, 8;167:1	transfer (8) 57:12;154:12,13,15; 155:4,12,14;160:15	Type (20) 14:12;41:14;72:16;75:7; 90:18;91:15;99:6;104:21; 121:8;129:8;132:19;135:8; 139:6;147:18;182:13,16; 184:11;189:7,17;205:19
technology (1) 31:19	thousand (2) 127:12;143:9	transferred (1) 100:20	Types (27) 4:5;13:7,17;14:16;21:11; 38:2;44:11;49:19;75:4; 76:21;94:5;105:1,6,11; 106:13;108:1;121:11; 130:3;132:6;146:7;178:11, 17;193:2,21;195:4,8;206:2
ten (30) 16:19,21;17:2,6;42:16; 50:13;51:3;76:17;77:7; 125:5;130:17;132:17; 133:7,10;134:13,21;138:14; 139:13;149:5;150:1; 151:12;158:14;166:20; 167:15;207:20;208:11; 209:4;210:7,17;211:1	threats (1) 189:11	transferring (1) 159:16	typical (2) 155:15;174:8
tend (10) 54:19;55:18;99:8;103:9; 132:4;137:17;138:10,10; 144:18;193:19	three (18) 27:11;29:20;87:8;110:11; 114:13,15;117:5,6,7; 118:10,12;119:8;120:11,16; 125:21;126:1;166:4,7	transfers (2) 192:12;198:9	typically (4) 55:6;80:19;148:1;181:18
tended (5) 95:14;98:1;107:20; 132:13;147:19	times (4) 29:14,20;30:2;44:9	transitional (1) 148:19	
ten-round (1) 148:15	title (1) 5:8	travel (2) 155:17,21	U
ten-shot (1) 17:3	today (16) 5:19;8:13;9:1,12;10:8; 47:21;50:6;51:7;56:20; 85:2;90:1;94:15;96:3; 111:10;186:7;201:2	tree (1) 135:10	ultimately (5) 156:3;157:6;195:12; 196:16;197:7
tentative (1) 93:9	today's (1) 8:1	trend (3) 15:2,3;93:17	under (16) 39:11;41:16;42:16,16; 43:10,14;64:8;69:2;80:15; 97:1;109:4;137:15;147:6; 155:7;159:9;165:7
term (2) 25:19;103:13	together (10) 10:18;22:16;36:12;39:11; 58:17;93:16;98:18;103:2; 113:12;168:19	trending (1) 15:15	undergraduate (2) 29:8;73:19
terms (12) 12:1;49:17;52:20;54:11; 62:10;76:17;95:15;168:19; 183:18,21;200:6;203:14	told (2) 207:8;211:3	Trends (17) 4:8;7:19;13:8;14:20,20; 43:7;44:11;87:21;88:9; 90:8;91:4;95:17;158:1; 175:18;202:2;209:17,20	undermine (1) 174:19
terrible (1) 196:3	took (1) 81:10	trials (1) 184:10	Underneath (3) 44:12;91:20;92:6
test (4) 92:6,6,12;186:2	top (6) 44:13;96:14;102:20; 143:8;146:9;180:13	tried (2) 17:7;134:3	Understood (4) 40:6;58:2;66:14;123:9
testified (1) 5:6	topic (1) 149:1	troubling (1) 56:1	unfold (1) 96:2
testimony (5) 9:7;19:7;27:7;201:2; 213:5	topics (1) 24:5	true (8) 38:21;57:21;63:18;96:3; 149:21;169:11;181:14; 213:5	unfolding (1) 96:1
testing (1) 184:10	total (10) 29:20;101:21;113:14; 124:2,18;133:12;142:16; 149:18;160:4;179:1	trusted (1) 204:10	Uniform (1) 100:4
tests (3) 179:10;184:6,7	touch (1) 187:19	truth (3) 5:5,5,6	United (7) 4:7;7:18;33:12;35:12; 100:20;157:18;175:17
Texas (1) 117:3	touched (3) 15:19;46:8;201:2	try (18) 9:16;17:6;22:20;23:4; 32:9;45:18,19;46:5,6; 54:10;86:11;91:1;130:9,10; 170:1;189:10;193:11;196:4	University (11) 5:11;13:1,13;22:3,9;29:5; 30:10;35:7;36:6;70:17;
thankfully (2) 126:10;128:20	towards (1) 65:18	trying (16) 23:17;25:18;43:4;52:8; 81:9;91:5;95:12;111:2; 115:15;131:19;170:10; 182:12;184:14;192:19; 195:1;205:12	
theory (2) 81:4;90:10	tracing (1) 90:20	turn (4) 120:10;122:3;152:5; 183:11	
thesis (5) 7:18;176:7,11;178:5; 185:8	tracking (1) 202:1	turned (2) 105:5;193:8	
thinking (1) 54:9	trained (1) 189:15	Turning (4)	
third (3)	training (7)		

<p>71:14 Unless (4) 30:16,16;182:3;202:10 unlikely (2) 173:14;203:13 unnecessarily (1) 65:4 unquote (1) 51:4 unusual (1) 63:20 unwanted (1) 202:12 up (20) 20:20;21:9;49:21;50:14; 63:15;86:9,15;105:5; 117:11;121:1,9;142:6; 143:2,14;151:7;155:17; 158:5;178:15;183:13; 208:10 update (1) 25:12 updated (2) 25:5;69:2 upon (9) 18:11;94:16;120:10; 121:16;126:7;127:18; 131:6;136:17;205:11 uprise (1) 177:19 ups (2) 49:18;93:19 upward (5) 14:19;15:2,3,15;90:13 Urban (4) 71:5;72:17;73:2,5 use (49) 7:21;8:12;14:17;15:2; 24:13;28:21;37:6;49:18; 51:13;62:11;63:7,10;64:7; 83:21;88:9;89:5,8;90:20; 91:1;93:11,12,19;95:17; 100:7;107:9;122:8;132:6; 144:8;152:2;153:13,16; 155:1,3;158:1;159:8; 161:17;173:15;180:1,20; 183:2;186:3,21;192:6; 198:18;201:17,17;207:13; 208:16;213:15 used (57) 13:7;14:17;15:6;38:8; 43:5;44:11;54:14;55:3,13, 17;56:6,10;75:11;97:4,7,16, 20;98:2,14,21;101:4;103:7, 9;104:11,19;105:17;106:7, 13;107:3,13,15,17;109:2,3, 15;113:4;114:21;115:3,4, 11;116:18;120:8;121:18; 122:6,10;130:14;144:11; 157:5;169:6;180:11; 181:15;182:2;189:2; 199:12;201:11;202:18; 206:16</p>	<p>useful (2) 159:19;160:4 using (14) 50:10;62:4,18;65:18; 86:18;108:18;129:8; 135:12;137:17,18;138:10; 169:16,18;194:6 usually (1) 140:6 Uzi (2) 114:5,9</p> <p style="text-align: center;">V</p> <p>validity (1) 176:16 value (3) 45:21;46:3;159:12 variability (2) 108:7;126:7 variable (3) 172:18;180:21;182:7 variables (2) 91:6;106:18 variation (2) 92:16;173:18 variations (1) 164:1 variety (5) 62:19,21;70:8,14;73:12 various (1) 103:10 vast (1) 181:14 Vastly (1) 128:13 vehicles (1) 128:10 verbal (1) 68:11 verdict (2) 79:19;80:10 Vernick (1) 7:15 version (4) 36:18;40:8;43:17;114:9 versus (12) 5:15;8:9;14:11;39:1; 41:13;56:8;62:10;72:16; 102:19;123:17,17;149:15 viable (1) 52:10 victim (11) 74:6,11;144:20;145:10, 12;146:1,15,20;147:2; 153:7;172:7 victimization (2) 132:16;136:2 victimizations (6) 54:16;77:6;94:2;149:4; 151:7;200:8 victims (26) 29:1;50:15;100:2,11;</p>	<p>130:4,5;132:5,7;138:3; 144:6;145:6;146:8,12,15, 16,19;147:20;149:11;153:7, 8;172:2;181:3;182:8; 183:17;185:4;199:15 videotape (1) 20:15 view (10) 18:21;50:6;51:7;54:19; 85:2;94:15,20;95:11,12,14 Vince (4) 78:3,9,15,17 Violence (39) 7:14;13:8;14:21;17:12, 20;33:11;34:6;36:4;40:13; 41:19;43:16,19;45:13,14; 51:10;67:10;74:7;76:18; 83:18;88:8;94:13;95:10; 152:13;189:19;191:1,6; 192:8,14,19;193:8;194:10; 196:10;206:9,21;207:3,14; 208:20;209:4,10 violent (3) 42:17;74:11;93:21 Virginia (8) 156:4,7,8;158:2;160:16, 17;202:15;203:1 virtually (1) 156:9 vitae (1) 69:18</p> <p style="text-align: center;">W</p> <p>wait (1) 9:16 waiting (1) 140:21 wants (2) 188:2,5 warranted (1) 150:15 Washington (8) 66:7;157:20;160:9;201:1, 7,14,21;202:13 water (2) 69:12;133:19 way (16) 12:12;30:21;54:19;56:12; 92:17,20;95:11;115:3; 121:6;153:18;155:4; 168:20;186:1;192:7;194:3; 200:17 ways (4) 55:18;57:17;154:13; 197:19 weapon (46) 7:9;12:7;27:3;47:16; 51:11,21;53:1,15;55:9; 82:11;83:14;84:19;85:12; 87:14;95:8;100:2,11; 103:13;108:18;109:13; 110:5;111:8,11;112:14;</p>	<p>113:4;117:6;123:16; 146:21;147:8;162:7,19; 163:5;165:9;166:18; 167:13,16;174:1;175:5; 182:13,16;184:11;188:9; 199:9;205:1,5,6 weaponry (7) 54:21;55:17;56:2;64:20; 121:8;129:8;205:19 weapons (158) 10:14;12:5;13:20;14:7; 19:9;21:7,16;25:15;27:14; 28:6,8,21;29:1;38:3,9,19; 39:13;41:1,6,12,17;43:12; 48:6,8,12;49:19;53:10,20; 54:12,18;55:2;56:8,13; 58:14;62:10,14;64:8;65:19; 67:14;68:2,17;69:6;70:20; 71:8;72:21;75:10;82:20; 83:8;84:4,9,13,18;85:13; 86:19;87:10;88:17;89:5,15; 90:11;91:12,19;93:6,12,19; 94:17;95:3,17;96:6;97:6,14, 21;98:8,11,13,14,16;99:11; 100:16;101:3,9;103:9,21; 104:10;105:5,15;106:6,13, 18;107:3,10,13;108:3,10, 13;113:15,21;114:16;115:3, 9,17;116:10,15;117:4,20; 118:9,11,13;119:10,12; 120:6;121:8;122:6,9,12; 124:19;125:21;126:2; 129:17;132:4,6;138:13; 144:4,9,17;146:7;147:8,21; 151:5,17;160:10;161:1,5; 163:4,11,16,18;164:10; 165:1;166:3;170:6,17,21; 171:2,6,14;172:1;174:3; 187:20;195:3,4;198:18; 199:11;205:3,10,19;206:2, 9;207:21 weapons' (1) 161:2 Webster (11) 7:14;19:15,17;26:6;27:6; 28:9,10;81:8,12,14;197:1 Webster's (2) 189:3;190:12 week (1) 23:9 weigh (2) 45:21;76:5 well-known (1) 34:5 weren't (1) 190:8 Wesbecker (1) 114:11 West (2) 156:8;160:16 What's (4) 17:2;52:13;159:18;164:5 Whereupon (1)</p>
--	--	--	---

5:2 whole (3) 5:5;128:3;203:2 who's (1) 155:18 whose (2) 57:4;181:6 wide (1) 22:18 widely (1) 97:20 Wiebe (1) 35:11 willing (2) 12:3;155:18 Wintemute (2) 161:14;162:5 wiser (1) 154:21 within (4) 22:15;98:12;155:12; 157:7 without (7) 18:20;32:11;136:13; 151:21;154:21;156:12; 184:14 witness (55) 5:4;11:12;19:4;28:17; 44:7;49:6;52:5;54:4;63:14; 64:16;65:7,17;68:7;75:2; 17;87:3;104:13;116:21; 118:5;119:15;121:5,21; 123:14;124:9;138:8; 143:15,17;154:10;156:15, 21;167:1,18;168:8;169:2, 20;170:15;173:3;175:2; 179:7;185:2;186:13; 187:10;188:8;190:4; 194:20;195:12,21;196:12; 199:21;204:20;205:17; 207:13;209:7;212:2,4 wondered (1) 189:4 word (3) 64:10;67:15;209:21 work (49) 11:16;12:4,6,11,15;13:18, 19;14:1,1,20:5;23:14,16; 26:1,18;31:9,20;32:4,18; 33:6,14;34:19;35:2,5;38:3, 9;39:16;42:1,13;46:5; 58:14;67:2;70:14,18;71:2; 72:12;73:10;80:5;87:13; 88:6;131:15;141:13;144:7; 156:5;176:1,17;190:12; 193:10,17;197:17 workable (1) 51:17 worked (10) 35:7;44:9;69:20;70:8; 71:8,11;72:1,5,9;73:6 Working (18) 32:5;42:7;44:8;58:13; 70:21;71:3,18;72:4,17,20; 73:2;78:7,15;86:13;139:19; 148:4;160:13;166:1 works (4) 22:21;79:6,8;179:17 wound (1) 138:10 wounded (7) 130:15;136:5;144:19; 145:8;147:20;149:15; 199:15 wounds (18) 55:11;61:18;138:2; 144:20;145:6,9,12,21; 146:8,11,15,20;147:2; 149:10;153:7,8;172:6; 173:9 wrap (1) 142:6 write (4) 24:5;45:2;80:20;115:3 writing (1) 35:21 written (3) 11:11;44:14;192:1 wrong (1) 193:21 wrote (5) 6:14;39:11;43:11;44:9; 81:6	100 (3) 76:8;138:15;150:2 104 (1) 147:16 10-round (1) 148:9 11 (1) 44:13 12 (3) 107:16;113:14;122:13 12,765 (1) 102:1 13 (5) 107:18;111:6;120:16,18; 187:18 133 (1) 4:5 13th (1) 46:15 14 (6) 112:2;113:10,10;116:6; 117:12;118:7 15 (13) 107:8,8;108:18;109:5; 112:16;113:1,17;119:8; 120:11,15,16;122:8;178:5 153 (2) 134:7;135:6 154 (1) 134:15 16 (2) 107:17;122:13 165 (1) 134:20 176 (1) 4:7 18 (3) 119:5,19;120:21 19.3 (2) 87:11;90:7 1930s (1) 56:17 1980 (1) 86:18 1980s (2) 56:18;97:17 1982 (1) 175:18 1982-2012 (2) 4:9;7:20 1989 (1) 72:6 1990 (1) 73:7 1990s (1) 20:1 1992 (3) 99:10;111:8;124:3 1992/1994 (3) 112:21;113:4;123:6 1994 (10) 7:8;24:18;38:19;72:6,10; 98:5;107:17;111:8;122:13;	124:3 1995 (3) 41:18;45:6;87:19 1996 (1) 99:11 1997 (31) 6:13;14:9;25:2,6,13,14; 28:11,14,18;38:21;39:3; 41:12,13;67:18;68:20;69:2, 3;71:6,16;72:10,16;78:11, 18;87:17;91:14;99:9; 109:21;124:6;127:18; 146:17;153:1 1999 (1) 41:11
		2
		2 (4) 24:9,10;32:14;106:5 2.42 (2) 91:20;92:5 2.52 (1) 102:1 20 (12) 76:13,16;77:9;103:20; 110:4;120:16,18;124:18; 157:7;158:5;175:12;208:10 2000s (1) 89:7 2001 (2) 7:1;71:6 2002 (1) 41:4 2003 (11) 13:16;15:19;17:9;44:5,7, 8;133:4;134:4;145:2;147:3; 149:6 2004 (40) 6:9;16:14;25:6,7,13;26:4, 9,14;27:19;40:21;41:7; 43:10;46:15;47:11;49:1,9; 68:21;70:20;82:2,9;89:4; 93:4;94:7;107:6;112:16; 113:1;116:3;117:12;119:7; 120:10;121:16;125:8; 138:12;139:2;146:2; 150:14;152:6;153:12; 201:5;210:1 2005 (3) 36:7;37:7;179:2 2005/2006 (1) 49:12 2007 (2) 40:17;69:21 2008 (1) 43:18 2008-2012 (1) 100:12 2009 (2) 35:11;86:19 2010 (4) 40:11;66:18;70:1;158:7
	Y	
	year (6) 42:12;126:8,19;142:16, 17;190:10 years (25) 19:19;25:17,17;29:13; 32:10;34:7;35:3,8;59:9; 70:1;72:1;73:19;100:15; 153:10;177:5;178:2,16; 179:1;207:20;208:11; 209:5;210:8,17;211:1,18 Yep (1) 70:6 York (1) 10:13 Youngstown (1) 146:14	
	0	
	0.66 (2) 91:19;92:2	
	1	
	1 (2) 5:18,20 1.5 (1) 108:14 10 (5) 4:7;176:6,7,9;178:5	

2011 (2) 29:17;66:19		143:10,18,21
2012 (8) 29:18;36:18;101:20; 103:21;142:19;143:7; 175:18;179:2	4	9.1 (2) 146:5,7
2013 (12) 7:13;20:8;25:7;26:4,5,14; 33:2;39:12;43:21;44:4; 80:16;81:6	4 (2) 46:16;164:16 4.5 (2) 123:4;125:17 40 (1) 102:21 46 (1) 158:15	9.2 (1) 146:8 91 (1) 150:13 92 (6) 109:16;110:1,3;112:13; 122:10;146:19 93 (1) 112:13
2014 (1) 4:3		94 (4) 109:16;110:1;112:13; 122:10
20-some (1) 177:5	5	9-4 (4) 152:6,8,9;153:4
21 (3) 141:10;142:1;175:20	5 (5) 82:4,10;87:1;94:8;117:13	95 (6) 72:3;84:17;86:21;146:19; 152:6,9
22 (3) 141:16;142:1;175:12	50 (1) 187:5	96 (2) 94:7;110:3
223 (3) 62:20;174:8,14	56 (1) 200:21	97 (7) 41:7,18;72:21;94:4; 111:13;112:5;124:5
239 (1) 134:11	57 (1) 202:21	98 (3) 124:6,9,14
26 (1) 187:18		99 (1) 92:18
267 (1) 87:7	6	
276 (2) 125:4,5	6 (3) 85:9,10,14	
281 (2) 27:7;122:20	6.6 (1) 124:14	
286 (1) 125:5	6:38 (1) 212:5	
3	7	
3 (3) 4:3;27:16;28:2	7 (4) 99:19,21;124:7;143:13	
3.5 (2) 123:4;125:16	72 (2) 206:18,20	
3.6 (5) 102:10;104:7;125:6,18; 135:2	75 (3) 158:15;159:7,12	
30 (4) 55:7;179:20;180:3,4	762-millimeter (1) 62:20	
308 (2) 174:7,12		8
31 (1) 179:1	8 (2) 112:6,9	
316 (1) 5:11	8,885 (1) 102:9	
32 (3) 141:17;142:2,3	81 (2) 82:9;87:1	
322 (2) 101:19;102:9	82 (1) 177:6	
33 (6) 141:18;142:3,4;179:8,21; 180:5	85 (1) 146:5	
38 (1) 178:20	89 (2) 147:17;148:7	
39 (1) 178:19		9
	9 (5) 4:5;133:15,16;134:5,7	
	9,000 (3)	