

**UNITED STATES CIRCUIT COURT OF APPEALS
FOR THE TENTH CIRCUIT**

No. 14-1292

JIM BEICKER, et al.,

Plaintiffs-Appellants v.

JOHN HICKENLOOPER,

Defendant-Appellee

On Appeal from the United States District Court for the

District of Colorado, the Honorable Chief Judge Marcia S. Krieger

**REPLY BRIEF OF APPELLANTS SHERIFFS
AND DAVID STRUMILLO**

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Oral argument requested

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SUMMARY OF ARGUMENT

Defendant’s brief concedes the widespread burden of the magazine ban: the ban will reduce the number of defensive shots fired in typical situations—those that involve fewer than 15 shots. Defendant acknowledges that this will reduce the risk of injury to attackers. This shifts some risk of injury from attackers to defenders.

Strict scrutiny is the appropriate standard of review for laws which substantially burden self-defense in the home. Consistent with this Circuit’s precedent, courts using the two-step test have employed strict scrutiny for burdens less severe than a permanent constriction of home defense.

Plaintiffs’ claims relate only to standard 16-20 round handgun magazines, and 16-30 round rifle magazines, which are stipulated to number in the “tens of millions,” and to be “typically used for lawful purposes.” Under *Heller*, they may be regulated but not prohibited.

Defendant does not dispute that regulation, such as background checks, would be appropriate to limit criminal access to magazines. Rather, Defendant argues that prohibition for the law-abiding is necessary because law-abiding defenders will “spray and pray,” by firing many shots. Defendant’s assertion is not supported by the record. He did not carry his burden of proving that there is any government interest in constricting typical defensive fire.

ARGUMENT

I. The burden is substantial because the magazine ban shifts risk of injury from attackers to defenders, and because it *de facto* prohibits common handguns.

A. The parties agree that a purpose and effect of the magazine ban is to reduce defensive shots fired by violent crime victims.

The parties and their experts agree that the magazine ban will reduce defensive fire by victims attempting to defend themselves against violent criminals. The parties also concur that it is rare for defenders to fire more than 15 shots.¹

As the appellate briefs and expert testimony on both sides have detailed, because violent confrontations are unpredictable, individuals want to keep a reserve of ammunition. For example, if a person is fighting against one or two perpetrators, he may not know of an additional, hidden attacker.

The victim may have a handgun with its standard 17-round magazine; or under the magazine ban, she may have the 10-round magazine that is typically sold where standard magazines are banned. JA.6:1500-01, 1504 (stipulations).

In either case, she probably will fire fewer than 10 rounds. Yet she will fire more defensive shots if she has the standard magazine, because of the greater reserve which is available should a third attacker appear.

¹ Appellants adopt all arguments presented in the 14-1290 brief.

On this, the parties are in accord, and the record supports them. As Defendant puts it: “Placing limits on magazine capacity will tend to reduce the number of times that firearms are discharged in confrontations.” Def.br.63. “The undisputed evidence at trial showed that the number of rounds expended in a confrontation is directly related to magazine capacity.” *Id.* (citing experts from both sides). This is true “during criminal aggression” and “in defense, as well.” *Id.* Magazine bans have “a broad ‘moderating effect’...on the number of shots fired.” Def.br.63 n.15.

Common sense, and the record, tell us that “a participant’s risk of being shot rises along with the number of rounds fired.” *Id.* at 64. Thus, when standard magazines are used, there is “more potential for injury simply because the greater reserve capacity encourages more gunfire.” *Id.* at 65.

Injured persons are less able to accomplish their objectives. An injured criminal is less capable of completing a violent crime. An injured defender is less capable of thwarting a violent attacker.

This factual record distinguishes the instant case from the magazine cases Defendant cites. *Id.* at 16. In considering the Second Amendment burden, those cases addressed only the unusual situations in which a defender fires a magazine to capacity. The parties agree that a magazine ban will also affect the far more common situations where only a few shots are fired.

The Sheriffs' Opening Brief pointed to the availability of laws narrowly tailored to criminal acquisition of magazines, while protecting the self-defense capabilities of law-abiding citizens. For example, requiring background checks on magazine purchases, as with firearms purchases. Or requiring an even more stringent check: obtaining a concealed handgun carry permit. This requires fingerprints, in-person application at a Sheriff's Office, in-person safety training, and gives Sheriffs discretion to veto applications and to revoke permits. Op.br.41-42.

Given that Coloradoans with concealed carry permits are extraordinarily law-abiding (data in Op.br.43, n.16), Defendant does not disagree that tailored laws would be effective in reducing criminal acquisition, while leaving law-abiding acquisition unimpaired. Rather, Defendant explains that law-abiding citizens are also intended targets of the magazine ban:

First, by focusing solely on criminal misuse of firearms and LCMs, Plaintiffs misapprehend the breadth of the challenged statute's beneficial effects. As all of the experts in this case agreed, one of the primary dangers of LCMs is that they encourage more gunfire by *all* participants during violent confrontations, however rare those confrontations may actually be. Any tendency to reduce the number of shots fired has obvious public safety benefits—benefits that would not be realized by adopting the alternative measures that Sheriffs contend the General Assembly was required to consider.

Def.br.72-73.

In no post-*Heller* case has a government admitted that a law will reduce defensive fire in ordinary self-defense. (Rather than in the unusual situations

when a magazine is fully expended.) The consequence of reduced defensive fire is that fewer criminal attackers will be injured. (For the reasons stated above.)

The consequence of fewer injured attackers is more completed violent crimes and more injuries to crime victims. *See, e.g.*, 18 U.S.C. §924(e)(2)(B)(ii) (recognizing special danger of a “violent felony” which “presents a serious potential risk of physical injury to another”).

Below, in Part III, the Sheriffs address Defendant’s arguments about the alleged public safety benefits of suppressing typical defensive fire. The Sheriffs believe that the Second Amendment forbids shifting the risk of injury from violent predators to innocent defenders. “[W]hatever else [the Second Amendment] leaves to future evaluation, it surely elevates above all other interests the right of law-abiding, responsible citizens to use arms in defense of hearth and home.” *District of Columbia v. Heller*, 554 U.S. 570, 635 (2008).

Because the magazine ban has the purpose and effect of reducing defensive fire (and thus of increasing the risk of victim injury), including in the home, the ban is “designed to strike at the right itself.” *Gonzales v. Carhart*, 550 U.S. 124, 157-58 (2007). *Cf. United States v. Decastro*, 682 F.3d 160, 168 n.6 (2d Cir. 2012) (federal statute setting procedures for importing out-of-state handguns was “not designed to strike at the heart of the right itself.”).

The magazine ban is in one sense more burdensome than a handgun ban. A handgun ban would not diminish defensive long gun fire in the home.

B. The parties agree that there is *de facto* prohibition of many full-size 9mm handguns.

Defendant accurately states that the magazine ban does not expressly outlaw any firearm. Def.br.58. But it is a *de facto* prohibition on many popular handguns.

The uncontradicted evidence showed that there are no magazines under 16 rounds manufactured for many popular handguns. For others, small magazines are commercially unavailable. This is particularly so for full-sized 9mm handguns. Op.br.22, 29. The three basic sizes of handguns are “full-sized,” “compact,” and “subcompact.” JA.6:1504 (stipulations).

Defendant acknowledges the impact on full-sized 9mm handguns: “Perhaps *most importantly for the Heller analysis*, magazines holding fifteen or fewer rounds come as standard equipment for virtually every .40 and .45 caliber pistol, and are also standard equipment for many 9mm handguns.” Def.br.61 (emphasis added).

While some people can manage the heavy recoil of the high-powered .40 or .45 handguns, many prefer the lower-recoil 9mm. Op.Br.29. That is one reason they are so common.

II. A substantial burden on home defense requires strict scrutiny or categorical invalidation.

A. *Heller*'s rules are easy to apply, and allow prohibition of "dangerous and unusual" weapons.

Constitutional jurisprudence contains many familiar bright-line rules, including with respect to the First Amendment,² Fifth Amendment,³ Sixth Amendment,⁴ Eighth Amendment,⁵ Tenth Amendment,⁶ and Fourteenth Amendment.⁷

Under *Heller*, two types of laws are categorically invalid, without resort to tiered scrutiny. The first is destruction of the right to keep arms or the right to bear arms. Separate from the D.C. handgun ban, another ordinance outlawed having an operable firearm in the home. This destroyed the right to keep arms,

² *Hosanna-Tabor Evangelical Lutheran Church and Sch. v. EEOC*, 132 S.Ct. 694 (2012) (forbidding interference with "ecclesiastical decisions"); *McDaniel v. Paty*, 435 U.S. 618, 626 (1978) (plurality op.) (categorically prohibiting "government from regulating, prohibiting, or rewarding religious beliefs as such").

³ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982) ("permanent physical occupation" is always a taking); *Arizona v. Washington*, 434 U.S. 497, 503 (1978) ("protection against double jeopardy unequivocally prohibits a second trial following an acquittal").

⁴ *United States v. Booker*, 543 U.S. 220, 244 (2005) (no sentences beyond maximum allowed by the facts found by the jury or admitted by defendant).

⁵ *Kennedy v. Louisiana*, 554 U.S. 407 (2008) (no capital punishment for crimes against individuals not causing death).

⁶ *New York v. United States*, 505 U.S. 144 (1992) (no commandeering state legislatures).

⁷ *Planned Parenthood of Se. Pennsylvania v. Casey*, 505 U.S. 833 (1992) (regulation but not prohibition of pre-viability abortion).

and was thus unconstitutional. *Heller*, 554 U.S. at 630. See also *Moore v. Madigan*, 702 F.3d 933 (7th Cir. 2012) (ban on bearing arms in public; no carry licenses available); *Palmer v. District of Columbia*, 2014 WL 3702854 (D.D.C. July 24, 2014) (same).

The second categorically invalid law is prohibition of arms “in common use,” which are “typically possessed by law-abiding persons for lawful purposes.” *Heller*, 554 U.S. at 624-25, 627. Their opposite is “dangerous and unusual.” *Id.*

By stipulation, 16-30 round magazines number “in the millions” in Colorado and “in the tens of millions” nationally. JA.6:1503-04. By stipulation, “Magazines capable of accepting more than fifteen rounds of ammunition are manufactured in the United States and are typically used for lawful purposes by Americans, including citizens of Colorado.” JA.3:548. These “multiple lawful purposes” include “recreational target shooting, competition shooting, collecting, hunting,” and being “kept for home defense and defense outside the home.” JA.6:1503 (stipulation). The “tens of millions” of standard magazines are about as numerous as handguns were when *Heller* was decided.⁸ No other magazine case has such stipulations.

Defendant attempts to avoid applying the *Heller* rules by arguing: “Any weapon or accessory, from antique musket to machine gun to howitzer, from

⁸ Jacobs & Potter, *Comprehensive Handgun Licensing & Registration*, 89 J. CRIM. L. & CRIMINOLOGY 81, 89 (1998).

laser scope to silencer to grenade launcher, is perfectly capable of being used lawfully. Yet there is no doubt that blanket bans of certain weapons and accessories pass muster under the Second Amendment.” Def.br.73.

But *Heller* does allow bans of “certain weapons.” First of all, a weapon can be banned because it is not a Second Amendment arm. The “Second Amendment extends, prima facie, to all instruments that constitute bearable arms.” *Heller*, 554 U.S. at 582. Howitzers are heavy cannons that a person cannot carry. Unbearable, they are not Second Amendment arms.

Or arms can be banned because they are “dangerous and unusual,” like machine guns. *Heller*, 554 U.S. at 624. History supports *Heller*’s rule. As defined in the 1934 National Firearms Act, “machine guns” were invented in 1884.⁹ In *Friedman v. City of Highland Park*, Chief Judge Easterbrook worried that the *Heller* rules about “common” arms would have made the 1934 machine gun restrictions unconstitutional. Machine guns were “all too common in Chicago” during Prohibition, he wrote. --F.3d--, 2015 WL 1883498 *2 (7th Cir., Apr. 27, 2015). But as the dissent pointed out, “nobody has argued, before or since, that ordinary citizens used these weapons for lawful purposes.” *Id.* at *9 (Manion, J., dissenting).¹⁰

⁹ ELLIS, THE SOCIAL HISTORY OF THE MACHINE GUN 34 (1975).

¹⁰ See also *id.* at 151 (For sales to civilians: “Commercially, then, the gun was a flop.”), 152-60 (detailing extensive use by gangsters).

Similarly, grenade launchers can be banned. Grenades have never been usual for self-defense. *Cf. United States v. Jennings*, 195 F.3d 795, 798 (5th Cir. 1999) (“[I]t would be quite difficult to protect oneself or one’s family with a pipe bomb.”). Guns have always been “commonplace and generally available,” unlike grenades. *Staples v. United States*, 511 U.S. 600, 611 (1994) (strict liability standard for grenade possession may not be applied to semi-automatic firearms). Unlike grenades, firearms “traditionally have been widely accepted as lawful possessions.” *Id.* at 612. *Highland Park* at *8 n.1 (Manion, J., dissenting) (“hand grenades have never been commonly used by law-abiding citizens for lawful purposes”).

Silencers can be banned if they are found to be “dangerous and unusual.”¹¹

Heller categorically forbids prohibition of arms that are “in common use” and “typically possessed by law-abiding citizens for lawful purposes.” 554 U.S. at 624-25, 627.

¹¹ See *United States v. McCartney*, 357 F. App’x 73, 76 (9th Cir. 2009) (Silencers are “dangerous and unusual,” not “typically possessed by law-abiding citizens for lawful purposes”). Silencers reduce the sound of a gunshot by about 15-20 decibels. Kopel, *Silencers for firearms*, in 3 FORENSIC SCIENCE 922 (Embar-Seddin & Pass eds., 2008). They are legal for hunting and other lawful possession in every state of the Tenth Circuit, and most of the United States, for hearing protection and reducing noise pollution, in compliance with strict federal licensing. 26 U.S.C. §5845(a)(7).

As applied to Defendant’s list: Antique muskets may not be banned. Formerly, they were one of the most popular arms, and are in common lawful use today, via replicas.

Laser scopes make a gun more accurate—especially in low-light situations typical of night-time home defense. Lineal descendants of “iron sights” and glass scopes, there are probably many millions. They may be regulated, not banned.

Application of *Heller*’s bright-line rules is straightforward; the rules defer to the American people’s choice of arms commonly kept for lawful purposes. Defendant’s theory forces judges to determine which common arms are “necessary” for self-defense, an approach rejected by *Heller* and *McDonald v. Chicago*, 561 U.S. 742 (2010). Op.br.12-18.

B. In the Tenth Circuit, stringency of review is variable.

Amicus Law Center to Prevent Gun Violence writes that intermediate scrutiny must apply. LawCenterBr.20-22. However, no Tenth Circuit case declares that intermediate scrutiny is the *only* standard for Second Amendment cases. As in other Circuits, categorical or strict scrutiny is available for laws burdening law-abiding citizens—especially for substantial burdens on self-defense in the home.

Like many sister Circuits, the Tenth Circuit has adopted the two-step test. *United States v. Reese*, 627 F.3d 792, 800-01 (10th Cir. 2010) (citing *United*

States v. Marzzarella, 614 F.3d 85, 89 (3d Cir. 2010)). Accordingly, “the Second Amendment can trigger more than one particular standard of scrutiny, depending, at least in part, upon the type of law challenged and the type of Second Amendment restriction at issue.” *Reese* at 801 (brackets and internal quotation marks omitted).

The first step is whether the conduct at issue falls within the scope of the Second Amendment’s guarantee. In two of this Court’s cases, litigants failed step one, for their conduct was expressly excluded by *Heller*. *United States v. McCane*, 573 F.3d 1037, 1047 (10th Cir. 2009) (felon); *Peterson v. Martinez*, 707 F.3d 1197, 1212 (10th Cir. 2013) (concealed carry).

Upon passage of step one, a court “must apply some level of heightened scrutiny and, in doing so, must look to analogous cases for guidance on precisely what level to apply.” *Reese* at 801. For persons under a domestic violence protective order, intermediate scrutiny applies, because the arms prohibition “applies only to a narrow class of persons, rather than to the public at large.” Persons in this “narrow class...based on their past behavior, are more likely to engage in domestic violence.” *Id.* at 802. Intermediate scrutiny also applies to illegal aliens, who are neither law-abiding nor citizens. *United States v. Huitron-Guizar*, 678 F.3d 1164, 1169-70 (10th Cir. 2012).

C. Sister Circuits use strict scrutiny or categorical rules when appropriate.

The Law Center writes that “strict scrutiny is generally inappropriate in the evaluation of firearm regulations.” LawCenterBr.21. However, federal courts apply different standards of review, depending on who is burdened, where the burden applies, and its severity.

1. Seventh Circuit.

Evaluating the prohibition on firearms possession by persons convicted of misdemeanor domestic violence, the Court required a “strong showing.” That showing was made; the Court found the ban to be “vital to the safety of their relatives.” *United States v. Skoien*, 614 F.3d. 638, 641, 643 (7th Cir. 2010). For a law affecting “the gun rights of the entire law-abiding adult population of Illinois,” the government “would have to make a stronger showing.” *Moore*, 702 F.3d at 940.

For law-abiding citizens, a sliding scale considers how closely a law comes to the Second Amendment core. “[A] severe burden on the core Second Amendment right...will require an extremely strong public-interest justification and a close fit between the government’s means and its end.” *Ezell v. City of Chicago*, 651 F.3d 684, 708 (7th Cir. 2011). Thus, Chicago’s ban on target ranges received “not quite ‘strict scrutiny.’” *Id.*

Chicago’s ban on almost all gun sales and transfers also received “not quite strict scrutiny.” *Illinois Ass’n of Firearms Retailers v. City of Chicago*, 961 F. Supp. 2d 928, 939 (N.D. Ill. 2014). Strict scrutiny was appropriate for a lifetime gun ban for non-violent misdemeanants. *Gowder v. City of Chicago*, 923 F. Supp. 2d 1110, 1123 (N.D. Ill. 2012).

2. Fifth Circuit.

“[A] law impinging upon the Second Amendment right must be reviewed under a properly tuned level of scrutiny—i.e., a level that is proportionate to the severity of the burden that the law imposes on the right.” *NRA v. BATFE*, 700 F.3d 185, 198 (5th Cir. 2012). “A regulation that threatens a right at the core of the Second Amendment—for example, the right of a law-abiding, responsible adult to...use a handgun to defend his or her home and family...triggers strict scrutiny.” *Id.* at 195.

This standard required strict scrutiny for a federal statute barring persons from buying handguns outside their state of residence. *Mance v. Holder*, 2015 WL 567302 (N.D. Tex. Feb. 11, 2015). Strict scrutiny was also applied to a ban on firearms in parking lots of businesses where alcohol is sold or served. *Taylor v. City of Baton Rouge*, 39 F. Supp.3d 807 (M.D. La. 2014). A restriction on possession in a discrete public location is far less of a burden than constricting self-defense in every location.

3. Fourth Circuit.

“[A]ny law that would burden the ‘fundamental,’ core right of self-defense in the home by a law-abiding citizen would be subject to strict scrutiny. But, as we move outside the home, firearm rights have always been more limited...” *United States v. Masciandaro*, 638 F.3d 458, 470 (4th Cir. 2011). Under this standard, strict scrutiny applied to a statute that allowed banning the possession, sale, or carrying of guns during declared emergencies. *Bateman v. Perdue*, 881 F. Supp. 2d 709 (E.D.N.C. 2012).

4. Ninth Circuit.

“[I]f a challenged law does not implicate a core Second Amendment right, or does not place a substantial burden on the Second Amendment right, we may apply intermediate scrutiny.” *Jackson v. City & Cnty. of San Francisco*, 746 F.3d 953, 961 (9th Cir. 2014). Banning firearms while camping or hiking on Army Engineers property “poses a substantial burden on a core Second Amendment right and is therefore subject to strict scrutiny.” *Morris v. United States Army Corps of Engineers*, 990 F. Supp. 2d 1082, 1086 (D.Idaho 2014).

D. *Marzzarella* provides guidance on level of scrutiny.

The two-step test adopted by this Court was first applied in *Marzzarella*, 614 F.3d at 89. That case involved a pistol with an obliterated serial number, in violation of 18 U.S.C. §922(k). The Third Circuit’s careful explanation of why

intermediate scrutiny was appropriate demonstrates why a higher standard is appropriate here.

Although selecting intermediate scrutiny was “not free from doubt,” it was chosen because the serial number law “leaves a person free to possess any otherwise lawful firearm he chooses—so long as it bears its original serial number.” *Id.* at 97.

Heller’s “categorical protection” rule was inapplicable; it “would make little sense to categorically protect a class of weapons bearing a certain characteristic wholly unrelated to their utility.” *Id.* at 94. A gun with a serial number is “equally effective as a firearm without one.” *Id.* at 95.

The serial number law had no effect on law-abiding citizens: “The District Court could not identify, and Marzzarella does not assert, any lawful purpose served by obliterating a serial number.” *Id.*

In contrast, the parties here agree that whether a magazine holds more than 15 rounds is very closely related to a weapon’s utility. As explained in Part I.A., Sheriffs and Defendant agree that the magazine ban will cause law-abiding citizens to fire fewer shots, and so fewer attackers will be injured.

E. Under *Heller*, Intermediate Scrutiny for laws aimed at law-abiding citizens must be rigorous.

Strict scrutiny “ordinarily” applies when a fundamental right is involved. *Riddle v. Hickenlooper*, 742 F.3d 922, 927 (10th Cir. 2014). But this Court

follows the Supreme Court’s lead to use intermediate scrutiny where the Court has so indicated, such as campaign contribution limits. *Id.* (citing *Randall v. Sorrell*, 548 U.S. 230 (2006)).

Intermediate scrutiny varies by context. For example, a lenient form applies to commercial speech. “The Constitution accords less protection to commercial speech than to other constitutionally safeguarded forms of expression.” *Grant v. Meyer*, 828 F.2d 1446, 1456 (10th Cir. 1987).

Defendant urges that an even weaker form of intermediate scrutiny be used for the Second Amendment. In particular, that the second part of intermediate scrutiny—the statute’s “fit”—passes muster if the legislature had any plausible reason to predict that the statute would be helpful. Further, Defendant insists that courts must ignore whether unnecessary and substantial infringement of the rights of law-abiding citizens causes the “fit” to be poor. Def.br.17-25. Suppression of lawful defensive fire against violent home invaders would be reviewed under a standard *more* lenient than for regulation of commercial highway billboards.

This contradicts *Marzzarella*, where the Third Circuit applied the commercial speech intermediate scrutiny cases. It explained:

The regulation need not be the least restrictive means of serving the interest, *see, e.g., Turner Broad. Sys. [v. FCC]*, 512 U.S. [622] at 662 [1994]; *Ward [v. Rock Against Racism]*, 491 U.S. [781] at 798 [1989], but may not burden more speech than is reasonably necessary, *see, e.g., Turner Broad. Sys.*, 512 U.S. at 662, *Ward*, 491 U.S. at 800.

614 F.3d at 98 (citations filled out, parallel citations omitted).

Heller provided strong guidance on Second Amendment intermediate scrutiny. The Court explained that the D.C. handgun ban failed “any of the standards of scrutiny the Court has applied to enumerated constitutional rights.” 554 U.S. at 571. Accordingly, there is a simple test for whether any particular formulation of Second Amendment intermediate scrutiny is permissible: apply that method to a handgun ban. If that formulation would lead to a handgun ban being upheld, the formulation is defective.

The weak intermediate scrutiny favored by Defendant fails the test. Defendant’s theory would uphold a handgun ban because there is an important government interest (handgun crime) and there is some basis for a legislature to predict that prohibition would reduce the problem (the pro/con social science detailed in Justice Breyer’s *Heller* dissent, which the Court treated as irrelevant). Op.br.8, 23, 34, 37 n.15, 40, 44, 53-54.

Minimalist intermediate scrutiny may be appropriate for laws against persons who are not “law-abiding citizens.” Under *Heller*, it is incorrect for laws which substantially burden law-abiding citizens.

F. This Court can review constitutional facts *de novo*.

The Sheriffs urged this Court to review *de novo* mixed questions of law and fact, sometimes called “constitutional facts.” Op.br.7-8. Defendant responds that *de novo* review is limited to First Amendment cases. Def.br.9.

Independent appellate judgment about constitutional facts originated in the late nineteenth century. Its most famous use was for alleged racial discrimination in jury panels. *See* Monaghan, *Constitutional Fact Review*, 85 COLUM. L. REV. 229 (1985), *cited in United States v. Friday*, 525 F.3d 938, 949 (10th Cir. 2008).

Today, the most common application is in Fourth Amendment cases. “We think independent appellate review of these ultimate determinations of reasonable suspicion and probable cause is consistent with the position we have taken in past cases. We have never, when reviewing a probable-cause or reasonable-suspicion determination ourselves, expressly deferred to the trial court’s determination.” *Ornelas v. United States*, 517 U.S. 690, 697 (1996).

It also applies to Eighth Amendment review of allegedly excessive punitive damages awards. *Cooper Indus. v. Leatherman Tool Grp.*, 532 U.S. 424, 436 (2001) (“courts of appeals should apply a *de novo* standard of review when passing on district courts’ determinations of the constitutionality of punitive damages awards”).

One court has applied it to abortion rights. *A Woman's Choice-E. Side Women's Clinic v. Newman*, 305 F.3d 684, 689 (7th Cir. 2002) (“constitutional fact,’ is reviewed without deference in order to prevent the idiosyncrasies of a single judge or jury from having far-reaching legal effects.”).

In the evolving area of Second Amendment law, this Court can choose to review constitutional facts *de novo*.

III. The magazine ban fails any form of heightened scrutiny.

If *Heller*'s categorical rules do not decide a case, some form of heightened scrutiny applies. Defendant and his amici have never claimed that either of the challenged statutes pass strict scrutiny. Examining Defendant's asserted interests demonstrates that the magazine ban fails any form of heightened scrutiny.

“[T]he government has the burden of demonstrating...that its objective *is advanced* by means substantially related to that objective.” *Reese*, 627 F.3d at 802 (emphasis added). “[I]ntermediate scrutiny places the burden of establishing the required fit squarely upon the government.” *United States v. Chester*, 628 F.3d 673, 683 (4th Cir. 2010). The government “must establish a tight fit” that is “narrowly tailored.” *Heller v. District of Columbia*, 670 F.3d. 1244, 1258 (D.C. Cir. 2011).

Defendant has asserted three interests: reducing fatalities in mass attacks; reducing gunfire by ordinary criminals; and reducing defensive gunfire by victims. Def.br.62-73.

A. Defendant has not shown that banning magazines reduces casualties during mass attacks.

The legislative history contains numerous assertions that magazine changes saved lives in Aurora, Newtown, and Tucson. But there is no evidence to support those key assertions. At trial, it was stipulated that the Aurora attacker's gun jammed. Although Defendant's Tucson witness thought that the criminal was tackled during a magazine change, his testimony was founded on the flawed belief that Glock pistols never jam, which was later stipulated to be untrue. Defendant's Newtown witness admitted that the killer changed magazines at least seven times, and official reports indicated that children escaped when the gun jammed. Op.br.52-53. In the two years since this lawsuit began, Defendant has not credibly presented any instance when a criminal was impeded during a magazine change.¹²

¹² In the Opening Brief, the Sheriffs pointed out an incident regarding which Professor Kleck had testified that a school shooter was tackled during a magazine change. Op.br.51-52. Dr. Kleck has determined that his testimony was incorrect. While researching a new scholarly article, he discovered that the student who tackled the criminal was shot and injured while doing so. Kleck, *The Effect of Large-Capacity Magazines on the Casualty Counts in Mass Shootings* 15 (Working paper, 2015), <http://ssrn.com/abstract=2609785>, ("The first intervener was shot in the hand while wresting this still-loaded gun away from the shooter." Citing THE OREGONIAN, May 23, 1998).

Defendant, citing his experts Fuchs and Cerar, argues that since a “pause” from a gun jam has been shown to save lives (as all parties agree), then a “pause” from a magazine change will also save lives. Def.br.68. This has no basis in the factual record, since the former type of pause is significantly longer than the latter. As stipulated, the “pause” from the gun jam at the Aurora theater lasted so long that a theater emptied. JA.17:3638. At Newtown, seven magazine change pauses did not allow anyone to escape, and one gun-jam pause did. No-one knows when a gun will jam, but a mass shooter can anticipate and prepare for a magazine change.

Defendant notes that his expert Jeffery Zax said that magazine bans would save lives. Def.br.66. Although Zax acknowledged that the magazine ban would have less effect on mass killers than on other persons, he insisted that the ban must have some effect, since “even addicts” respond to price increases. JA.1797-98. But Defendant does not address the Sheriffs’ point that people who plan meticulously for months for a one-time event are not “addicts,” who must repeatedly obtain whatever feeds their addiction. Op.br.50-51.

Alternatively, Defendant points to two opinions on magazine bans. Both were summary judgment cases. A consulting firm¹³ produced a report that “the

¹³ See *NERA’s Role in Litigation Involving Bans on Assault Weapons and Large Capacity Magazines*, <http://www.nera.com/publications/archive/case-project-experience/neras-role-in-litigation-involving-bans-on-assault-weapons-and-.html>.

average number of fatalities or injuries per mass shooting more than doubles when a shooter uses a large-capacity magazine.” (Defined as over 10 rounds.) *New York State Rifle & Pistol Ass’n v. Cuomo*, 990 F. Supp. 2d 349, 371 (W.D.N.Y. 2013). The statement is based on the consultant’s affidavit, which was heavily based on analysis of a data set collected by *Mother Jones* magazine.¹⁴ But *Mother Jones* missed more than 40 percent of the cases which met its selection criteria.¹⁵ Nor did it consistently follow its purported selection criteria.¹⁶

Defendant also cites *Kolbe v. O’Malley*, 42 F. Supp. 3d 768, 788 (D.Md. 2014). Def.br.67. The *Kolbe* court cited a Declaration from Christopher Koper, which in turn was based on the flawed *Mother Jones* data.¹⁷

Amicus Brady Center cites the D.C. Circuit’s *Heller II* opinion, which cited the unsworn legislative testimony of Brady lobbyist Brian Siebel. 670 F.3d. at

¹⁴ Case no. 1:13-cv-00291-WMS, Doc. 69, <https://ecf.nywd.uscourts.gov/doc1/12912700031>.

¹⁵ Duwe, *The Truth About Mass Public Shootings*, Reason.com, Oct. 28, 2014, <http://reason.com/archives/2014/10/28/the-truth-about-mass-public-shootings#.esuljj:16Hi>. Duwe is author of *Mass Murder in the United States: A History* (2007), a leading scholarly book on the subject.

¹⁶ Fox, *Mass shootings not trending*, BOSTON GLOBE, Jan. 23, 2013, http://www.boston.com/community/blogs/crime_punishment/2013/01/mass_shootings_not_trending.html. Fox is professor of criminology at Northeastern University, formerly the Dean, and author of 15 books, including *Extreme Killing: Understanding Serial and Mass Murder* (2d ed. 2014).

¹⁷ Docket #44, Exhibit 7, ¶¶ 25, 38-39, <https://ecf.mdd.uscourts.gov/doc1/09315766843>.

1263; BradyBr.27. The Brady Center also cites a report from fellow amicus Everytown. BradyBr.25. But Everytown specifies the criminal's magazine size in only six of 110 incidents, and does not identify which incidents were assigned to which categories.

While citing studies that amalgamate "assault weapons" and 10-round magazines, Defendant and the Brady Center ignore the evidence in the record that informs us about the question in this case: whether the presence of a magazine over 15 rounds affects the number of fatalities in mass shootings. Professor Kleck collected information on mass shootings from 1994-2013. JA.25:5325-53.¹⁸ This supplemented his previous data collection on such crimes in 1984-1993. JA.12:2473-74, 23:5096. Defendant's cross-examination identified some incidents which Kleck had missed. JA.26:5408-57.

These show that the average number of fatalities in mass shootings when the criminal(s) used magazines of 15 or less was 6.781. If the criminal(s) used magazines over 15, average fatalities were 7.176. The Appendix to this brief contains the calculations. As described in the Appendix's statistical analysis, the "P value" is 0.778,¹⁹ indicating that it is very unlikely that the presence of a magazine over 15 rounds affects the number of fatalities.

¹⁸ Kleck's data set included *Mother Jones*, as well as many other sources. JA.12:2461-65.

¹⁹ On a scale of 0 to 1, a lower P value indicates that it is more likely that a change in one variable (magazine capacity in this case) is associated with a

B. Magazine restrictions for ordinary criminals.

Defendant's second stated interest is that depriving ordinary criminals of standard magazines will reduce criminal gunfire. Yet the *Journal of Trauma*, edited by Defendant's witness Dr. Ernest Moore, found an *increasing* trend in the number of wounds inflicted by criminal gunfire in New Jersey, a state with a 15-round limit. Op.br.49.

Nor does a magazine ban appear to affect the homicide rate. Professor Zax analyzed Virginia data, and found a decline in the percentage of "large" (over 10 round) magazines seized from Virginia criminals when a federal ban was in effect. Op.br.47-49. He did not examine whether this had affected homicide.

A subsequent study examined the Virginia data in conjunction with crime rates. It concluded: "Using the only data available with which to make a direct test of the LCM [Large Capacity Magazine] lethality hypothesis, we are unable to find any effect of LCMs or the Federal LCM ban on lethality measured as the number of murders, the murder rate, the number of gun homicides, the gun homicide rate, or deaths and injury caused by public shootings." Moody,

change in another (average fatalities in this case). "[S]tatistical analysts often use certain preset significance levels—typically .05 or .01. The .05 level is the most common in social science, and an analyst who speaks of 'significant' results without specifying the threshold probably is using this figure." FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 124 (2d ed. 2000).

Large Capacity Magazines and Homicide at 7 (WM. & MARY, Dep't of Econ., Working Paper No. 160, Feb. 2015), <http://ssrn.com/abstract=2592728>.

C. Inhibiting defensive fire by law-abiding victims of violent attacks is not a legitimate government interest.

Banning tens of millions of magazines from law-abiding citizens does not reasonably fit a government interest in suppressing magazine use by criminals. Defendant does not dispute this. Instead, he argues that one purpose of magazine prohibition is to affect the law-abiding. Defendant and the Sheriffs agree that the magazine ban will reduce defensive fire, even when only a few rounds are fired. Part I.A.

Plaintiffs consider the magazine ban “overinclusive means that impact more law-abiding citizens than criminals.” *Illinois Ass’n*, 961 F. Supp. 2d at 942 (ordinance was unconstitutional because “whatever burdens the City hopes to impose on criminal users” also fell “squarely on law-abiding residents”). But in Defendant’s view, the law-abiding are proper targets.

Defendant’s rationale is that law-abiding defenders are inclined to “spray and pray”—to fire excessive shots. Def.br.64-65. The evidence does not support this post-hoc justification, which is not in the legislative history.

Amicus Law Center quotes an op-ed in *USA Today* by Brady Center lobbyist Brian Siebel about the dangers of stray bullets because of “the tendency for defenders to keep firing until all bullets have been expended.”

LawCenterBr.14. That quote, restated in Mr. Siebel's testimony before D.C. Council in 2008, appears nearly verbatim in *Heller II*. 670 F.3d at 1263-64.

At trial two experts testified about spray and pray: Defendant's John Cerar and Plaintiffs' Massad Ayoob. Although Cerar never personally trained anyone, he formerly headed the New York Police Department's firearms training unit, and he had a basic certification in instruction. JA.16:3403-07. Ayoob is the former head of the Firearms Committee of the American Society of Law Enforcement Trainers. He has personally trained thousands of people, including law enforcement, citizens, and persons with disabilities. JA.11:2262-68.

Both testified that "spray and pray" sometimes needed to be corrected for trainees who had been accustomed to carrying revolvers, and were transitioning to semi-automatic pistols, which generally have greater ammunition capacity. JA.11:2279-80, 2317-19 (Ayoob), 16:3382-89 (Cerar).

The District Court expressed concern that dangers to bystanders may make "the firing of large numbers of defensive rounds by a civilian ill-advised." Op.31. This might be true, but it is irrelevant here; Defendant's evidence shows that before the magazine ban's enactment, Colorado law-abiding citizens did *not* fire "large numbers of defensive rounds."

Defendant obtained reports of every home invasion to which a plaintiff Sheriff's Office had responded, over a ten year period. This of course does not

cover crimes in municipalities, nor crimes outside the home, nor crimes which were not reported. Defendant's expert Zax examined the data. Defendant asked him: "Did anyone come close to firing 15 rounds or more?" Zax answered, "As far as the reports go, the answer to that is no." JA.17:3632.

Nothing in the record indicates that "spray and pray" is or ever has been a problem in Colorado. The magazine ban burdens crime victims by reducing their already low-volume defensive fire. The non-existent problem of spray and pray does not justify this burden. To meet the burden "of establishing a reasonable fit" under Second Amendment intermediate scrutiny, "the government may not rely upon mere 'anecdote and supposition.'" *United States v. Carter*, 669 F.3d 411, 418 (4th Cir. 2012) (quoting *United States v. Playboy Entm't Grp.*, 529 U.S. 803, 822 (2000)).

If "spray and pray" were, *arguendo*, a problem with some gun owners, prohibition for everyone goes too far. A licensing system could include required training, and demonstration of safe proficiency.

Amicus New York offers an alternative rationale for imposing prohibition on law-abiding citizens: to prevent magazines from being stolen by criminals. N.Y.br.21-22. That rationale was rejected in *Heller*. Justice Breyer's dissent had argued for banning handguns lest they be stolen by criminals. The argument was not accepted by the majority. Op.br.43 (discussing Justice Breyer's dissenting rationales for prohibition). *See also Illinois Ass'n*, 961 F.

Supp. 2d at 940 (Banning gun sales because some gun dealers knowingly sell to “straw purchasers” who procure guns for criminals is “drastically overinclusive”).

As detailed in the Sheriffs’ Opening Brief, denial of magazines to criminals, and protection of the rights and safety of law-abiding citizens, can be accomplished by the same background checks used for firearms purchases. Or even by the stringent checks used for concealed carry licensing. Op.br.41-42.²⁰ Again, Defendant has not disputed that these means are effective for disarming criminals.

IV. Handgun magazines of 16-20 rounds, and rifle magazines of 16-30 rounds, are protected by the Second Amendment.

In a footnote, Defendant adverts to the argument that standard 16-30 round magazines are not covered by the Second Amendment. His amici make it at length.

A. Defendant did not attempt to meet his burden of proving that magazines over 15 rounds are outside the traditional understanding of the Second Amendment right.

“Constitutional rights are enshrined with the scope they were understood to have when the people adopted them.” *Heller*, 554 U.S. at 634–35. An

²⁰ In addition, Colorado enhances sentences of violent criminals who use semi-automatic centerfire firearms with detachable magazines containing more than 20 rounds. C.R.S. §18-1.3-406(7). The Second Amendment does not prevent Colorado from changing the sentencing enhancer to a lower number.

essential “when” is the period when the People made the Second Amendment enforceable against the states. *See Heller*, 554 U.S. at 614-19 (discussing “Post-Civil War Legislation” and “Post-Civil War Commentators” to elucidate the meaning of the Second Amendment); *Ezell*, 651 F.3d at 702–03; *United States v. Greeno*, 679 F.3d 510, 518 (6th Cir. 2012).

Defendant bore the burden to prove that 16-30 round magazines are outside the scope of the Second Amendment as traditionally exercised. *Jackson*, 746 F.3d at 960 (“whether the record includes persuasive historical evidence establishing that the regulation at issue imposes prohibitions that fall outside the historical scope of the Second Amendment.”); *United States v. Chovan*, 735 F.3d 1127, 1137 (9th Cir. 2013); *Greeno*, 679 F.3d at 518 (citing *Ezell*); *Ezell*, 651 F.3d at 702-03; *Chester*, 628 F.3d at 681-82.

Defendant offered no evidence to meet his burden. Nor can he point to Supreme Court decisions which state that standard magazines are outside the scope of the Second Amendment as traditionally understood. *See Peterson v. Martinez*, 707 F.3d 1197, 1209-12 (10th Cir. 2013) (citing *Heller*, 554 U.S. at 626; *Robertson v. Baldwin*, 165 U.S. 275 (1897) (tradition that concealed carry is not part of the right to bear arms)).

Defendant urges this Court not to consider the history books cited in the Sheriffs’ briefs. Def.br.54. Yet this Court has urged parties to elucidate Second Amendment history in their briefs. In *Huitron-Guizar* (involving the federal

ban on gun possession by illegal aliens), this Court wrote that *Heller* “drew upon the understanding of the age of 1787 in determining the right’s scope. We must follow that approach.” The *Huitron-Guizar* Court expressed its dissatisfaction that “this textual-historical inquiry is unaddressed in the parties’ briefs, nor is there anything to this end in the record.” 678 F.3d at 1169. It is no novelty for Second Amendment briefs to discuss history. *E.g.*, *Moore*, 702 F.3d at 935 (“The parties and the amici curiae have treated us to hundreds of pages of argument, in nine briefs. The main focus of these submissions is history.”). Even if history is ignored, Defendant comes no closer to carrying his burden of proving that standard magazines are not part of the traditional understanding of the Second Amendment right.

B. *Highland Park*’s novel rules contradict *Heller* and Article I.

In the recent *Highland Park* case, Chief Judge Easterbrook rejected *Heller*’s categorical rules. He was concerned that the rules would have thwarted the 1934 National Firearms Act’s severe restrictions on machine guns. 2015 WL 1883498, at *2. This is mistaken; as noted by the dissent, there is no evidence that machine guns have ever been “in common use” among law-abiding citizens. *Id.* at *9 (Manion, J., dissenting).

Chief Judge Easterbrook created a new rule, which removed magazines from Second Amendment protection entirely, upholding a magazine ban without applying heightened scrutiny. *Highland Park* considers whether a

weapon was common at the time of ratification or whether it has a “some reasonable relationship to the preservation or efficiency of a well regulated militia.” *Id.* at *3 (quoting *United States v. Miller*, 307 U.S. 174, 178-79 (1939)).

This is contrary to *Heller*, as the dissent pointed out. The *Highland Park* majority ignored *Heller*’s statement that limiting firearms to the types that were common in the 18th century was “bordering on the frivolous.” *Id.* at *7 (Manion, J., dissenting) (quoting *Heller*, 554 U.S. at 582).²¹

Highland Park ignored *Heller*’s broad historical sweep, which found Second Amendment meaning in the era of Reconstruction and the Fourteenth Amendment. *Heller*, 554 U.S. at 614-19. By then, magazines over 15 were in common law-abiding use. Op.br.20.

Under *Highland Park*’s militia rule, states “should be allowed to decide” what arms the militia has. *Highland Park* at *4. So state or local magazine bans are permissible. *Id.*

This contradicts the constitutional text. The Constitution grants Congress, not the States, the power “To provide for organizing, *arming*, and disciplining

²¹ Magazines over 15 were not common in 1791, but they were the state of the art, with the Girandoni air rifle. Op.br.19. Defendant writes: “It cannot be seriously argued that an air rifle...could be used to inflict damage on the same scale as a modern AR-15.” Def.br.55. Actually, the 22-shot .46 or .49 caliber Girandoni could take an elk (or 22 elk). Op.br.19. The AR-15 in its most typical caliber (.223) is too small for that; Colorado requires a minimum rifle caliber of .24 for all big game hunting. 2 Colo. Code Regs. §406-2:203(A)(1).

the Militia,” while “reserving to the States” the appointment of officers and training. U.S. CONST. art. I, §8 cl. 16 (emphasis added). Accordingly, Congress, and not the state legislatures or city councils, is the source for what constitute militia arms. Since Congress has not banned standard magazines, such magazines are necessarily militia arms, if the *Highland Park* militia test were to be applied.

Another novelty of *Highland Park* is the assertion that when a fundamental right is restricted, the fact that some people will feel safer justifies a law. *Highland Park* at *5. This is contrary to *Heller*; there must have been many D.C. citizens who felt safer because of the handgun ban. The D.C. Council’s enactments presumably reflected their feelings. In *McDonald*, Justice Stevens identified “feeling safe” as a justification for arms bans, but that was in dissent, not the opinion of the Court. *McDonald*, 561 U.S. at 891 (Stevens, J., dissenting).

C. The Second Amendment’s text does not support a magazine ban.

Amicus Law Center argues that magazines are not “arms,” but mere “accessories,” and so irrelevant to the Second Amendment. The Center concedes that small magazines are necessary for a firearm to function at all, and so are protected even though they are not “arms.” But the Center argues that magazines over 15 rounds are not essential to function, and so their

prohibition is not a Second Amendment issue. LawCenterBr.10. The same argument could be made equally well about all magazines over one round.

Apply the Law Center’s theory to the freedom of the press. An ink magazine is not a “press”; it is an accessory to a printing press. So a government can outlaw “large” ink magazines, and the First Amendment is not implicated.

The Center quotes a Kansas statute which defines magazines as “firearms accessories.” The Center omits the statute’s title: “The Second Amendment Protection Act.” K.S.A. §§ 50-1201, 50-1203(b). The Act provides identical statutory protections to firearms and accessories. K.S.A. §§ 50-1204, -1206, -1207, -1208, -1210.

“Arms” and “press” are synecdoches—using a part to refer to the whole. Like calling an automobile “my wheels.” Or using “press” to refer to the whole process of creating, recording and distributing information.

As a Founding Era maxim states: “The accessory follows the nature of his principal.”²² Thus, when Congress exercised its Article I power “To provide for...arming...the Militia,” the 1792 Militia Act required ownership of more than firearms: “a sufficient bayonet and belt, two spare flints, and a knapsack, a *pouch with a box therein, to contain not less than twenty four cartridges....*;

²² *United States v. Burr*, 25 F.Cas. 55, 177 (Marshall, Circuit Justice); COKE, 3 INSTITUTES ON THE LAWS OF ENGLAND 139 (1644) (“Accessorius sequitur naturam sui principalis”).

or with a good rifle, knapsack, shot-pouch, and powder-horn, twenty balls suited to the bore of his rifle...” 1 Stat. 271 (1792) (emphasis added).

Consider the plains rifle displayed in front of Courtroom 1 of the Byron White Courthouse. The rifle belonged to Ephraim White, grandfather of Justice White. Atop the barrel is a U-shaped sight. The sight is not essential to the operation of the gun, which would still function without it (albeit less accurately). If a government banned rifle sights, the Second Amendment would not be implicated, according to the Law Center.

Excluding gun components from the Second Amendment would force judges to decide which components are “essential.” The simpler approach is to apply *Heller*: whether magazines are classified as “arms” or “accessories,” the Second Amendment protects those in common lawful use.

D. Standard magazines are the opposite of “dangerous and unusual.”

Defendant’s amici say that standard handgun magazines of 16-20 rounds, and standard rifle magazines of 16-30 rounds are “dangerous and unusual.” This contradicts the stipulations that there are “tens of millions” of them “typically used for lawful purposes.” Part II.A.

As the Sheriffs have explained, “large” magazines are disproportionately *less* likely to be used in shootings of police officers, perhaps because they are too large to easily conceal. Op.br.49. According to Defendant’s witness, former

Colorado Springs Police Chief Lorne Kramer, a “[t]ypical street criminal does not” carry a magazine over 15 rounds. JA.15:3275.

Widespread law enforcement use is further evidence that particular arms are common and typically used for lawful purposes, rather than “dangerous and unusual.” *See State v. DeCiccio*, 105 A.3d 165, 200-01 (Conn. 2014) (police batons are Second Amendment arms); *People v. Yanna*, 824 N.W.2d 241, 245 (Mich. App. 2012) (“Hundreds of thousands of Tasers and stun guns have been sold to private citizens, with many more in use by law enforcement officers,” so prohibition is unconstitutional).

Standard magazine bans are unusual. Amicus Law Center can point to only seven other states. LawCenterBr.5, n.2. Three of these states are in some respects less severe than Colorado.²³ *See Kennedy v. Louisiana*, 554 U.S. at 426 (“national consensus” against a law which existed in only six states, and not federally); *Kerr v. Hickenlooper*, 744 F.3d 1156, 1178 (10th Cir. 2014) (courts evaluating gun control laws “consider the rarity of state enactments in determining whether they are constitutionally permissible.”).

²³ Massachusetts has a licensing system, not a ban. Op.br.42; *see also* Plaintiffs’ Trial Brief, JA.7:1702 (five out of six Massachusetts gun owners have a Class A license, allowing standard magazine acquisition); HAW. REV. STAT. §134-8(c) (only handguns); MD. CODE ANN., CRIM. LAW §§ 4-302(6) & (7) (exemptions for inheritance, and retired law enforcement), 4-305(b) (bans only sale and transfer, not possession or import).

Standard magazine bans are dangerous because they reduce typical defensive fire. They shift risk of injury from violent aggressors to law-abiding innocents. Part I.A.

V. The Sheriffs had standing individually and officially; their dismissal was not harmless.

A. Because the Supreme Court’s *Allen* decision is recognized as controlling by this Court, the Sheriffs had standing in their official capacities.

In *Board of Education v. Allen*, two school boards and two townships brought a lawsuit arguing that a state statute providing for distribution of free textbooks to students in parochial schools violated the Establishment Clause. *Bd. of Ed. of Cent. Sch. Dist. No. 1 v. Allen*, 392 U.S. 236 (1968). Although the “political subdivision doctrine” often bars political subdivisions from suing their parent state, the Supreme Court ruled that the subdivisions had Article III standing grounded in the “personal stake” of their officers:

[T]hey are in the position of having to choose between violating their oath and taking a step—refusal to comply with s 701—that would be likely to bring their expulsion from office and also a reduction in state funds for their school districts. There can be no doubt that appellants thus have a “personal stake in the outcome” of this litigation.

Id. at 241 n.5.

The Sheriffs’ Opening Brief explained that the District Court misunderstood *Allen*; the District Court believed that individual school board members were named plaintiffs, and so had standing in their individual, non-

official capacities. Op.br.57-58. Defendant does not defend the District Court’s analysis.

Instead, Defendant characterizes the *Allen* rule as “based on a single footnote in *dicta* that is nearly 50 years old.” Def.br.118. But an Article III court’s explanation of why it has jurisdiction to decide a case is essential to its decision. *See Dias v. City & Cnty. of Denver*, 567 F.3d 1169, 1176 (10th Cir. 2009).

Defendant points out that the Ninth Circuit does not follow *Allen*. Def.br.119-20. The Tenth Circuit, however, considers *Allen* binding. In *City of Hugo v. Nichols*, this Court explained that the Hugo officers had no “personal stake” in the litigation, unlike the School Board members in *Allen*, who risked losing their jobs. 656 F.3d 1251, 1259-60 (10th Cir. 2011). The *Hugo* plaintiffs thought that a state statute limiting their sale of water contradicted the dormant commerce clause; nothing in the opinion indicates that *Hugo* officers personally had to disobey the dormant commerce clause.

Here, in contrast, the Sheriffs have argued that enforcing the magazine ban and HB1229 forces them to violate their oaths to uphold the Second and Fourteenth Amendments. Sheriffs are required to enforce “all laws of the State of Colorado.” C.R.S. §16-2.5-103.

Defendant argues that *Allen*’s oath-based rule should be ignored because it gives standing to any local official who has constitutional objections to any

state law. Def.br.120. But as *Hugo* demonstrates, *Allen*'s oath rule is limited to situations where a political subdivision officer would have to *personally* violate the Constitution. Most of the cases cited by Defendant make this distinction. See *Legislature of the Virgin Islands v. DeJongh*, 645 F. Supp. 2d 452, 463 (D.V.I. 2009) (statute "does not actually require the Governor to do anything at all"); *Athanson v. Grasso*, 411 F. Supp. 1153, 1158-59 (D. Conn. 1976) (the system of state funding for public education did not force any city council member to violate the constitution); *Heimbach v. Regan*, 575 F. Supp. 767, 769 (S.D.N.Y. 1983) (following *Athanson*). See also *Regents of the Univ. of Minn. v. NCAA*, 560 F.2d 352, 363-64 (8th Cir. 1977) (Regents had to personally violate due process rights of student-athletes);²⁴ *Akron Bd. of Ed. v. State Bd. of Ed. of Ohio*, 490 F.2d 1285, 1289-91 (6th Cir. 1974) (school board had *Allen* standing because state statute allegedly required them personally to violate the Fourteenth Amendment rights of students).

Defendant also argues that *Allen* applies, at most, to situations in which an officer might lose his job. Def.br.119. A Sheriff who refuses to enforce a state statute could be impeached for "malfeasance in office." COLO. CONST. art. XIII, §2.

²⁴ Abrogated on the grounds that the NCAA is not a state actor. *NCAA v. Tarkanian*, 488 U.S. 179 (1988).

In *Allen*, there was no certainty the school board members *would* be removed from office. There was simply the possibility “that the members of the school board *may be* prejudiced by removal proceedings if they fail to administer a state statute which is alleged to be unconstitutional.” *Board of Ed. of Central Sch. Dist. No. 1 v. Allen*, 276 N.Y.S.2d 234, 241 (N.Y. App. Div., 3d Dept. 1966) (Staley, J., concurring) (emphasis added).

The magazine ban and HB1229 force the Sheriffs to violate a criminal statute. For example, HB1229 has *no* law enforcement exemption. So routine transfers of firearms within the course of law enforcement—such as sending a firearm to a regional crime lab, and later retrieving it—are criminalized. Op.br.60-61. Defendant does not contest that the plain language of the statutes criminalizes many routine law enforcement activities.

Instead, Defendant argues that being criminalized is not one of the examples of a “personal stake” specifically listed in *Allen*. True. The school board members were not violating a New York State criminal law. Yet if being forced to violate a constitutional oath, or being put at risk of losing a government job is a “personal stake,” then *a fortiori* being required to violate the criminal law is a “personal stake.”

It is true that criminalization applies to individual officers of political subdivisions, and not to the subdivision itself. Def.br.121-22. So does the forced

violation of an oath or the loss of a job. Under *Allen*, “personal stake” harm to officers in their official capacities means that there is official capacity standing.

Defendant asserts without argument that there is no credible threat of prosecution. *Id.* at 122. Neither the Attorney General nor any District Attorney has said that he or she will *not* prosecute the Sheriffs. The

[P]laintiffs are...parties against whom these criminal statutes directly operate....Moreover, the State has not disavowed any intention of invoking the criminal penalty provision...against these plaintiffs...and the State here is vigorously upholding the statute in litigation with these plaintiffs. [W]hen fear of criminal prosecution under an allegedly unconstitutional statute is not imaginary or wholly speculative, a plaintiff need not first expose himself to actual arrest or prosecution to be entitled to challenge [the] statute.

Grant, 828 F.2d at 1449 (internal quotes and citations omitted; brackets in original). *See also Dias*, 567 F.3d at 1177 (pit bull owners would have had “credible threat” standing for Denver’s pit bull ban if they had “alleged an intention to return to Denver”); *Ezell*, 651 F.3d at 695-96 (“The very existence of a statute implies a threat to prosecute, so pre-enforcement challenges are proper, because a probability of future injury counts as ‘injury’ for the purpose of standing.”).

In December 2013, the District Court ruled that eleven Sheriffs who had announced retirement dates of January 2015 faced an “imminent enough” threat of prosecution, since they would no longer have an exemption from the magazine ban. JA.9:1887. *A fortiori*, Sheriffs who are presently violating

HB1229, and presently violating the portion of the magazine ban which has no law enforcement exemption face a credible threat.

B. Defendant does not dispute that the District Court erred in dismissing 44 Sheriffs in their individual capacities.

Defendant does not contest the Sheriffs' argument that when the District Court granted Defendant's "motion to dismiss the Sheriffs in their official capacities," the District Court erred by also *sua sponte* dismissing all 55 in their *individual* capacities. Op.br.64-65.

Defendant also does not dispute that the District Court abused its discretion by refusing to grant the Plaintiffs' unopposed motion to alter/amend the decision. *Id.* at 65-68.

C. Defendant did not carry his burden to prove harmlessness of the dismissal of the Sheriffs in their individual or official capacities.

1. The errors may be harmless for Article III jurisdiction.

The District Court had ruled that 11 of the 55 Sheriffs could, via an amended complaint, challenge the magazine ban in their individual capacities, and that none of the Sheriffs in their individual capacities could challenge HB1229. JA.9:1886-90.

The existence of error below being undisputed, Defendant bore the burden of proving it harmless. *United States v. Olano*, 507 U.S. 725, 734 (1993). Defendant writes that "Because at least one plaintiff established standing,

there is no need to consider whether some or all other plaintiffs also had standing.” Def.br.124.

Defendant is correct, as long as this Court agrees with the District Court that at least one plaintiff had standing to challenge the magazine ban and HB1229. But the District Court expressed doubt that any Plaintiffs had standing for either statute. Op.9-19. Further, Defendant still argues that no one had standing to challenge HB1229. Def.br.28-31.

Should this Court agree that none of the trial plaintiffs had standing for either or both statutes, then the exclusion of the 44 individual Sheriffs (for magazines) and all 55 individual Sheriffs (for HB1229) would not be harmless. The excluded Sheriffs could have testified as parties about the individual, non-official harms which they presently suffer, and will continue to suffer, as a result of both statutes. *See, e.g.*, Proposed Third Amended Complaint, JA.5:1095-1108 (detailing individual harms from both statutes).

2. The dismissal of the 44 Sheriffs as individuals prevented some of them from seeking as-applied relief.

Defendant argues that the individual capacity exclusion was harmless, because other plaintiffs presented evidence. Def.br.124. Some of the excluded Sheriffs, however, have particularly compelling reasons for wanting to acquire, including during retirement, standard 16-30 round magazines, based on personal threats against them. Their exclusion as individual capacity plaintiffs

prevented them from seeking as-applied relief, and also prevented the District Court from hearing important evidence about why some highly proficient gun users have compelling needs for standard magazines. *See* JA.3:469-71 (Sheriff Garrett Wiggins declaration); Proposed Third Amended Complaint, JA.5:1095-97 (threats).

3. Defendant has not proven the exclusion of all 55 Sheriffs in their official capacities to be harmless.

As to the exclusion of all Sheriffs in their official capacities, Defendant's harmless error argument is, *in toto*: "The facial challenges advanced by Sheriffs in their official capacities were identical to those advanced by other parties and were fully resolved on the merits." Def.br.122.

First, this ignores the parallel request for as-applied relief, in paragraph H of the Complaint; the as-applied relief the Sheriffs could have been granted would necessarily have been different from as-applied relief granted to other parties. For example, Colorado Youth Outdoors does not transfer firearms to regional crime labs. Nor does it safeguard the guns of unconscious victims of auto accidents, and later return them.

Second, the exclusion of official capacity Sheriffs prevented introduction of much evidence about how the two statutes seriously harm law enforcement. As noted above, HB1224 criminalizes law enforcement firearms transfers. It has impeded law enforcement acquisition of standard magazines. Trained citizen

volunteers who aid law enforcement on a regular basis—the “posses” of many rural Sheriffs’ Offices—are not allowed to acquire the most suitable equipment. Op.br.62-64, 69-71. The first clause of the Second Amendment is not indifferent to the well-being of organizations that keep the peace. Judicial review of statutes which purport to help public safety should consider the harms inflicted on persons and organizations who keep the peace. The Second Amendment safeguards the rights “of those interested in preserving the ‘publick Peace.’” *United States v. Barton*, 633 F.3d 168, 174 (3d Cir. 2011).

VI. Conclusion

The decision of the District Court should be reversed, or it should be remanded for consideration of the Sheriffs’ evidence and relief.

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CERTIFICATE OF COMPLIANCE

I certify pursuant to the Federal Rules of Appellate Procedure 28(a)(11) and 32(a)(7)(c) that the foregoing brief is in 13-point, proportionately spaced Century Schoolbook font. According to the word processing software used to prepare this brief (Microsoft Word), the word count of the brief is exactly 9,987, excluding the cover, table of contents, table of authorities, certificate of service, and this certificate of compliance. On May 21, 2015, the Court issued an Order that the limit for this brief is 10,000 words.

s/David B. Kopel

CERTIFICATE OF SERVICE

I hereby certify that on May 29, 2015, I served the foregoing brief via the CM/ECF system for the United States Court of Appeals for the Tenth Circuit, which will distribute the brief to all attorneys of record in this case and in the related case of 14-1290:

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In addition, seven printed copies of this brief will be hand-delivered to the Tenth Circuit Court of Appeals by June 2, 2015.

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APPENDIX

Data examined

Mass shooting incidents from 1984-2013 are compiled from Professor Gary Kleck's expert report covering 1994-2013 and from his cross-examination, which introduced reports of additional incidents. JA.25:5325-53; 26:5408-57. This supplemented Professor Kleck's previous data collection on such crimes for 1984-1993. JA.12:2473-74, 23:5096.¹

Results

When magazines with a capacity of 15 or fewer rounds were used, the mean (average) number of fatalities was 6.781. When magazines with a capacity greater than 15 rounds were used, the mean number of fatalities were 7.176. The "P value" was 0.778.

The "P value" is an expression of the statistical strength of a relationship. The P value can be between 0 and 1. If the P value is less than 0.05, then the relationship is said to be statistically significant: There is less than a 5% chance that the association between the two variables is due to random variation.

The P value of 0.778 is far from 0.05. This indicates that it is overwhelmingly unlikely that the use of magazines with a capacity greater than 15 rounds affects the number of fatalities in mass shootings.

¹ The previous data collection was published in GARY KLECK, TARGETING GUNS 144, tbl. 4.2 (1997).

Data Table

Below are the data used. The selection criteria are shootings in which more than six people were wounded or killed.

Location	Date	Killed	Guns Used	Mag. over 15?
Santa Monica, CA	6/7/2013	5	AR-15 style rifle, Remington revolver, other handgun(s)	Y
Newtown, CT	12/14/2013	26	Bushmaster semi-automatic rifle, 10mm Glock semi-automatic handgun, Sig Sauer 9mm handgun. 30 round mags.	Y
Brookfield, WI	10/21/2012	3	Unknown	?
Minneapolis, MN	9/27/2012	6	Glock 9mm semi-automatic pistol	?
Sikh Temple, WI	8/5/2012	6	Springfield Armory XD 9mm. 3x19 round mags.	Y
Lauderdale Lakes, FL	3/30/2012	2	Unknown	?
Miami, FL	3/30/2012	2	Unknown	?
Jacksonville, FL	8/29/2011	1 fetus	Unknown	?
Copley, OH	8/7/2011	7	Unknown	?
Grand Prairie, TX	7/23/2011	5	Handgun	?
Aurora, CO	7/20/2012	12	Remington tactical shotgun, Smith and Wesson M&P semi-automatic rifle, Glock .40 caliber semi-automatic handgun. 100 round drum on the rifle.	Mix
Tuscaloosa, AL	7/17/2012	0	“assault rifle”	Y
Oakland, CA	4/2/2012	7	.45 caliber handgun, 8 round mags.	N
Jackson, TN	2/2012	1	Unknown	?
Englewood, IL	12/30/2011	2	Unknown	?
Seal Beach, CA	10/14/2011	8	Springfield 9mm semi-automatic handgun, Heckler and Koch .45 caliber handgun, Smith and Wesson .44 Magnum	?
Dallas, TX	10/9/2011	0	One handgun, other gun unknown	?

Cupertino, CA	10/5/2011	3	Unknown.	?
Miami, FL	9/18/2011	1	Unknown	?
Palmetto, FL	9/10/2011	2	Unknown	?
Carson City, NV	9/6/2011	4	Norinco MAK 90, illegally modified to full automatic. 30 rounds mags.	Y
Grand Rapids, MI	7/7/2011	7	Glock 9mm w/ 12 round mag.	N
Tucson, AZ	1/8/2011	6	Glock 19 9mm semi-automatic handgun w/ 2x15, 2x33 round mags.	Y
Buffalo, NY	8/14/2010	4	Unknown	?
Manchester, CT	8/3/2010	8	2 Ruger 9mm semi-automatic handguns w/ 17 round mags.	Y
Hialeah, FL	6/6/2010	4	.45 caliber semi-automatic handgun	N
Tuscaloosa, AL	5/19/2010	1	9mm handgun	?
Washington, D.C.	3/30/2010	4	AK-47, 9mm semi-automatic pistol, .45 semi-automatic pistol.	Y
Appomattox, VA	1/19/2010	8	"High-powered rifle"	?
St. Louis, MO	1/8/2010	3	"one assault rifle, one shotgun and two handguns"	Y
Ft. Hood, TX	11/5/2009	13	FN Herstal 5.7 tactical pistol. 15 magazines of 20 to 30 rounds	Y
Reading, PA	11/2009	1	Unknown	?
Collier, PA	8/4/2009	3	Unknown	?
Overtown, FL	7/6/2009	2	Unknown	?
Philadelphia, PA	6/21/2009	1	Unknown	?
Jacksonville, FL	4/27/2009	1	Unknown	?
Binghamton, NY	4/3/2009	13	Beretta .45 caliber semi-automatic pistol, Beretta 9mm semi-automatic pistol w/ 2 30 round mags.	Y
Santa Clara, CA	3/29/2009	5	.45 caliber semi-automatic pistols	N
Carthage, NC	3/29/2009	8	Shotgun, at least one other gun	?

Samson, AL	3/11/2009	10	Bushmaster AR-15, SKS rifle, shotgun, and .38 caliber pistol	Y
Largo, MD	3/1/2009	1	Unknown	?
Portland, OR	1/27/2009	2	9mm handgun	?
Seattle, WA	9/2/2008	6	Rifle, handgun	N
Knoxville, TN	7/2008	2	Sawed-off double-barreled shotgun	N
DeKalb, IL	2/14/2008	5	Sig Sauer P232 9mm semi-automatic pistol, HiPoint CF380 .380 caliber semi-automatic pistol, Glock 19 9mm pistol, Remington Sportsman 48 12 gauge shotgun. Shooter had 2x15, and 2x33 magazines for the Glock. He may have used only the shotgun and the Glock.	Y
Kirkwood, CA	2/7/2008	6	.44 caliber revolver, Smith and Wesson .40 caliber semi-automatic pistol	N
Denver, Colo. Springs, CO	12/9/2007	4	Bushmaster XM15 rifle, Springfield Armory 9mm semi-automatic handgun. (Unused: AK-47 style rifle, Beretta .40 caliber semi-automatic handgun.)	Y
Omaha, NE	12/5/2007	8	AK-47 style semi-automatic rifle. 30 round mags.	Y
LoDo, Denver, CO	11/2007	1	Unknown	?
Crandon, WI	10/7/2007	6	Automatic rifle, 30 rounds fired	Y
Virginia Tech, VA	4/16/2007	32	Glock 19 9mm semi-automatic pistol, Walther P22 .22 caliber Pistol (10 and 15 round mags)	N
Salt Lake City, UT	2/12/2007	5	Maverick Arms Model 88 12 gauge shotgun, Smith and Wesson .38 caliber pistol	N
Lancaster, PA	10/2/2006	5	Springfield 9mm semi-automatic pistol, capacity of magazines unknown; 12 gauge shotgun; Ruger bolt-action rifle	?
Indianapolis, IN	6/3/2006	7	Unknown	?
Seattle, WA	3/25/2006	7	Winchester Defender pump-action 12 gauge shotgun, Ruger P-94 .40	N

			caliber handgun. (Unused AR-15 in car).	
Red Lake, WI	3/12/2005	7	Ruger .22 caliber semi-automatic handgun, Glock .40 caliber semi-automatic handgun, Remington 12 gauge shotgun. Magazine capacity unknown.	?
Birchwood, WI	11/21/2004	5	SKS 7.62mm, 10 round mag. (reloaded at least twice).	N
Meridian, MS	7/8/2003	6	Winchester 12 gauge pump-action shotgun. (Other unfired guns in car.)	N
Goshen, IN	12/6/2001	1	12 gauge shotgun	N
Elgin, IL	4/14/2001	2	Shotgun, silver handgun, speed-loading device, several magazines	?
Santee, CA	3/5/2001	2	.22 caliber revolver (reloaded three times)	N
Chicago, IL	2/5/2001	4	SKS semi-automatic rifle, Remington shotgun, .30 caliber hunting rifle, .38 caliber revolver	Y
Wakefield, MA	12/26/2000	7	AK-47 style rifle (60 round mag.), Winchester 12 gauge pump-action shotgun, .32 caliber semi-automatic pistol	Y
Roanoke, VA	9/22/2000	1	9mm Ruger handgun. Mag capacity unknown, but more than 9	?
Queens, NY	5/24/2000	5	Bryco-Jennings .380 caliber semi-automatic pistol	N
Washington DC	4/24/2000	0	9mm shells found. Gun never recovered.	?
Florida	12/30/1999	5	9mm semi-automatic handgun, .38 caliber handgun	?
Honolulu, HI	11/2/1999	7	9mm Glock pistol. 10 rounds fired.	?
Ft. Worth, TX	9/15/1999	7	9mm semi-automatic handgun (Ruger) and a .380 caliber handgun	?
Atlanta, GA	7/30/1999	9	Glock 9mm handgun, Colt .45 handgun, H&R .22 caliber revolver, Raven .24 caliber pistol. Capacity of magazines unknown	?

Conyers, GA	5/20/1999	0	.22 caliber rifle, .357 magnum handgun	N
Littleton, CO	4/20/1999	13	Intratec TEC-DC-9 9mm semi-automatic handgun, Hi-Point 995 9mm carbine rifle, Savage-Springfield 67H 12 gauge pump action shotgun, Stevens 311D double barreled shotgun.	Mix
Salt Lake City, UT	4/15/1999	2	.22 caliber semi-automatic handgun	N
Springfield, OR	5/21/1998	4	“.22 caliber semi-automatic Ruger rifle, his father’s 9mm Glock pistol and a .22 caliber Ruger semi-automatic pistol.” 50 round magazine	Y
Jonesboro, AR	3/24/1998	5	At least four guns used. Including 30 round magazine.	Y
Orange, CA	12/18/1997	4	AK-47, shotgun, handgun	Y
Paducah, KY	12/1/1997	3	.22 caliber handgun (shooter also had two rifles and two shotguns)	N
Pearl, MS	10/1/1997	2	Rifle	?
Aiken, GA	9/15/1997	4	semi-automatic pistol (8 round mags.)	N
North Hollywood, CA	2/28/1997	0	Fully automatic AIM AK-47, Norinco Type 56 S-1, semi-automatic HK-91, and a Bushmaster XM15 E2S	Y
NYC, NY	2/23/1997	1	.380 caliber Beretta handgun	N
Washington DC	12/31/1994	2	.22 caliber rifle, handgun	?
Spokane, WA	6/20/1994	4	AK style rifle. 70 round mag. “unspecified ‘single shot’ weapon” (unused)	Y
Washington, DC	3/31/1994	1	Tec-9 semi-automatic (found but not confirmed as used in the shooting)	Y
Long Island R.R., NY	12/7/1993	5	Ruger P-85 9mm semi-automatic pistol	N
San Francisco, CA	7/1/1993	8	Two Intratec DC9 9mm semi-automatic pistols; 1 Colt .45 caliber semi-automatic pistol	Y
Killeen, TX	10/16/1991	22	Two Glock 17 9mm semi-automatic pistols	Y

Phoenix, AZ	8/10/1991	9	.22-caliber rifle; 20-gauge shotgun	N
Chimayo, NM	2/26/1991	7	7mm rifle, .38 cal. revolver, .357 magnum revolver	N
Jacksonville, FL	6/18/1989	8	.30-caliber semi-automatic carbine; also armed with .38 caliber revolver	N
Louisville, KY	9/14/1989	7	AK-47 semi-automatic rifle; 2 MAC-11 semi-automatic pistols; Sig-Sauer 9mm semi-automatic pistol; Smith and Wesson .38 caliber handgun	Y
Stockton, CA	1/17/1989	5	Model 56S (copy of AKM-47); also armed with 9mm pistol	Y
Sunnyvale, CA	2/17/1988	7	12-gauge shotgun used in all killings; also armed with .30-06 rifle, 9mm Browning semi-automatic pistol; .380 caliber semi-automatic pistol	N
Russellville, AK	12/18/1987	16	Two .22-caliber pistols	N
Eckland, MO	9/25/1987	7	.22-caliber revolver	N
Palm Bay, FL	4/23/1987	6	.223 caliber rifle; revolver	Y
Edmond, OK	8/19/1986	14	Two .45 caliber semi-automatic pistols, borrowed from Oklahoma National Guard; personally owned .22 caliber handgun	N
San Ysidro, CA	7/18/1984	21	12-gauge pump shotgun; 9mm Uzi semi-automatic carbine	Mix
Brooklyn, NY	4/15/1984	10	“Two different guns” [.22 pistol and .38 revolver]	N

How magazine size was determined

If magazine size was not specified, the following assumptions were made: When the term “assault rifle” was listed in the information, or when the weapon type listed was a rifle whose standard magazine capacity is greater than 15 rounds, the magazine size was presumed to exceed 15, despite the availability of smaller magazines for such rifles. (*See*

Def.br.61.) We assumed that handguns in .40 or .45 caliber did not have a magazine with a capacity over 15, because almost all of them come standard with a smaller magazine. (*Id.*) Because 9mm handguns come in many sizes, (JA6:1504), we left as “unknown” incidents which specified only that a 9mm handgun was used. When a model name was provided for any firearm, we assumed that the gun had the largest standard magazine for that model. For example, the Glock 17 has a standard 17 round magazine, and the Glock 19 has a standard 15 round magazine. We assumed that revolvers and .22 caliber handguns had an ammunition capacity of 15 rounds or fewer, and also rifles in calibers for which standard magazines of more than 15 rounds are not typical. Likewise, shotguns almost always have integral tubular magazines whose capacity is well under 15 rounds. Or they have no magazine, as in a double-barreled shotgun.

In several crimes, the criminal(s) used magazine(s) of both sizes (16 or more; 15 or less). These were classified as follows: At San Ysidro, California, “at least half” of the 21 fatalities were inflicted with the shotgun. Christopher S. Koper & Jeffrey Roth, *The Impact of the 1994 Assault Weapons Ban on Gun Violence Outcomes*, 17 J. QUANTITATIVE CRIMINOL. 33, 42 (2001), discussed in JA.23:5096; cited in BradyBr.25 n.25. In this case, 11 deaths were attributed to the shotgun, and 10 to the carbine (which had a magazine over 15 rounds).

At the Aurora Theater, there were 3 fatalities from the shotgun, and 9 from the rifle with its 100-round drum.²

² Order Re: Preliminary/Proof Evident Hearing, *People v. Holmes*, no. 12CR1522, at 15, (D. Arapahoe, Colo. Jan. 10, 2013),

At Columbine, both murderers carried sawed-off shotguns. One killer carried a rifle with a magazine under 15 rounds; the other killer carried a handgun with a magazine over 15. There were 5 fatalities from shotgun wounds. For the other 8, we presumed that half were from the rifle, and half from the handgun.³

The following additional cases appear to be mixed, but we classified them as if all the fatalities were from magazines over 15 rounds: St. Louis, MO, 1/8/2010; DeKalb, IL, 2/14/2008; Red Lake, WI, 3/12/2005; Wakefield, MA, 12/16/2000; Jonesboro, AR, 3/24/1998.

In mixed incidents (both sizes of magazine used), the fatalities are separately analyzed. For example San Ysidro (21 total fatalities) is calculated as one incident for the shotgun (11 fatalities) and a separate incident for the carbine (10 fatalities; magazine capacity over 15).

The various studies cited by Defendant and amici do not account for mixed cases. In situations where the criminal killed family members before traveling somewhere else to initiate a mass attack, we did not count the family fatalities, because they are not relevant to the question of magazine type in mass attacks. Nor did we count the death of the perpetrator himself. The consultant study based on *Mother Jones* (Part III.A) did include these fatalities.

https://www.courts.state.co.us/userfiles/file/Court_Probation/18th_Judicial_District/18th_Courts/12CR1522/001/1102013%20Order%20C19.pdf. One fatality was listed as arising from both. *Id.* at 19.

³ *Columbine High Shooting Victims Official Autopsy Reports*, <http://www.acolumbinesite.com/autopsies.html>.

For the oldest case (Brooklyn, N.Y., 1984), the table in Kleck’s book reported “two handguns.” These were a .38 caliber revolver, and a .22 caliber pistol.⁴

Statistical tests

At the end of this Appendix is a Glossary which explains some of the statistical terms used in the analysis.

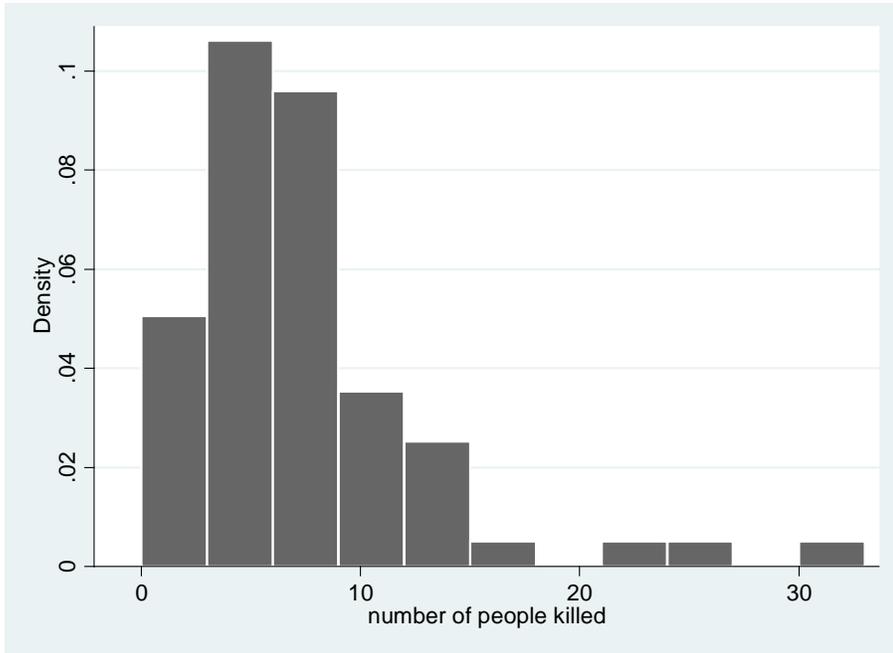
The data was subjected to multiple statistical analyses, outlined below. None of the tests showed a statistically significant difference between the number of people killed during mass shootings, based on whether a magazine was over 15 rounds. Statistical significance is defined with the standard metric of a P value of <0.05. In none of the tests did a P value approach this standard of statistical significance. The analyses were carried out using SigmaPlot 13 analytic software from SysStat Software Inc. and Stata Version 12.

Descriptive Statistics:

In those cases where the shooter used magazines with a capacity of 15 rounds or less, the average number of people killed in each incident is 6.78. In those cases where the shooter used large capacity magazines (>15), the average number of people killed is 7.18.

Variable	Obs	Mean	Std. Dev.	Min	Max
killed	32	6.78125	5.835013	0	32
killed	34	7.176471	5.507409	0	26

⁴ See John M. Doyle, *Man Convicted of Manslaughter In Slayings of 10 Women and Children*, AP Online, July 19, 1985.



An alternative approach to the standard t-test is to use a regression model with a dummy (binary) variable. The dummy variable (called “lcm16” below) indicates whether the shooter used magazines capable of holding more than 15 rounds. The dummy is equal to 1 if the shooter used magazines capable of holding more than 15 rounds, zero if he used smaller magazines.

Source	SS	df	MS			
Model	2.57492201	1	2.57492201	Number of obs =	66	
R-esidual	2056.40993	64	32.1314051	F(1, 64)	= 0.08	
Total	2058.98485	65	31.67669	Prob > F	= 0.7780	
				R-squared	= 0.0013	
				Adj R-squared	= -0.0144	
				Root MSE	= 5.6685	

killed	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lcm16	.3952206	1.396119	0.28	0.778	-2.393847	3.184289
_cons	6.78125	1.002051	6.77	0.000	4.779423	8.783077

The coefficient on the dummy variable is identical to the difference between the two means (0.3952206) and the P value is also identical (0.778).

To test the sensitivity of the analysis to the assumption of normality the same test is done assuming a Poisson distribution, which was developed to describe just such data as those described in the figure above.

```
Poisson regression                                Number of obs   =           66
                                                  LR chi2(1)      =           0.37
                                                  Prob > chi2     =           0.5436
Log likelihood = -239.22669                    Pseudo R2       =           0.0008
```

```
-----+-----
      killed | Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----+-----
      lcm16 | .0566462   .0933095     0.61  0.544    - .1262369   .2395294
      _cons | 1.914161   .0678844    28.20  0.000     1.78111    2.047212-
-----+-----
```

The results are the same. There is no significant difference between the two means. The P value corresponding to the null hypothesis that the means are the same is 0.544. We cannot reject the null hypothesis that the means are the same.

Finally, a widely used alternative to the Poisson is the so-called negative binomial model which makes somewhat less restrictive assumptions than the Poisson.

```

Negative binomial regression          Number of obs   =          66
LR chi2(1)                          =           0.10
Dispersion = mean                   Prob > chi2     =          0.7524
Log likelihood = -190.82731          Pseudo R2      =          0.0003

```

```

-----+-----
      killed | Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----+-----
      lcm16 | .0566462   .179486     0.32   0.752    - .2951398   .4084323
      _cons | 1.914161   .1293011   14.80   0.000     1.660736   2.167587
-----+-----
      /lnalpha | -.9479487   .2416106                -1.421497   -.4744006
-----+-----
      alpha | .3875352   .0936326                .2413525    .6222579
-----+-----

```

```

Likelihood-ratio test of alpha=0: chibar2(01) =96.80
Prob>=chibar2 = 0.000

```

The results are again unchanged. The null hypothesis of no difference between the means cannot be rejected at any reasonable level of significance ($P = 0.752$). The results are the same when we drop the assumption that the data are distributed normally. Therefore the results do not depend on the normality assumption.

As a result of these tests, we can conclude with considerable confidence that the use of magazines capable of holding more than 15 rounds in multiple-victim shootings has no relationship to the number of people killed in such events.

Glossary

Alternative hypothesis (Ha). The statement accepted as true if the null hypothesis is rejected ($P < .05$). For example if the null hypothesis is that two means are equal, the alternative hypothesis is that the two means are not equal.

Bartlett's Test for Equal Variances. The standard test for the equality of the variances of two groups.

Coefficient (Coef.) Number associated with a variable in a regression. For example, the coefficient on the dummy variable gives the change in the mean number of people killed if the dummy goes from zero (small magazine) to one (large magazine). If this coefficient is not significantly different from zero ($P < .05$) then the size of the magazine makes no difference in the mean number of people killed.

Confidence Interval. A numerical expression of the degree of uncertainty associated with a sample statistic such as a mean or coefficient.

F Value. The F-test is the standard small sample test for the equality of two variances.

Hypothesis. A statement that can be subjected to statistical analysis.

Mean. Mathematical term for average. Obtained by adding up all values and dividing by the number of values.

Negative Binomial. Statistical distribution for count data, such as the number of people killed. It is a more flexible version of the Poisson distribution.

Null Hypothesis (H_0). The statement being tested. For example that the number of people killed with large capacity magazines is the same as the number killed with smaller capacity magazines. If the null hypothesis is rejected (P value less than .05), the alternative hypothesis is accepted as true.

Obs. Observations. The number of incidents in the data set.

P value. A statistic used for testing statistical hypotheses. For every test a significance level is chosen, traditionally 5%. The null hypothesis in this case is that the mean number of people killed with magazines of capacity greater than 15 is equal to the mean number of people killed with smaller capacity magazines. If the P value is equal to

or smaller than the significance level, it suggests that the observed data are inconsistent with the null hypothesis (the observed difference between the two means is too large to be explained by chance alone). Therefore the null hypothesis must be rejected. If the P value is greater than the significance level the null hypothesis cannot be rejected (the observed difference is so small that it could be explained by chance alone).

Poisson Distribution. Statistical distribution derived to model the occurrence of relatively rare events, which are not modeled accurately by the normal distribution.

Regression. A statistical method of determining the relationship between two variables.

Skewness. The degree of asymmetry present in a data set.

Standard Deviation. A representation of the amount of variation or dispersion associated with a data set, equal to the square root of the average squared difference between each observation in set and the set's mean.

Standard Error. Same definition as standard deviation, applied to estimates such as mean or coefficients.

Sum of Squares. The sum of the squares of each value in a data set.

T-value and Degrees of Freedom. The t-value is the result of the t-test being applied to a set of data, with the degrees of freedom being a function of the sample size. The t-value is distributed according to the t-distribution, a modification of the normal distribution.

Variance. A measure of the dispersion of a set of data or a statistical distribution. The sample variance is the sum of the squares of the differences between each observation and the sample mean, divided by the degrees of freedom.

Z Statistic. Alternative to the t-statistic, appropriate for the Poisson and negative binomial distributions.

The above statistical analysis was performed by (1) Noah Rauscher, candidate to receive a degree of Bachelor of Science in Psychology at the University of Colorado at Denver in August 2015, and a Research Associate at the Independence Institute, and (2) Carlisle Moody, Professor of Economics at the College of William and Mary, Williamsburg, Virginia. Professor Moody's research was cited by the Supreme Court's opinion in *McDonald v. Chicago*. JA.17:1818.