

Nos. 25-238 & 25-566

In the
Supreme Court of the United States

CUTBERTO VIRAMONTES, et al.,
Petitioners,

v.

COOK COUNTY, et al.,
Respondents.

EDDIE GRANT, JR., et al.,
Petitioners,

v.

JAMES ROVELLA, IN HIS OFFICIAL CAPACITY, et al.,
Respondents.

*On Writs of Certiorari to the
United States Courts of Appeals
for the Seventh and Second Circuits*

**BRIEF OF PROFESSOR GARY KLECK AND
FPC ACTION FOUNDATION AS AMICI
CURIAE IN SUPPORT OF PETITIONERS**

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INTEREST OF *AMICI CURIAE*¹

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¹ Pursuant to Supreme Court Rule 37.6, *amici* affirm that no counsel for a party authored this brief in whole or in part, and that no person or entity other than *amici* and their counsel made a monetary contribution intended to fund the preparation or submission of this brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

Too much of the discussion and analysis surrounding “assault weapons” focuses on the use of so-called “large-capacity magazines.” Indeed, when legislatures set out to define prohibited weapons, they often include a semiautomatic rifle’s “ability” or “capacity” to accept “large-capacity magazines” as a “feature” that, in combination with one or more other features, transforms the rifle into an “assault weapon.” Proponents of these “assault weapon” bans—and courts that reject Second Amendment challenges to them—frequently focus on the purported dangers of such magazines instead of the semiautomatic rifle itself.

Section I of this brief describes why this conflation of issues is an analytical mistake that should be avoided when the Court decides these cases. First, semiautomatic rifles, such as the AR-15, are uniformly designed with a standard-sized magazine well that accepts similarly standard-sized magazines—regardless of the magazine’s capacity.² This means that ammunition capacity is a feature of separate magazines, not the semiautomatic rifles themselves. It therefore makes no sense to define an “assault weapon” by its “ability” to accept a “large-capacity magazine.” But the definition has the (doubtless intended) effect of sweeping in all AR-15s and similar semiautomatic

² While this brief focuses on the AR-15 (and AR-15 style rifles) as a paradigmatic example of the weapons covered by so-called assault weapon bans, the same is true of any similar semiautomatic weapon, including those banned by Cook County and Connecticut, both in reference to features and by name.

rifles, regardless of whether the gun is actually *used* with magazines whose capacities exceed what legislators deem acceptable.

For the same reason, legislators and courts improperly fail to separate out the issues when they focus on the supposed dangers of these magazines in connection with their analysis of weapon bans. The frequently-cited fear that “assault weapons” equipped with “large-capacity magazines” can fire a large number of bullets in a short period of time is actually focused on the magazine, not the rifle.

Indeed, many legislatures have imposed entirely separate bans on so-called large-capacity magazines, and those laws are subject to separate legal challenges. While magazines are themselves protected by the Second Amendment, a challenge to a magazine ban will present separate issues from a challenge to a firearm ban.

Section II explains how, in any event, empirical research does not support the policy justifications made in favor of banning magazines. Studies have not shown that the availability of supposed large-capacity magazines increases the frequency or lethality of shooting incidents. Shooters rarely fire enough rounds for increased capacity to make a difference, and when they do, it can be attributed to factors other than magazine capacity. Similarly, bans on “large-capacity magazines” have not been shown to reduce gun violence or lethality.

A popular argument for magazine bans is that they force a “pause” while malevolent shooters have to reload, during which the shooter can be neutralized. But research shows that reloading often fails to result in a meaningful

“pause”—and even if it did, bystanders almost never take advantage of it. On the other hand, law-abiding citizens who are caught off guard by an attack frequently require more than the common ten-round limit imposed by states in order to fend off attackers, and a lack of ammunition (or a delay to reload) can cost them their lives.

The Court should reverse.

ARGUMENT

I. Arguments Surrounding So-Called “Assault Weapons” Improperly Conflate Them With “Large-Capacity Magazines.”

Semiautomatic rifles, such as the AR-15, are designed to accept any magazine that fits into their standard magazine well—regardless of capacity. This means that ammunition capacity is a feature of separate magazines, not the guns themselves. Nonetheless, much of the discussion and analysis surrounding “assault weapons” turns on the use of so-called large-capacity magazines. Because magazines are separate devices, with distinct features that present discrete legal issues, they should not be conflated.

It is also important to note at the outset that, while magazines holding more than ten (or fifteen) rounds are considered unacceptably “large” by some legislatures, most of these magazines should be called “standard-capacity magazines,” since they constitute the strong majority of all magazines in circulation. *See, e.g., Ass’n of N.J. Rifle & Pistol Clubs, Inc. v. Attorney General*, 183 F.4th 211, 249-50 (3d Cir. 2026) (en banc) (“ANJRPC”) (“AR-15s ... typically come standard with twenty- or thirty-

round magazines.”). Calling them “large-capacity magazines” is a rhetorical device not unlike the pejorative “assault weapon” label. So while *amici* may use the term “large-capacity magazine” below, they do not agree that it is accurate when applied universally to magazines holding more than ten rounds.

A. Defining AR-15s As “Assault Weapons” By Reference To Their Ability To Accept “Large-Capacity Magazines” Is Nonsensical, As An AR-15 Has Just One Size of Magazine Well That Accepts Magazines, Whatever Their Capacity.

Many “assault weapon” bans define what constitutes a prohibited firearm by setting out a list of “features.” If a firearm has those disqualifying features, it’s an illegal “assault weapon.” *Assault Weapons*, Giffords, <https://perma.cc/8PED-QTVN> (table showing state bans with a feature-based test). These definitions often include features such as the ability to accept “large-capacity magazines,” pistol grips, and adjustable stocks. *See, e.g.*, Highland Park, Ill., City Code § 136.001; Deerfield, Ill., Mun. Code § 15-86; Melrose Park, Ill., Mun. Code § 9.24.060(A)(1); Calumet Park, Ill., Code of Ordinances § 135.01.

The Cook County ban here defines “assault weapon” in part by reference to a semiautomatic rifle’s “capacity to accept a large capacity magazine detachable or otherwise.” Cook Cnty., Ill., Code of Ordinances § 54-211. The

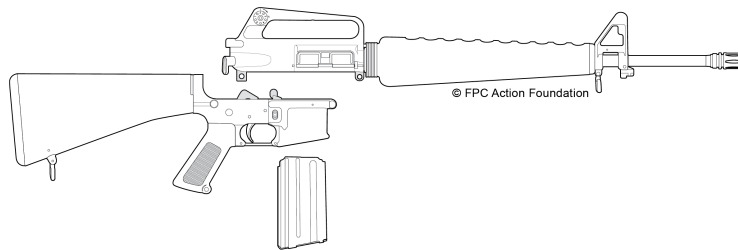
ordinance defines “large-capacity magazine” as “any ammunition feeding device with the capacity to accept more than ten rounds.” *Id.*³

As demonstrated below, however, the standardized design of semiautomatic rifles such as the AR-15 means that defining an “assault weapon” based on its ability to accept “large-capacity magazines” is nonsensical. “[A]mmunition capacity has nothing to do with the gun itself” because “[t]he magazine, not the gun, is the variable.” David B. Kopel, *Rational Basis Analysis of “Assault Weapon” Prohibition*, 20 J. CONTEMP. L. 381, 390–91 (1994). The gun is the same gun, regardless of the kind or size of magazine used with it.

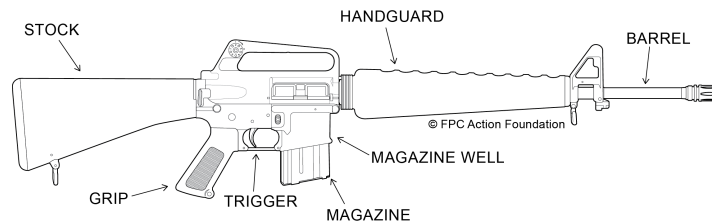
Start with the basics. Every single AR-15 is comprised of an upper receiver assembly (containing the bolt group,

³ Other jurisdictions refer to “detachable magazines,” rather than explicitly identifying large-capacity magazines. *See, e.g.*, Cal. Penal Code § 30515(a); D.C. Code § 7-2501.01(3A)(A)(i)(IV); N.Y. Penal Law § 265.00(22)(a). But since “[m]ost firearms that accept detachable magazines can be equipped with a large-capacity magazine,” *Duncan v. Bonta*, 133 F.4th 852, 862 (9th Cir. 2025) (en banc), *cert pending*, No. 25-198, the “detachable magazines” language serves as a proxy for the ability to accept large-capacity magazines. *See* Kopel, *Rational Basis Analysis of “Assault Weapon” Prohibition*, *supra*, at 391 (describing how one way to “ban guns based on potential large ammunition capacity would be to outlaw all guns which can accept detachable magazines”); James B. Jacobs, *Why Ban “Assault Weapons”?*, 37 CARDOZO L. REV. 681, 689–90 (2015) (tying “the detachable magazine” language in assault weapon bans to the fact that a “semiautomatic that accepts a ten cartridge magazine can also accept a fifteen cartridge magazine”).

chamber, and barrel) and a lower receiver assembly (containing the trigger, hammer, stock, and magazine well).⁴ The following shows the separated upper and lower receiver assemblies, along with a removed magazine:



The following image shows a fully assembled AR-15 with its major components labeled and magazine inserted:



⁴ See STEPHEN P. HALBROOK, AMERICA'S RIFLE: THE CASE FOR THE AR-15 2 (2022) (explaining modularity with an “upper receiver (which includes the barrel) [that] can be switched for barrels in different calibers, using the same lower receiver (which hold internal parts and shoulder stock)”; *United States v. Rowold*, 429 F. Supp. 3d 469, 471 (N.D. Ohio 2019) (describing the “two-part system” comprising the “AR-15 firearm platform”).

“The AR-15 is the civilian version of the military’s M-16 rifle, and is, unless modified, a semiautomatic weapon.” *Staple v. United States*, 511 U.S. 600, 603 (1994). The M-16 was built to standards set by the military in specifications known as “technical data packages.”⁵ These include detailed dimensional drawings of every component of the gun. Correspondingly, the vast majority of AR-15 uppers and lowers are based on this standard (aside from components that would otherwise allow fully automatic fire). As one industry source explains, “[m]ost reputable manufacturers design their AR-15 lower and upper receiver components to these specifications, ensuring basic compatibility.” *AR-15 Parts Interchangeability: What Swaps Between Brands?*, AR-15 Outfitters (Apr. 10, 2026), <https://perma.cc/A8AW-KGMJ>. One significant benefit of standardization to customers is the interchangeability of components—including between different manufacturers and capacities of magazines.⁶ This

⁵ See, e.g., *M 16 Technical Datapackage + Aditonal Prints + Bolt Schematic*, <https://tinyurl.com/63pjfuy>. Technical data packages are the “authoritative technical definition of an item” to be acquired by the military. U.S. Dep’t of Def., MIL-STD-31000C § 3.1.47, *Technical Data Packages* (Feb. 3, 2025).

⁶ See *AR-15 Parts Interchangeability*, *supra* (“AR-15 magazines maintain broad compatibility thanks to STANAG specifications.”). While NATO’s proposed magazine standard—based on the AR-15/M-16 magazine interface and known as STANAG 4179—failed to be adopted, a number of countries and firearm manufacturers have unofficially accepted the pattern. ROBERT E. WALKER, CARTRIDGES AND FIREARM IDENTIFICATION 228 (2013), <https://tinyurl.com/3cvm7t>. This has led to a variety of interchangeable magazines of different sizes and materials that can be accepted by a number of semiautomatic weapons including the AR-15. *Id.*

1.0875 DIA

90° CSK TO 1.22 DIA
AFTER ANODIZE:
13/16-16 UN-3B SPECIAL
MAJOR DIA 1.0875 MIN
PITCH DIA 1.1461/1.1593 SPECIAL
MINOR DIA 1.1207/1.1283
SEE SECTION B-B FOR HOLE LOCATION

90° CSK TO 2.91±.02 DIA
AFTER ANODIZE:
1/4-28 UNF-28 MOD
MINOR DIA .2170/.2210 MOD
PITCH DIA .2268/.2311
MAJOR DIA .2500 MIN

SECTION A-A

FLASH ALLOWED ON
ENTIRE CONTOUR

1.0875 DIA

90° CSK TO 1.22 DIA
AFTER ANODIZE:
13/16-16 UN-3B SPECIAL
MAJOR DIA 1.0875 MIN
PITCH DIA 1.1461/1.1593 SPECIAL
MINOR DIA 1.1207/1.1283
SEE SECTION B-B FOR HOLE LOCATION

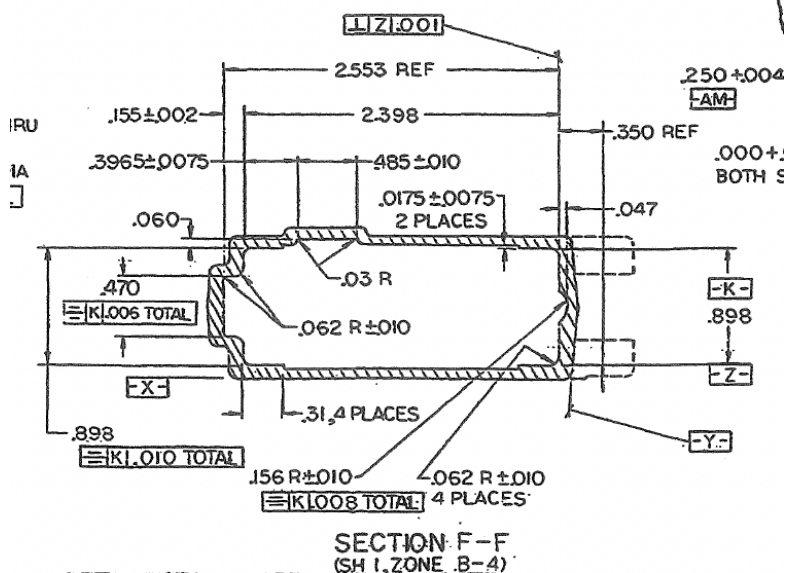
90° CSK TO 2.91±.02 DIA
AFTER ANODIZE:
1/4-28 UNF-28 MOD
MINOR DIA .2170/.2210 MOD
PITCH DIA .2268/.2311
MAJOR DIA .2500 MIN

SECTION A-A

FLASH ALLOWED ON
ENTIRE CONTOUR

M 16 Technical Datapackage + Additional Prints + Bolt Schematic, supra, at 63.

The M-16's technical data package includes a bottom-view schematic showing additional uniform dimensions for the magazine well. The specifications generally identify dimensions down to thousands of an inch—or ten-thousandths in some instances:

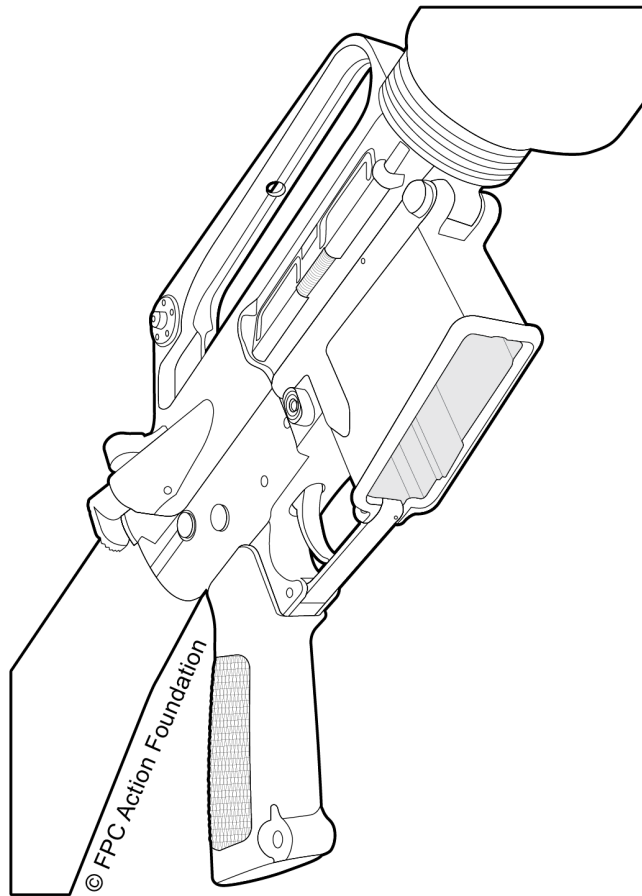


Id.

As a result of the standardization of the magazine well size, the AR-15 *does not vary* based on the capacity of the magazine being inserted. There is no such thing as a “10-round magazine AR-15” or a “30-round magazine AR-15.”⁷

⁷ It is possible to *modify* an AR or other platform rifle at issue here with a fixed magazine size, but that is extremely rare.

When constructed, the AR-15 magazine well looks like this and sits ready to accept magazines of any capacity:



Because the standardized AR-15 accepts magazines of different capacities into its magazine well, the number of rounds it can fire is ultimately a feature of the magazine used with the gun, rather than the gun itself. Kopel, *Ra-*

tional Basis Analysis of “Assault Weapon” Prohibition, supra, at 390–91 (“The number of rounds a gun can fire ... depends on the size of magazine ... [and] has nothing to do with the gun itself.”). A law-abiding AR-15 owner could equip it with a 10-round magazine for applications like hunting, where light weight is an advantage and fewer rounds are necessary. Or she could separately purchase a larger 20-round or 30-round magazine for use in that same gun for self-defense.

In short, defining an “assault weapon” based on its ability to accept “large-capacity magazines” makes no sense. But this is not lost on legislatures seeking to ban AR-15s; the statutory definitions are simply designed to sweep in all AR-15s and similar semiautomatic rifles, regardless of whether the gun is actually *used* with so-called large-capacity magazines.

B. “Assault Weapon” Bans Are Commonly Justified By Reference To The Alleged Dangers Of “Large-Capacity Magazines.”

In spite of the fact that so-called large-capacity magazines are not an inherent “feature” of an “assault weapon,” these bans are commonly justified by fear-mongering appeals to the number of rounds a gun can fire in a certain amount of time—a function that is ultimately tied just as much to the capacity of the magazine as to the gun itself.

1. Before the Seventh Circuit in this case, the government argued in favor of Cook County’s ban by pointing in part to “the ability to fire continuously without reloading” which “[w]hen used against noncombatant civilians ...

translate[s] to mass, indiscriminate harm.” Brief of Defendants-Appellees at 7, *Viramontes v. Cook County*, No. 24-1437 (7th Cir. June 2, 2025). The ability to “fire continuously without reloading” is fundamentally a function of magazine capacity.

Similarly, before the district court, Cook County’s experts explicitly tied the ban to the goal of targeting shootings involving large round counts. John Donohue’s declaration, for example, described the objective of the Cook County ordinance as “reduc[ing] the prevalence of weapons that will be most attractive to mass killers and most effective for committing mass murder or the type of rapid, sustained deadly fire that would be most advantageous for criminal purposes.” Declaration of Professor John J. Donohue at 27–28, *Viramontes v. Cook County*, 1:21-cv-04595, (N.D. Ill. Mar 1, 2024). Donohue’s examples of how “assault weapons” resulted in “more shots fired, persons wounded, and wounds per victim than do other gun attacks” involved “large-capacity magazines.” *Id.* at 54. And in attempting to link weapon bans to reduced deaths, Donohue asserted that it was the “high-capacity magazine[]” used in the Las Vegas shooting that “enable[d] hundreds of individuals to be shot.” *Id.* at 61.

Cook County’s expert James Yurgealitis similarly focused on magazine capacity. He noted that “magazine capacity is a common feature in all firearms subject to The Ordinance” and concluded that “[w]ithout argument the ability to fire an increased quantity of cartridges without reloading increases the lethality and effectiveness of small arms in combat or the military would not have incorporated this feature. ... In a civilian criminal mass or indis-

criminate shooting the resultant effect is the same.” Expert Report of James E. Yurgealitis at 24, 27, *Viramontes v. Cook County*, 1:21-cv-04595, (N.D. Ill. Mar 1, 2024).

In emphasizing the “dangers” of “assault weapons,” Cook County’s experts cited examples of shootings in which many rounds were fired in a short amount of time. For example, Louis Klarevas’s expert report pointed to a Stockton, California shooting where “the gunman fired over 100 rounds in under 3 minutes ... [leaving] 5 dead and another 32 wounded.” Expert Report of Professor Louis Klarevas at 19, *Viramontes v. Cook County*, 1:21-cv-04595, (N.D. Ill. Mar 1, 2024).⁸ Donohue listed a number of similar examples. Declaration of Professor John J. Donohue, *supra*, at 22–23, 40, 44, 46. But the “danger” highlighted by these examples is the number of rounds fired quickly, which is fundamentally a function of magazine size, not of the rifle in which the magazine is used.

2. Legislators also regularly justify these bans by citing the dangers associated with so-called large-capacity magazines. When debating an amendment to the Connecticut ban at issue in *Grant*, State Senator Meyer characterized “large-capacity magazines” as “the most dangerous feature of an assault weapon.” Conn. S. Proc., 2013 Sess. (Apr. 3, 2013), <https://perma.cc/T3KC-DRYF>. In the same debate, Senator Bye emphasized how “large-capac-

⁸ This shooting reportedly involved both a 30-round magazine and a 100-round drum. John Hurst & Stephen Braun, *Rifle Used in Carnegie ‘Easier to Buy Than Handguns’*, L.A. Times (Jan. 18, 1989), <https://perma.cc/582Z-R6DA>.

ity magazines” are an “accessory [that] enables mass destruction, the number of bullets that can be fired so quickly.” *Id.*

While the legislative history of Cook County’s ban is “minimal,” *Wilson v. County of Cook*, 968 N.E.2d 641, 657 (Ill. 2012), when Illinois adopted a similar ban at the state level, Senator Harmon contrasted excluded weapons like the M1 and 1911—taking an “eight-round clip” and “seven rounds,” respectively—with the weapons covered by the ban, which were “designed to do one thing, and one thing only, kill people in a horribly brutal and vicious way.” 102nd Ill. Gen. Assem., Senate Proceedings, Jan. 9, 2023, at 33–34 (statement of Sen. Harmon). Likewise, the 2022 bill that enacted Delaware’s “assault weapon” ban pointed to incidents of violence in its preamble, including the Sandy Hook school shooting where the shooter used “a Bushmaster semi-automatic rifle with 30-round magazines enabling him to fire 154 rounds in less than 5 minutes.” Act of June 30, 2022, ch. 328, 83 Del. Laws (preamble).

At the federal level, the legislative debates in the years leading up to the 1994 Assault Weapons Ban were replete with similar statements. Senator Metzenbaum pointed out that the weapons covered by the proposed ban were “all designed and marketed to use large capacity magazines, which enable them to fire a large number of rounds in a matter of seconds.” 135 Cong. Rec. 1974 (1989) (statement of Sen. Metzenbaum). Representative Johnson supported the final version of the ban because it made it harder for people to get “weapons equipped [with large-

capacity magazines] to fire dozens of shots without reloading.” 140 Cong. Rec. 9358 (1994) (statement of Rep. Johnson).

Legislators hoping to revive a federal ban similarly link “assault weapons” and “large-capacity magazines” in their arguments. Representative Nadler characterized assault weapons “combined with high-capacity magazines” as “the weapon of choice for mass shootings.” 168 Cong. Rec. H7511 (daily ed. July 29, 2022) (statement of Rep. Nadler). Representative Jackson argued that “there is no debating that when paired together, large capacity magazines and assault weapons perform as they were designed—killing more people quickly and efficiently.” 168 Cong. Rec. H7515–16 (daily ed. July 29, 2022) (statement of Rep. Jackson). The House Judiciary Committee’s report on the Assault Weapon Ban of 2022 bill stated that “[s]emiautomatic assault weapons and large-capacity ammunition feeding devices ‘result in more shots fired, more persons hit, and more wounds inflicted per victim than do attacks with other firearms.’” H.R. Rep. No. 117-442, at 42 (2022).

3. Lower courts are not immune from the analytical mistake of conflating “assault weapons” and so-called large-capacity magazines. In *Barnett v. Raoul*, 180 F.4th 1035 (7th Cir. 2026), for example, the Seventh Circuit rejected a challenge to Illinois’ ban on “assault weapons.” The court focused its discussion on the dangers of “AR-15s equipped with large-capacity magazines”:

[A] shooter can discharge thirty rounds ... as quickly as he can pull the trigger. And when that magazine is empty, he can replace it in just a few

seconds, reloading thirty rounds in a fraction of the time it would have taken to reload one in 1791 or 1868. Taking all of this together, a modern shooter armed with an AR-15 and thirty-round magazines can fire almost sixty extraordinarily lethal rounds—assuming about one pull of the trigger per second, with a few seconds to change out magazines—in the time it took to fire a pair of far less damaging shots at the Founding.

Id. at 1055-56. Again, the number of rounds fired is a function of the size of the magazine used with the gun, not the gun itself. Indeed, the courts’ own cited data suggests the feared harm is really correlated with magazine size. *Id.* at 1058 (discussing mass shootings in which more involved large-capacity magazines than assault weapons).

In the Second Circuit litigation in *Grant*, the state tied much of the asserted danger of “assault weapons” to their capacity and speed of firing, noting that it takes “as little as five seconds ... to empty a 30-round LCM.” Brief of the Defendants-Appellees at 10, 153 F.4th 213 (2d Cir. 2025). The Second Circuit adopted this reasoning and zeroed in on magazines: “An AR-15 can hold 30 rounds; is accurate within 400 yards; has a muzzle velocity of approximately 3,251 feet per second; can be reloaded with full magazines in as little as three seconds; and can empty a thirty-round magazine in five seconds.” *NAGR v. Lamont*, 153 F.4th 213, 238 (2d Cir. 2025); *see also Bianchi v. Brown*, 111 F.4th 438, 463–64 (4th Cir. 2024) (en banc) (emphasizing examples of high round-count shootings)

It is no overstatement to conclude that what “assault weapon” ban proponents really fear is magazines they

consider unacceptably large, not the so-called “assault weapon” rifles themselves.

C. While Magazines Are Protected By The Second Amendment, Challenges To “Large-Capacity Magazine” Bans And “Assault Weapon” Bans Raise Separate Issues.

Thirteen states and the District of Columbia have enacted separate bans on so-called “large-capacity magazines.”⁹ Two other states have passed “large-capacity magazine” bans that are not currently in effect.¹⁰ Many (if

⁹ See, e.g., Cal. Penal Code §§ 16740, 32310 (prohibiting the making, importing, sale, purchase, or possession of “any ammunition feeding device with the capacity to accept more than 10 rounds”); Colo. Rev. Stat. §§ 18-12-301–303 (more than 15 rounds); Conn. Gen. Stat. § 53-202w (more than 10 rounds); Del. Code Ann. tit. 11, §§ 1468, 1469, 1469A (more than 17 rounds); D.C. Code § 7-2506.01(b), (c) (more than 10 rounds); Haw. Rev. Stat. § 134-8(c) (pistol magazines capable of holding more than 10 rounds); 720 Ill. Comp. Stat. 5/24-1.10 (more than 10 rounds for long guns and more than 15 rounds for handguns); Md. Code Ann., Crim. Law § 4-305(b) (more than 10 rounds); Mass. Gen. Laws ch. 140, §§ 121, 131M (more than 10 rounds or 5 shotgun shells); N.J. Stat. Ann. §§ 2C:39-1(y), 2C:39-3(j), 2C:39-9(h), 2C:39-20 (more than 10 rounds); N.Y. Penal Law §§ 265.00(23), 265.02(8) (more than 10 rounds); R.I. Gen. Laws §§ 11-47.1-1–3 (more than 10 rounds); Vt. Stat. Ann. tit. 13, § 4021 (more than 10 rounds for long guns and more than 15 rounds for handguns); Wash. Rev. Code §§ 9.41.010(26), 9.41.370 (more than 10 rounds).

¹⁰ Oregon’s ban, Or. Rev. Stat. § 166.355 (more than 10 rounds), was enjoined by a state court and review is currently pending before the Oregon Supreme Court. *Arnold v. Kotek*, 2023 WL 12078798, at *27 (Or. Cir. Ct. 2023), *reversed by*, 566 P.3d 1208 (Or. Ct. App. 2025), *review allowed*, 571 P.3d 1096 (Or. 2025). The Oregon Legislature subsequently amended Section 166.355 to take effect on January 1,

not all) of these bans are the subject of their own Second Amendment challenges.¹¹

Magazines, like semiautomatic rifles, are protected by the Second Amendment. “If a challenged law falls within the plain text of the Second Amendment, it is presumptively unconstitutional.” *Wolford v. Lopez*, 146 S. Ct. 2032, 2044 (2026). This includes laws regulating “Arms”—meaning any “instrument[] that facilitate[s] armed self-defense.” *N.Y. State Rifle & Pistol Ass’n, Inc. v. Bruen*, 597 U.S. 1, 28 (2022).

This protection extends not only to firearms, but also to ammunition and related devices. As the Court has recognized, “[t]he possession of arms also implie[s] the possession of ammunition.” *United States v. Miller*, 307 U.S. 174, 180 (1939). And all magazines “facilitate armed self-defense” by “feed[ing] ammunition into certain guns,” and

2028. 2026 Or. Laws ch. 120. Virginia’s ban, Va. Code Ann. § 18.2-309.1 (more than 15 rounds), was preliminarily enjoined effective July 21, 2026. Amendment to June 29th Letter Opinion, *Santolla v. Katz*, No. CL26-1139 (Va. Cir. Ct. Jul. 7, 2026). While *Santolla* was subsequently stayed pending the Court’s decision in this case, the trial court left the injunction in place. Order Granting Defendants’ Motion to Stay, *Santolla v. Katz*, No. CL26-1139 (Va. Cir. Ct. Jul. 28, 2026).

¹¹ See, e.g., *Ocean State Tactical v. Rhode Island*, 95 F.4th 38 (4th Cir. 2024); *ANJRPC*, 183 F.4th 211 (3d Cir. 2026); *Duncan*, 133 F.4th 852 (9th Cir. 2025); *Fitz v. Rosenblum*, No. 23-35478 (9th Cir., appeal docketed Jul. 17, 2023); *McDonald v. Katz*, No. 1:26-cv-01305 (E.D. Va., filed May 14, 2026); *United States v. Colorado*, No. 1:26-cv-01950 (D. Colo., filed May 6, 2026); *Elliott v. Denver*, No. 1:26-cv-02948 (D. Colo., filed June 30, 2026); *Hanson v. District of Columbia*, 120 F.4th 223 (D.C. Cir. 2024); *Benson v. United States*, 352 A.3d 719 (D.C. 2026), *vacated, en banc granted*, 355 A.3d 190 (D.C. Apr. 22, 2026).

so “are ‘arms’ within the meaning of the Second Amendment.” *ANJRPC*, 183 F.4th at 247; *see also* Jamie G. McWilliam, *Arms*, 101 TUL. L. REV. (forthcoming 2027) (manuscript at 50), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6505699 (“the word ‘Arms’ in the Second Amendment includes any item that facilitates individual or communal defense”).

Second Amendment challenges to magazine bans certainly involve issues that overlap with challenges to “assault weapon” bans, but they nevertheless also raise separate issues. For example, in *ANJRPC*, the Third Circuit considered Second Amendment challenges to New Jersey’s separate “assault weapons” ban and magazine ban, and the court bifurcated its *Bruen* analysis of each. 183 F.4th at 237, 247. In particular, the separate bans involved different textual arguments. *Compare id.* at 238–39, *with id.* at 247–49. The historical analysis involved more overlap, as the court noted among other things that both semiautomatic rifles that qualified as “assault weapons” and “large-capacity magazines” were in common use. *Compare id.* at 239–47, *with id.* at 249–50.

In short, while supposed large-capacity magazines and semiautomatic rifles that fit the definition of “assault weapons” are both covered by the plain text of the Second Amendment, the adjudication of challenges to bans on each will involve separate issues.

II. In Any Event, Empirical Evidence Does Not Support The Policy Justifications Made In Favor Of “Large-Capacity Magazine” Bans.

Justifying “assault weapon” bans by invoking the “dangers” of so-called large-capacity magazines suffers

from yet another fundamental flaw: these magazines are not actually associated with greater lethality or crime. Nor does real-life experience support the fantastical theory that “large-capacity magazine” bans allow targets of mass shootings to physically engage with shooters during the “pause” associated with switching between smaller-capacity magazines.

A. The Availability Of “Large-Capacity Magazines” Has Not Been Shown To Increase The Frequency Or Lethality Of Shooting Incidents.

Studies have not borne out any association between purported large-capacity magazines and an increase in the rate or harm of criminal shooting events.¹² In one prominent study, *amicus* Prof. Kleck surveyed the “15 mass shooting incidents in which more than 6 victims were killed or more than 12 were killed or wounded” during the 10-year period before the enactment of the Federal Assault Weapon Ban. Gary Kleck, *Impossible Policy Evaluations and Impossible Conclusions: A Comment on Koper and Roth*, 17 J. QUANTITATIVE CRIMINOLOGY 75, 79 (2001). He concluded that so-called large-capacity magazines “had no discernible effect on the number of victims.” *Id.* In each of the surveyed incidents, the shooter was

¹² The fact that arms otherwise in common use for lawful purposes are sometimes used for crimes does not alter the Second Amendment analysis. *See District of Columbia v. Heller*, 554 U.S. 570, 636 (2008) (“We are aware of the problem of handgun violence But the enshrinement of constitutional rights necessarily takes certain policy choices off the table.”). Nonetheless, lower courts have wrongly included consideration of this in their analyses. *See, e.g., Barnett*, 180 F.4th at 1057 (pointing to the AR-15’s use in mass shootings); *Duncan*, 133 at 862.

equipped with sufficient guns or magazines, or had a sufficiently low rate of fire, that “large-capacity magazines” would not have “affected the outcomes of *any* known incidents of gun violence.” *Id.*

This finding has been confirmed by later studies. An analysis by Carlisle Moody, Professor of Economics at the College of William and Mary, examined data from a Virginia database of crime guns with large-capacity magazines seized by police between 1993 and 2013. Carlisle E. Moody, *Large capacity magazines and homicide* (College of Wm. & Mary, Dep’t of Econ., Working Paper No. 160, 2015), <https://perma.cc/6PFJ-34YC>. Moody tested the “LCM lethality hypothesis” but could not “find any effect of LCMs ... 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.” *Id.* at 7. He concluded that “[l]arge capacity magazines appear to have little to do with homicide, public or private.” *Id.*

A simple reason for these findings is that assailants in firearm attacks typically do not fire enough rounds for the “large-capacity magazines” to make a difference. See Christopher S. Koper, *Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun Violence, 1994–2003*, at 90 (Nat’l Inst. of Justice, June 2004), <https://perma.cc/DC8M-5JUY>. Koper suggests that “assailants fire less than four shots on average.” *Id.* Other studies suggest even lower rates like “2.7 shots per semiauto gun homicide.” Kleck, *Impossible Policy Evaluations*, *supra*, at 79; see also D.C. Reedy & C.S. Koper, *Impact of handgun types on gun assault outcomes: a comparison of gun assaults involving semiautomatic pistols*

and revolvers, 9 INJURY PREVENTION 151, 152 (2003) (showing ranges of 2.30 to 2.58 or 3.23 to 3.68 depending on type of gun used).

And even when large numbers of rounds were fired during an incident, Prof. Kleck's research suggests that this was unlikely to have been caused by the use of large-capacity magazines. Gary Kleck, *Large Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages*, 17 JUST. RSCH. & POL'Y 28, 44 (2016). Shooters often used multiple guns, and multiple magazines. So "[i]n all but one of such cases in the period from 1994 through 2013, there was nothing impossible or even difficult about the shooter firing equally large numbers of rounds even if he had possessed only smaller capacity magazines, since the same number of rounds could easily have been fired with smaller detachable magazines." *Id.* at 44–45. Instead, Prof. Kleck found the large number of rounds fired to more likely reflect the more lethal intentions of mass shooters, "just as their planned use of multiple guns and multiple magazines, and the unusually high fatality rate (deaths over total woundings) of their attacks are outward indications of a desire to shoot many people." *Id.* at 45.

B. Correspondingly, "Large-Capacity Magazine" Bans Have Not Been Shown To Reduce Gun Violence Or Lethality.

As explained above, purported large-capacity magazines have not been empirically linked to an increase in the frequency or lethality of gun violence. Similarly, a

number of studies have failed to show a significant relationship between bans on so-called large-capacity magazines and a *decrease* in those metrics.

One RAND Corporation report aggregated the results of five studies on the effects of “assault weapon” and magazine bans on the occurrence of mass shootings. *Effects of Assault Weapon and High-Capacity Magazine Bans on Mass Shootings*, RAND Corp. (Jan. 29, 2026), <https://perma.cc/EWL2-N55E>. One of the studies suggested that states with so-called large-capacity magazine bans “had a significant 48-percent reduction in mass shooting incidents and a suggestive 33-percent reduction in mass shooting fatalities.” *Id.* The report noted, however, that “[b]ecause the number of incidents and fatalities is quite low over [the studied] period, maximum likelihood estimates like those used in [this] study may be biased.” *Id.* A different study with less methodological concerns showed only a minor, “suggestive negative association ... between high-capacity magazine bans and the occurrence of a mass shooting.” *Id.* Based on a holistic examination of the studies, the report found only “limited evidence that high-capacity magazine bans reduce mass shootings.” *Id.*

This tracks the conclusions of other studies on the subject. Moody examined the effect of the federal “large-capacity magazine” ban on shooting lethality, and could not find any effect. He concluded that “laws banning [these magazines] apparently have no effect.” Moody, *Large capacity magazines and homicide, supra*, at 7. Koper’s 2004 study found that the Federal Assault Weapons Ban (which also banned “large-capacity magazines”) led to “no discernible reduction in the lethality and injuriousness of

gun violence, based on indicators like the percentage of gun crimes resulting in death or the share of gunfire incidents resulting in injury.” Koper, *Updated Assessment, supra*, at 96.

Prof. Kleck’s 2016 assessment of “large-capacity magazines” similarly concluded that “there is little sound affirmative empirical basis for expecting that fewer people would be killed or injured if LCM bans were enacted.” Kleck, *Large Capacity Magazines and the Casualty Counts in Mass Shootings, supra*, at 45. At the state level, an article addressing Maryland’s large-capacity magazine ban concluded that “the ban has done little to stamp out the use of big magazines by criminals.” Brian Freskos, *Baltimore Police Are Recovering More Guns Loaded With High-Capacity Magazines, Despite Ban on Sales*, The Trace (Mar. 27, 2017), <https://perma.cc/B4AJ-N2MT>.

Another reason that so-called large-capacity magazine bans do not decrease lethality is that “mass shooters rarely use LCMs.” Gary Kleck, *Do Mass Shooters Favor Using Large-Capacity Magazines?* (manuscript at 6), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3552203. As Prof. Kleck has explained, “given that over 14.8% of all U.S. firearms are equipped with LCMs holding over 10 rounds, their use in mass shootings is no more frequent than one would expect if mass shooters simply randomly selected guns and magazines, without any preference for big magazines or guns equipped with them.” *Id.*

C. The Vaunted “Pause” Theory Is Not Supported By The Empirical Evidence.

A common argument for magazine bans is that restricting magazine size will require shooters intent on inflicting mass harm to reload smaller magazines more often, thereby providing a “pause” in the shooting during which they will be easier to neutralize. California Attorney General Rob Bonta, for example, has argued that limiting rounds fired before a shooter must “pause to reload” is a “critical intervention to limit ... mass casualty attacks.” *California’s Large-Capacity Ban Declared Constitutional: Attorney General Bonta Celebrates Important Win for Firearm Safety*, Cal. Dep’t of Justice, Press Release (Mar. 20, 2025), <https://perma.cc/68YM-C8BB>. And Giffords Law Center has supported magazine bans by arguing that “[t]he time a shooter takes to reload his weapon can be critical in enabling victims to escape and law enforcement or others to intervene.” *Large Capacity Magazines*, Giffords Law Center, <https://perma.cc/V4MQ-BXWR>.¹³

But this theory has not been borne out in practice. One study of shooting events from 1994 to 2013 identified only one event in which “interveners actually tackle[d] the

¹³ See also, e.g., Act of Mar. 23, 2022, ch. 104, § 1, 2022 Wash. Sess. Laws (E.S.S.B. 5078) (one reason for regulating large-capacity magazines is that in some “instances[,] ... victims were able to escape or disarm the shooter during a pause to reload”); *Ass’n of N.J. Rifle & Pistol Clubs, Inc. v. Attorney General*, 910 F.3d 106, 120 (3d Cir. 2018) (approving of the district court’s conclusion that “there is some delay associated with reloading, which may provide an opportunity for potential victims to escape or for a bystander to intercede and somehow stop a shooter”).

shooter while he may have been reloading a semiautomatic firearm.” Kleck, *Large Capacity Magazines and the Casualty Counts in Mass Shootings*, *supra*, at 39. And in that event, evidence was insufficient to show that the need to reload was the actual cause of bystanders’ successful intervention. *Id.* at 39–40.

Empirical evidence shows why the theoretical benefits of the reloading pause do not translate into the real world. First, shooters in mass shooting events often “devote considerable advance planning to their crimes,” including “cumulating multiple guns, multiple magazines, and many rounds of ammunition.” *Id.* at 41. This means that “in cases where the shooter has more than one loaded gun, he can continue firing, without significant pause, even without LCMs, simply by switching to a loaded gun.” *Id.* Of 23 known incidents that involved “large-capacity magazines,” 74% also involved more than one gun. *Id.* And of those same incidents, 100% involved multiple magazines, with the average number of magazines in the shooter’s immediate possession being at least 5.78. *Id.*

Second, typical rates of fire, combined with reload speed, mean that the “pause” does not usually amount to a significant break in shooting. In only three of 25 incidents in which average rates of fire could be computed, did shooters average less than two seconds between rounds. *Id.* at 44. “This means that taking 2 s[econds] to reload a detachable magazine would not have slowed the shooters’ average rate of fire at all in 22 of the 25 incidents for which rate of fire could be established and would have only slightly slowed the rate in the remaining three incidents.” *Id.* Further, shooters sometimes change maga-

zines before emptying them¹⁴—meaning that lower capacity magazines would not result in more “pauses” to reload or fewer shots fired.

The combination of these facts effectively offsets any potential real-world benefits from a forced pause. For example, in two of the three “relatively rapid fire incidents,” shooters possessed multiple guns, meaning that instead of reloading, they could have just switched firearms and maintained a high rate of fire. *Id.* Prof. Kleck’s study ultimately concluded that “in nearly all LCM-involved mass shootings, the time it takes to reload a detachable magazine is no greater than the average time between shots that the shooter takes anyway when not reloading[, so] there is no affirmative evidence that reloading detachable magazines slows mass shooters’ rates of fire.” *Id.*

Finally, and more practically, the theory of mass-shooting targets exploiting a reloading “pause” clashes with the reality of an actual mass shooting event. Even if a potential unarmed victim were inclined to engage with the shooter, in the chaos of trying to survive, it would be nearly impossible to even recognize a two- or three-second pause to reload magazines as the opportunity to leave whatever shelter were available. The “pause” theory relies on extraordinary heroes willing to sacrifice themselves, which is why the theory finds so little support in real life.

¹⁴ See, e.g., Report of the State’s Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newton, Connecticut on December 14, 2012 21 (Nov. 25, 2013), <https://perma.cc/GPU9-ZV85> (describing partially-emptied magazines found on the scene).

D. “Large-Capacity Magazine” Bans Do Make It Harder For Law-Abiding Citizens To Successfully Defend Themselves.

Banning supposed large-capacity magazines has not been shown to decrease gun violence, but restricting the magazine capacity that law-abiding citizens can use in defensive situations can have lethal consequences. As one scholar has explained, the “pause” associated with reloading works strongly *against* the innocent defender trying to fend off an attack:

When the defender is reloading, the defender is especially vulnerable to attack. When ammunition is low but not exhausted (e.g., two or three rounds remaining), that may be insufficient to deter or control the threat, especially if the threat is posed by more than one criminal. If the victim is attacked by a gang of four large people, and a few shots cause the attackers to pause, the victim needs enough reserve ammunition in the firearm to make the attackers worry that even if they rush the victim all at once, the victim will have enough ammunition to knock each attacker down. When guns are fired defensively, it is unusual for a single hit to immediately disable an attacker.

David B. Kopel, *The History of Firearm Magazines and Magazine Prohibitions*, 78 ALBANY L. REV. 849, 851–52 (2015). Further, unlike perpetrators who have time to plan their attack, victims are caught off guard and only able to use what magazines they have on hand. Stephen P. Halbrook, *Banning America’s Rifle: An Assault on the Second Amendment*, 22 FEDERALIST SOC’Y REV. 152, 158

(2021). In these situations, “ten rounds may not be enough” and it is “unrealistic to assume that frightened and confused victims ... would be able to secure a second loaded magazine and replace an empty magazine with it.” *Id.*

This risk is not just theoretical. One study of defensive gun uses found that victims who used guns defensively often did so in situations involving multiple offenders. *See* Jongyeon Tark & Gary Kleck, *Resisting Crime: The Effects of Victim Action on the Outcomes of Crimes*, 42 *CRIMINOLOGY* 861, 898 tbl. 8 (2004) (from 1992 to 2001, 3,725 attacks in the National Crime Victimization Survey were committed by multiple assailants—28.9% of those who defended with a gun, and 24.1% of those who threatened their attacker with a gun, faced multiple attackers). And experts have recognized that a single shot is unlikely to stop an attacker. *See, e.g.*, FBI Academy Firearms Training Unit, Handgun Wounding Factors and Effectiveness 8 (1989), <https://tinyurl.com/5n73y2vu> (“[T]he concept of reliable and reproducible immediate incapacitation of the human target by gunshot wound to the torso is a myth.”).¹⁵ So not only do victims in defensive gun use cases frequently face multiple attackers, they will need to fire multiple shots per attacker to have a realistic chance

¹⁵ *See also* Greg Ellifritz, *An Alternate Look at Handgun Stopping Power*, Buckeye Firearms Ass’n (Jul. 8, 2011), <https://perma.cc/GNG3-S4ZQ> (“No matter what gun you are shooting, you can only expect a little more than half of the people you shoot to be immediately incapacitated by your first hit.”); Chuck Remsberg, *New Study on Shooting Accuracy*, Force Science (Nov. 28, 2018), <https://perma.cc/EYK6-HH23> (analysis of Dallas Police Department showed a mere 35% hit rate from shots fired).

of stopping them. The round counts needed to fend off such an attack stack up.

It makes sense, then, that citizens have frequently found themselves in situations where they needed more than 10 rounds to adequately defend themselves. *See Ten cases over the last few years where people have had to fire ten or more shots in self defense*, Crime Prevention Research Center (Oct. 22, 2020), <https://perma.cc/LN5D-UMFW> (nonexhaustive list of situations where up to “hundreds” of shots were fired in self-defense); *see also*, e.g., G. Halek, *[CCW IN ACTION] Houston Concealed Carriers Unload On Armed Muggers—Why We Travel In Packs*, *Concealed Nation* (Dec. 21, 2015), <https://perma.cc/U3CF-9DT5> (defender “emptied his 12-round clip”); *Police: Tallahassee homeowner shot 2 out of 4 home invasion suspects, all 4 charged*, ABC27 WTXL (May 24, 2019), <https://perma.cc/5VLG-SQ6B> (victim fired 25 rounds in self-defense); *Woman shoots 2 alleged intruders, killing 1, inside West Philadelphia apartment, police say*, 6ABC (Mar. 29, 2024), <https://perma.cc/6YBE-HPL9> (13 shots).

By limiting the capacity of magazines that law-abiding citizens can own, they are deprived of a key tool for self-defense.

CONCLUSION

The decision below should be reversed.

Respectfully submitted,

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