
23-1353

IN THE
United States Court of Appeals
FOR THE SEVENTH CIRCUIT

ROBERT BEVIS, et al.,

Plaintiffs-Appellants,

—v.—

CITY OF NAPERVILLE, ILLINOIS, a municipal corporation, and JASON ARRES,

Defendants-Appellees,

—and—

STATE OF ILLINOIS,

Intervening Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION
NO. 1:22-CV-04775
HONORABLE VIRGINIA M. KENDALL

**BRIEF OF AMICUS CURIAE GIFFORDS LAW CENTER TO
PREVENT GUN VIOLENCE IN SUPPORT OF DEFENDANTS-
APPELLEES AND INTERVENING APPELLEE**

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Appellate Court No: 23-1353

Short Caption: Robert Bevis, et al. v. City of Naperville, et al.

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(2) The names of all law firms whose partners or associates have appeared for the party in the case (including proceedings in the district court or before an administrative agency) or are expected to appear for the party in this court: Freshfields Bruckhaus Deringer US LLP

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ii) list any publicly held company that owns 10% or more of the party's, amicus' or intervenor's stock:

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I. INTEREST OF *AMICUS CURIAE*¹

Amicus curiae Giffords Law Center to Prevent Gun Violence (“Giffords Law Center”) is a non-profit policy organization serving lawmakers, advocates, legal professionals, gun violence survivors, and others seeking to reduce gun violence and improve the safety of their communities. The organization was founded more than a quarter-century ago and was renamed Giffords Law Center in 2017 after joining forces with the gun-safety organization led by former Congresswoman Gabrielle Giffords. Today, through partnerships with researchers, public health experts, and community organizations, Giffords Law Center researches, drafts, and defends the laws, policies, and programs proven to effectively reduce gun violence, and advocates for the interests of gun owners and law enforcement officials who understand that Second Amendment rights have always been consistent with gun safety legislation and community violence prevention.²

II. INTRODUCTION

The City of Naperville’s Ordinance prohibiting the sale of assault weapons, Naperville Municipal Code tit. 3, ch. 19, §§ 3-19-1, 3-19-2 (the “Naperville Ordinance”), and the State of Illinois’ Protect Illinois Communities Act, 720 Ill. Comp. Stat. Ann. §§ 5/24-1.9, 1.10 (the “Illinois Act”) (together the “Challenged Laws”) are constitutional under the new test in *New York State Rifle & Pistol Ass’n, Inc. v. Bruen*, 142 S. Ct. 2111 (2022). *Bruen* dictates that when a law regulates conduct covered by the plain text of the Second Amendment, courts reviewing the law’s constitutionality must determine if the “regulation is consistent with this Nation’s historical

¹ In accordance with Federal Rule of Appellate Procedure 29(a)(2), all parties have consented to this filing. No party’s counsel authored any part of this brief, and no one other than *amicus* contributed to its preparation or submission.

² Giffords Law Center has filed numerous *amicus curiae* briefs around the country, providing technical expertise and analysis in gun-related cases. *See, e.g., Bruen*, 142 S. Ct. 2111 (2022); *McDonald v. City of Chicago, Ill.*, 561 U.S. 742 (2010); *D.C. v. Heller*, 554 U.S. 570 (2008); *Libertarian Party of Erie Cnty. v. Cuomo*, 970 F.3d 106 (2d Cir. 2020).

tradition of firearm regulation.” 142 S. Ct. at 2126. The Challenged Laws are constitutional because they are relevantly similar to historical regulations that were designed to address pressing public safety concerns of the time. When considering the unprecedented social and technological conditions addressed by the Challenged Laws, *Bruen* requires a “nuanced approach” to the analogical inquiry to avoid creating a “regulatory straightjacket.” 142 S. Ct. at 2132–33.

The weapons and features governed by the Challenged Laws are also uniquely dangerous, not quintessential self-defense weapons, and, therefore, not covered by the plain text of the Second Amendment. These weapons are designed to kill large numbers of people quickly, making them significantly more lethal than any firearms in the 1700s or 1800s.

Finally, as we show below, Appellants’ version of the common use test is inherently flawed, and their claim that large-capacity magazines (“LCMs”) are in common use is not supported by the evidence.

III. ARGUMENT

A. *Bruen*’s New Second Amendment Test Effectively Requires the Consideration of Empirical Social Science Research.

In *Bruen*, the Supreme Court articulated a new standard for determining whether a regulation is unconstitutional under the Second Amendment. Under *Bruen*, the party challenging a law bears the initial burden of showing that the regulated conduct is covered by the Second Amendment’s plain text. The burden then shifts to the government to demonstrate that the regulation is “consistent with this Nation’s historical tradition” of firearms regulation. *Bruen*, 142 S. Ct. at 2135 (2022). The Court explained that there is no need for a modern regulation to be the “twin” of a historical regulation, because “[w]hile the historical analogies in [*Bruen*] and [...] *Heller* are relatively simple to draw, other cases implicating unprecedented societal concerns or dramatic technological changes may require a more nuanced approach.” *Id.* at 2132.

In cases like this one, involving “unprecedented societal concerns or dramatic technological changes,” *Bruen* endorsed nuanced analogical reasoning to determine whether the challenged law is “relevantly similar” to historical laws. *Id.* The Court identified two important—but non-exclusive—considerations for lower courts: “*how* and *why* the regulations burden a law-abiding citizen’s right to armed self-defense.” *Id.* at 2133 (emphasis added).

Comparing the motivations (the “whys”) and the implementations (the “hows”) of modern and historical laws requires courts to consider relevant social science research regarding the prevailing conditions in modern and historical American society. Such empirical research helps courts contextualize modern and historical laws and the prevailing social backdrop against which those laws were passed, as required by *Bruen*.

Appellants overlook this critical point. They criticize the District Court’s exploration of the whys and hows of the Challenged Laws, wherein the Court outlines the danger and past carnage that the Naperville and Illinois legislatures sought to address.³ Appellants claim this analysis is forbidden “means end scrutiny.”⁴ But there is a distinction between means end scrutiny, *i.e.*, weighing the costs and benefits of a challenged law to determine if the affected right is “really worth insisting upon,” *Bruen*, 142 S. Ct. at 2129, and historical analogical reasoning, *i.e.*, determining “why [a] regulation[] burden[s]” the right to armed self-defense, *id.* at 2133. *Bruen* forbids the first, but mandates the second. And *Bruen*’s historical analogical reasoning effectively requires a review of social science research to understand why a challenged law was passed. Thus, historical analysis requires a court to do exactly what the District Court did in this case.

³ See Brief of Plaintiffs-Appellants, Dkt. No. 27 (“Appellants’ Brief”), at 25 (addressing the District Court’s opinion, pgs. 26–30).

⁴ *Id.* at 25–26.

Bruen created a new test for determining constitutionality under the Second Amendment, one that turns to historical precedent while leaving room for flexibility and nuanced analysis in the context of unprecedented circumstances. This analysis of historical analogues demands that gun safety regulations be viewed in light of relevant prevailing societal conditions, and social science research provides indispensable evidence of these conditions.

B. Because the Challenged Laws Address Unprecedented Social and Technological Conditions, *Bruen* Requires a Nuanced Approach.

Over the past 200 years, unprecedented societal changes and advances in firearms technology have caused a dramatic rise in the frequency and lethality of mass shootings. This uniquely modern danger motivated the Challenged Laws, which like many regulations spanning our Nation’s history, were designed to protect the public.⁵

1. The Frequency, Lethality, and Geographic Concentration of Premeditated Public Mass Shootings Are Novel Societal Concerns.

The United States has indisputably experienced an exponential increase in the frequency of public mass shootings. Giffords Law Center could find only two instances of mass shootings in America throughout all of the 18th and 19th centuries,⁶ both of which occurred in 1891 and neither of which involved fatalities (likely due to the limitations of gun technology at the time).⁷ One scholar estimates that 25 mass shootings occurred between 1900 and 1965.⁸ By contrast, sources

⁵ See Intervening Appellee’s Br., Dkt. No. 56 (“Illinois Brief”), at 5 (explaining motivations); Appellees City of Naperville and Jason Arres’ Response in Opposition to Appellants’ Opening Brief, Dkt. No. 59 (“Naperville Brief”), at 2–3 (same).

⁶ As used here, a “mass shooting” is a shooting in which four or more people (other than the perpetrator(s)) are injured and/or killed, where victims are selected indiscriminately, and where the shootings are not attributable to any other underlying criminal activity or circumstance. Intervening Appellee uses a definition that focuses on the number of deaths caused by a mass shooter. Illinois Br. at 39. Both definitions yield the same conclusion: mass shootings have skyrocketed in this country to an unacceptable level.

⁷ See Maria Hammack, *A Brief History of Mass Shootings*, BEHIND THE TOWER (2016), <https://tinyurl.com/yc85z9pn> (last visited Dec. 9, 2022).

⁸ See Bonnie Berkowitz & Chris Alcantara, *Mass Shooting Statistics in the United States*, WASH. POST (May 9, 2021), <https://tinyurl.com/537ww9z4>.

report over 600 mass shootings *per year* in each of the last three years (610 in 2020, 690 in 2021, and 646 in 2022), with at least four people shot or killed in each incident.⁹ As of this drafting,¹⁰ more than 200 mass shootings occurred in the United States in 2023,¹¹ an average of more than 1.5 per day.

This societal threat is remarkable not just because of its swift rise to epidemic proportions in the United States, but also because of the disproportionately high rate of mass shootings in the United States relative to the rest of the world. At least one comprehensive study has found that between 1998 and 2012, the United States experienced 29.7% of all mass shootings globally, but accounted for just 4.5% of the world's population.¹² This disparity is even starker when measured by gun-related fatalities: in 2015, “[t]he overall firearm death rate was 11.4 times higher in the US than in other high-income countries,” and “83.7% of all firearm deaths, 91.6% of women killed by guns, and 96.7% of all children aged 0-4 years killed by guns were from the US.”¹³

Together, these figures demonstrate that the phenomenon of mass shootings is strikingly more prevalent in modern-day America than at any other time in history or in any other comparable place in the world.

⁹ See *Past Summary Ledgers*, GUN VIOLENCE ARCHIVE (last visited Apr. 27, 2023), <https://tinyurl.com/y5s7ax23>.

¹⁰ And this number is likely to grow. Just last week, there were two mass shootings in Texas. See *How many US mass shootings have there been in 2023?*, BBC (May 9, 2023), <https://tinyurl.com/3k4ahtyh>.

¹¹ *Id.*

¹² See Adam Lankford, *Confirmation That the United States Has Six Times Its Global Share of Public Mass Shooters*, *Courtesy of Lott and Moody's Data*, 16 ECON JOURNAL WATCH 1, 73–77 (Mar. 2019), <https://tinyurl.com/5c8xpuv9>.

¹³ See Erin Grinshteyn and David Hemenway, *Violent death rates in the US compared to those of the other high-income countries, 2015*, 130 NURSING AND HEALTH PROFESSIONS FACULTY RESEARCH AND PUBLICATIONS 1, 2 (2019), <https://tinyurl.com/zb7phedb>.

2. The Rise of Mass Shootings Coincides with Unprecedented Societal Concerns, Which the Founders Could Never Have Imagined.

Several modern social phenomena coincided with a dramatic increase in mass shootings over the 21st century, making firearms regulation especially imperative. The proliferation of social media platforms and transformative urbanization are two poignant examples.

a. *Social Media*

Social media platforms create a means of communication that is exponentially faster, farther-reaching, and more difficult to regulate than anything the Founders could possibly have imagined. Numerous studies have correlated social media with increases in anti-social behavior; political, religious, and social extremism; mental health disorders; and ultimately, mass shootings. Social media has specifically been shown to play an important role in the radicalization of American extremists,¹⁴ as a mounting body of evidence shows that content-ranking algorithms limit users' exposure to contrary viewpoints, creating "echo chambers" that intensify biases.¹⁵

Amid such violent and frenetic discourse, many perpetrators of mass shootings have been inspired by what they read online. One example (from far too many to choose from) is the May 2022 Tops Buffalo shooting, in which the 18 year-old gunman published a racist manifesto online before broadcasting the shooting live on social media.¹⁶ According to an investigation by the New York Attorney General, the gunman's "path towards becoming a white supremacist terrorist began upon viewing on the 4chan [social media] website a brief clip of a [previous] mass shooting."¹⁷ The shooter also posted material on a different social media platform, Discord, "with the explicit

¹⁴ See, e.g. MICHAEL JENSEN ET AL., *Use of Social Media By US Extremists*, NAT'L CONSORTIUM FOR THE STUDY OF TERRORISM AND RESPONSES TO TERRORISM (2019), <https://tinyurl.com/3s9nmbbc>.

¹⁵ See Pablo Barberá, *Social Media, Echo Chambers, and Political Polarization*, CAMBRIDGE UNIV. PRESS (Aug. 24, 2020), <https://tinyurl.com/bdds6wf9>.

¹⁶ See *Investigative Report on the role of online platforms in the tragic mass shooting in Buffalo on May 14, 2022*, OFFICE OF THE NEW YORK STATE ATTORNEY GENERAL (Oct. 18, 2022).

¹⁷ *Id.* at 3.

goal of provoking future mass shootings.”¹⁸ A *Reuters* article observed that the shooting “appear[ed] to be the latest in a line of ‘copycat’ gunmen carrying out deadlier mass shootings inspired by previous attackers.”¹⁹ On May 7, 2023, just days before this brief was filed, yet another mass shooter killed eight people in Allen, Texas, after seemingly being influenced by content he saw on social media.²⁰

b. *Urbanization*

In addition to social media, urbanization has radically transformed society since the Founders’ era. In 1800, the United States averaged 6.1 people per square mile.²¹ By 2020, this increased by a staggering 1500% to an average of 93 per square mile.²²

This explosion in population density has profoundly changed the way people associate. People gather in large groups more frequently than would have been possible before urbanization and mass industrialization, including in schools that accommodate thousands of students, tightly packed commuter trains and buses, large office buildings, and crowded night clubs, concerts, movie theaters, malls, and parades. These gatherings create “sitting duck” situations in which mass shooters can efficiently injure or kill large numbers of people in a single event.²³

3. Advances in Gun Technology Have Combined with These Societal Changes to Create the Perfect Storm for Mass Shootings.

Against the backdrop of these societal changes, advances in gun technology allow even an

¹⁸ *Id.* at 15.

¹⁹ Tim Reid, ‘Copycat’ mass shootings becoming deadlier, experts warn after New York attack, REUTERS.COM (May 15, 2022), <https://tinyurl.com/bdzb8us>.

²⁰ Jake Bleiberg et al., *Source: Investigators examine ideology of Texas gunman*, AP NEWS (May 8, 2023), <https://tinyurl.com/3ywej7aa>.

²¹ POP CULTURE: 1800, U.S. CENSUS BUREAU (Dec. 9, 2022), <https://tinyurl.com/78cxvafx>.

²² Because these figures are an average of the population density of all areas of the country, the much lower density in rural areas means that the numbers drastically understate the impact of population density in *urban* areas, where most mass shootings occur.

²³ *See, e.g.*, Vanessa Romo, *FBI Finds No Motive in Las Vegas Shooting, Closes Investigation*, NPR (Jan. 29, 2019), <https://tinyurl.com/3v2aycdk> (reporting that Last Vegas shooting lasted only 11 minutes but killed 58 concertgoers and injured nearly 1,000 others).

inexperienced shooter to kill more people—and to do so more quickly—than ever before.

The typical Revolutionary-era musket at the time of the Founding: (i) could hold just one round at a time; (ii) had a maximum accurate range of 55 yards; (iii) had a muzzle velocity of approximately 1,000 feet per second; and (iv) took half a minute to load a single shot.²⁴ By contrast, a typical AR-15 rifle: (i) can hold 30 rounds (30 times more);²⁵ (ii) can shoot accurately from around 400 yards²⁶ (7 times as far); (iii) attains a muzzle velocity of around 3,251 feet per second²⁷ (over 3 times faster); and (iv) can be reloaded with full magazines in as little as 3 seconds.²⁸ As a result, one shooter wielding an AR-15 is vastly more lethal than one with a Revolutionary-era musket, which does not come close to the AR-15 in speed and accuracy.²⁹

Even the most advanced firearms of the Civil War era were a far cry from modern weapons such as an AR-15 rifle. For example, the 1866 Winchester rifle had a magazine capacity of 11 to 15 rounds,³⁰ a maximum effective range of approximately 100 yards (one-fourth of an AR-15 rifle), a muzzle velocity of 1,100 feet per second (one-third of an AR-15 rifle),³¹ and could fire

²⁴ Christopher Ingraham, *What ‘Arms’ Looked Like When The 2nd Amendment Was Written*, WASH. POST (June 13, 2016), <https://tinyurl.com/mu5ety64>. “Muzzle velocity” is the speed of a projectile when leaving the muzzle of a gun, and is a general measure of the power and lethality of a firearm. NEWCASTLE UNIVERSITY NATIONAL CIVIL WAR CENTRE, *Meet a Musketeer*, <https://tinyurl.com/heehyjnk>.

²⁵ AR-15 rifles use the same magazines as M16 rifles, which come in a standard size of 30 rounds. See NECKBONE ARMORY, *Are Ar-15 Magazines Interchangeable? Which Ones Are*, <https://tinyurl.com/hppuzpb2>. See also, Ingraham, *supra* note 25.

²⁶ James Miller, *The 5 Best AR-15 Pistols Reviewed: Reports from Range*, MINUTEMAN REVIEW (Apr. 7, 2023), <https://tinyurl.com/5n9as9ye>.

²⁷ Peter M. Rhee et al., *Gunshot wounds: A review of ballistics, bullets, weapons, and myths*, 80 J. OF TRAUMA AND ACUTE CARE SURGERY 6, 856 (2016).

²⁸ AR15.com, “What is your Par time for an AR-15 emergency reload?” (Nov. 22, 2010) <https://tinyurl.com/3csjs7kd>.

²⁹ Scott Pelley, *What makes the AR-15 style rifle the weapon of choice for mass shooters?*, CBS (June 23, 2019), <https://tinyurl.com/3y97wn33>.

³⁰ WINCHESTER GUN STORE, *Winchester Model 1866 Short 38 Special Lever Action Rifle*, <https://tinyurl.com/yc3cv2zc>; Dan Alex, *Winchester Model 1866 Lever-Action Repeating Rifle*, MILITARY FACTORY (Mar. 12, 2019), <https://tinyurl.com/p88kcaye>.

³¹ *Id.*

only 10 shots per minute.³² Using a semiautomatic assault rifle, a shooter can fire forty rounds in as little as nine seconds.³³ This meets the U.S. Army definition for “rapid semiautomatic fire.”³⁴

Increased firing power, coupled with advanced ballistics,³⁵ have made modern firearms far more deadly and fundamentally different from their historical predecessors. Time and again we have all been forced to recognize that in our modern world, a lone individual can carry out mass murder in an extremely short time. This would have been entirely foreign to the generation that ratified the Second Amendment in 1791.

4. *Bruen* Demands Nuance in Analyzing Historical Analogues.

In passing the Challenged Laws, the Naperville and Illinois legislatures contended with realities that legislatures of the past did not, namely the increase in mass shootings, shifts in our society, and advances in gun technology. These drastic societal and technological changes mean that, under *Bruen*, the Court must employ a nuanced analysis when comparing the “hows” and “whys” of the Ordinance with those of historical laws. 142 S. Ct. at 2132.

The motivation behind the Challenged Laws—their (“why”)—is, fundamentally, to promote public safety.³⁶ Many (if not all) gun regulations passed at the time of the Founding and throughout our history had the same motivation: to protect the public from deadly harm.³⁷ Thus, there is a strong and easily discernable link between the past and present “whys.”

³² UBERTI USA, 1866 Yellowboy Rifle History, <https://tinyurl.com/3x2wjth3> (“The gun’s . . . rate of 10 or more shots per minute was a game changer.”).

³³ See Mark Berman and Todd C. Frankel, *High-capacity magazine bans could save lives. Will they hold up in court?*, WASH. POST (Mar. 27, 2023), <https://tinyurl.com/dkzjskxs>.

³⁴ TC 3-22.9 Rifle and Carbine Manual, HEADQUARTERS, DEPARTMENT OF THE ARMY, §§ 8-19–20, (May 2016), <https://tinyurl.com/2p963dxd>.

³⁵ See, e.g., Ethan Siegel, *The Physics Behind Why Firing a Gun Into the Air Can Kill Someone*, FORBES (Feb. 15, 2017), <https://tinyurl.com/2hudma2t>.

³⁶ See Illinois Br. at 5 (explaining motivations); Naperville Br. at 2–3 (same).

³⁷ See Saul Cornell, *History and Tradition or Fantasy and Fiction: Which Version of the Past Will the Supreme Court Choose in NYSRPA v. Bruen?*, 49 Hastings Const. L.Q. 145, 168–69 (2022), <https://tinyurl.com/zx2dvsmc>; see also Illinois Br. at 32–36; Naperville Br. at 28–40.

To analogize present and past “hows,” the Court must determine if the Challenged Laws impose a “burden on the right of armed self-defense” that is “comparable” to the burden imposed by historical laws. 142 S. Ct. at 2133. The Naperville and Illinois legislatures—like prior lawmakers—chose to restrict the use and sale of specific especially-dangerous firearms and features to protect public safety, and they have done so without restricting access to the modern-day quintessential self-defense weapon. Employing the nuanced approach required by *Bruen*, *id.* at 2132, and for the reasons stated in Appellees’ Briefs, the Challenged Laws are relevantly similar to many historical weapons regulations, and thus are consistent with our Nation’s tradition of firearm regulation.³⁸ The Challenged Laws are constitutional under *Bruen* for the reasons cogently advanced by the District Court.

C. Appellants’ Formulation of “Common Use” Is Inherently Flawed.

1. Neither Challenged Law Is a Categorical Ban, and Therefore the Common Use Standard Does Not Apply.

Appellants argue that the Challenged Laws constitute an “absolute ban on a category of arms,” and thus, that the District Court “erred when it failed to address the *Heller/Bruen* rule that a categorical ban of commonly held arms is unconstitutional.”³⁹ Appellants, however, make no comparison between the Challenged Laws and the regulation at issue in *Heller* to support their claim; nor do they provide support for their assertion that the Challenged Laws constitute such an absolute, categorical ban.

In *Heller*, Justice Scalia, writing for the Court and striking down the statute as unconstitutional, held that the Second Amendment right “is not unlimited” and that for centuries, “the right was not a right to keep and carry any weapon whatsoever in any manner whatsoever and

³⁸ See Illinois Br. at 30–46; Naperville Br. at 28–40.

³⁹ Appellants’ Br. at 7.

for whatever purpose.” *Heller*, 554 U.S. at 626. Providing this caveat, Justice Scalia explained that the law at issue in that case violates the Second Amendment because the District’s total ban on handgun possession in the home “amounts to a prohibition of an entire class of ‘arms’[.]” *Id.* at 628.

Appellants fundamentally misunderstand the difference between an absolute ban and a narrowly tailored regulation. Appellants do not even attempt to show how the Challenged Laws would constitute a “prohibition on an entire class of arms” as described in *Heller*. *Id.* *Heller* dealt with a broad ban on possession of all handguns. The Challenged Laws do not ban “rifles” or “semi-automatic rifles.” They regulate an enumerated, narrowly tailored, list of features of certain semiautomatic rifles that pose a specific threat to society. Appellants’ own assertion that the term “assault weapon” in the Illinois Act is “defined by a list of enumerated guns” confirms the point.⁴⁰

Appellants reason that, “[i]n the context of a flat ban on arms,” the question of whether the regulation comports with the history and tradition of the Second Amendment “turns on whether the banned arms are in common use today[.]”⁴¹ Even were this an accurate interpretation of the law, which it is not, it is irrelevant here because the Challenged Laws regulating specific, non-essential features posing a threat to society do not constitute a complete ban on an entire class of weapons.

2. Even Under the Common Use Test as Set Forth by Appellants, the Relevant Weapons Are Not in Common Use.

Appellants argue that simply because millions of assault weapons and LCMs are “in circulation,” or have been “introduced” into the United States, *i.e.*, manufactured in or imported into the United States since 1960, they are in “common use” and thus covered by the plain text of

⁴⁰ Appellants’ Br. at 3.

⁴¹ *Id.* at 17.

the Second Amendment.⁴² This argument fundamentally misapprehends the law because ownership and manufacture estimates prove nothing about the relevant question: whether the instruments regulated by the Challenged Laws are commonly used for self-defense.⁴³

Appellants' assertions regarding semiautomatic weapon ownership in the United States are unfounded and contradictory.⁴⁴ For example, Appellants assert that “tens of millions of Americans own AR-15s or similar rifles,” citing only an unpublished, non-peer-reviewed summary of an online survey.⁴⁵ Yet the article acknowledges that “this estimate is based on a question that asks whether someone **has ever** owned such a rifle,” thus not accounting for transfer of ownership, such as resale.⁴⁶ This highlights just one fallacy in Appellants' use of historical ownership statistics to define “common use”: The argument necessarily assumes that every individual who has ever owned an AR-15-style weapon in the United States still owns that weapon, *i.e.*, that it has not been replaced by a newer model, lost, stolen, discarded, or seized, and that the weapon is *in use*, *i.e.*, in working condition and actively used by the owner.

Even if this data was acceptable, which it is not, using ownership statistics covering many decades to define “common use” ignores the additional requirement that such weapons must be in common use *for lawful self-defense*. See *Bruen*, 142 S. Ct. at 2132 (amendment protects only “instruments that facilitate armed self-defense”). Even Appellants' formulation of the common use test concedes that, to qualify, weapons must be used “for self-defense in the home.”⁴⁷

⁴² See Appellants' Br. at 18, 20.

⁴³ See Illinois Br. at 19.

⁴⁴ See Kim Parker et al., *America's Complex Relationship with Guns: The demographics of gun ownership*, PEW RESEARCH CENTER (June 22, 2017), <https://tinyurl.com/3ckmyeee>.

⁴⁵ Appellants' Br. at 18 (citing William English, *2021 National Firearms Survey: Updated Analysis Including Types of Firearms Owned*, Georgetown McDonough School of Business Research Paper No. 4109494, at 2 (May 13, 2022), <https://tinyurl.com/yc3fer46> (hereinafter “English Paper”)).

⁴⁶ English Paper, 33 (emphasis added).

⁴⁷ Appellants' Br. at 24 (characterizing *Bruen* as not allowing “complete prohibition of weapon[s] commonly possessed by Americans for self-defense in the home.”); see also *id.* at 48.

Additionally, as this Court noted in *Friedman v. City of Highland Park*, “relying on how common a weapon is at the time of litigation [is] circular,” 784 F.3d 406, 409 (7th Cir. 2015), because it would mean that States would have no authority to regulate new weapons once some sufficient number of such weapons are “in circulation.” *Id.* at 408 (submachine guns’ popularity during Prohibition did not provide “constitutional immunity”). By Appellants’ logic, if a firearms company were to manufacture a “civilian version” of a latest development in infantry technology (just as the AR-15 is the “civilian version” of an M16), and market it to consumers by, for example, selling it at competitive prices on e-commerce weapons sites, the States would be powerless to institute any kind of regulation on these weapons if enough people purchased them. This is not and cannot be the test for whether the constitution protects these highly dangerous weapons.

D. Assault Weapons Are Uniquely Dangerous and Not “Quintessential Self-Defense” Weapons Protected by the Second Amendment.

The Supreme Court has held that the Second Amendment right to bear “arms” protects the right of law-abiding, responsible citizens to possess a handgun—the “quintessential self-defense weapon”—in and outside the home for self-defense. *Heller*, 554 U.S. at 629; *Bruen*, 142 S. Ct. at 2119. The Court cautioned, however, that the Second Amendment should not be understood to bestow a right to keep and carry any weapon, in any manner, for any purpose; rather it explicitly endorsed the “historical tradition of prohibiting the carrying of ‘dangerous and unusual weapons.’” *Heller*, 554 U.S. at 626–27.⁴⁸

As discussed above, the Challenged Laws are distinct from the statute at issue in *Heller*, which “totally ban[ned] handgun possession,” 554 U.S. at 628. The Challenged Laws regulate only a narrow subset of assault rifles with features that turn them into dangerous military-style firearms.

⁴⁸ *Bruen* makes clear that many regulations implicating Second Amendment rights will survive scrutiny. See *Bruen*, 142 S. Ct. at 2133–34.

The AR-15, for example, traces its origins to a military-grade rifle designed in the late 1950s.⁴⁹ It is the AR-15’s “phenomenal lethality” that has made versions of it the U.S. military’s standard-issue assault rifle since the Vietnam War.⁵⁰ Besides the capability of automatic fire,⁵¹ the AR-15 is functionally the same as the M16, an automatic weapon designed for military combat.⁵² The AR-15’s and M16’s gas impingement system specifically appealed to the military—an innovation that redirects some of the energy from a fired bullet to reload the next bullet in order to reduce recoil and make it easier for a gunman to maintain aim, thereby increasing accuracy.⁵³ Another assault weapon regulated by the Challenged Laws, the AK-47, Naperville Ordinance § 3-19-1(4)(A), Illinois Act § 1.9(a)(1)(J)(i), was created to match an assault rifle developed and used by Germany in WWII, the StG.⁵⁴

Indeed, virtually all of the world’s armies use assault rifles, which are variants of the AR-15 and AK-47.⁵⁵ As described by the Intervening Appellee, “assault weapons were designed for the U.S. military with features that increase the effectiveness of killing enemy combatants in offensive battlefield situations, and are advertised as military-style weapons.”⁵⁶

⁴⁹ See Sam Bocetta, *The Complete History of the AR-15 Rifle*, SMALL WARS JOURNAL (July 12, 2017), <https://tinyurl.com/2jwemryz>; Sara Swann, *The history of the AR-15 and how it became a symbol of American gun culture*, POYNTER (June 29, 2022), <https://tinyurl.com/5bffkafr>.

⁵⁰ Tim Dickinson, *All-American Killer: How the AR-15 Became Mass Shooters’ Weapon of Choice*, ROLLING STONE (Feb. 22, 2018), <https://tinyurl.com/4nedm6fa>.

⁵¹ Just because the AR-15 does not fire automatically does not make it appropriate for civilian use. The U.S. Army Field Manual instructs soldiers that *semiautomatic* fire is “[t]he most important firing technique during modern, fast moving combat,” emphasizing that it is “surprising how devastatingly accurate rapid [semiautomatic] fire can be.” *Rifle Marksmanship M16A1, M16A2/3, M16A4, and Carbine*, DEPARTMENT OF THE ARMY, §§ 7-7, 7-8, (Apr. 23, 2003), <https://tinyurl.com/3reu38px>.

⁵² Terry Gross, *How the AR-15 became the bestselling rifle in the U.S.*, NPR (Apr. 20, 2023) <https://tinyurl.com/3ak32wvp>.

⁵³ *Id.*

⁵⁴ See Michael Shurkin, *A Brief History of the Assault Rifle*, THE ATLANTIC (June 30, 2016), <https://tinyurl.com/vjac8a3b>.

⁵⁵ *Id.*

⁵⁶ Intervening State Appellee’s Opposition to Plaintiffs’ Motion for Injunction Pending Appeal, at 11.

Assault weapons are exponentially more lethal than any firearms available during the ratification of the Second or Fourteenth Amendments or throughout most of our Nation's history. Semiautomatic assault rifles fire bullets at a higher velocity than other types of firearms (such as semiautomatic handguns), which results in more grievous injuries.⁵⁷ Bullets from a 9mm handgun travel around 800 miles per hour, but bullets from assault weapons can travel three times faster and strike with twice the force.⁵⁸ The muzzle velocity of an assault weapon is four times greater than the muzzle velocity of a handgun.⁵⁹ When traveling through the body, bullets fired from semiautomatic rifles cause "cavitation," whereby a swath of tissue several inches from the bullet's path ripples away from the bullet and then settles back, creating a large cavity.⁶⁰ Bullets do not need to hit an artery to cause catastrophic bleeding.⁶¹ Exit wounds can be the size of oranges.⁶² In describing the difference between gunshot wounds inflicted by a semiautomatic rifle and a 9mm handgun, Peter Rhee, a trauma surgeon at the University of Arizona, stated: "One looks like a grenade went off in there," while "[t]he other looks like a bad knife cut."⁶³

The effects of assault weapons are particularly devastating in mass shootings involving child victims. Roy Guerrero, a pediatrician in Uvalde, Texas recalled victims with "[o]pen chest wounds," "war wounds," wounds akin to "decapitation," "as if things exploded once the bullets

⁵⁷ See, e.g., Heather Sher, *What I Saw Treating the Victims from Parkland Should Change the Debate on Guns*, THE ATLANTIC (Feb. 22, 2018), <https://tinyurl.com/2uc4bepe> (explaining the difference between injuries inflicted by semiautomatic rifles versus handguns).

⁵⁸ Pelley, *supra* note 30.

⁵⁹ Peter M. Rhee et al., *Gunshot Wounds: A review of ballistics, bullets, weapons, and myths*, 80 J. TRAUMA & ACUTE CARE SURGERY 863–64 (2016).

⁶⁰ Sher, *supra* note 59.

⁶¹ *Id.*

⁶² *Id.*

⁶³ Sarah Zhang, *What an AR-15 Can Do to the Human Body*, WIRED (June 17, 2016), <https://tinyurl.com/5d5prxmt>; see also Dickinson, *supra* note 52 (quoting the Navy trauma surgeon who operated on Congresswoman Gabrielle Giffords as saying that while handgun wounds are comparable to "stabbing with a bullet," shooting someone with an AR-15 is "as if you shot somebody with a Coke can").

hit the bodies.”⁶⁴ In his congressional testimony, Dr. Guerrero recalled seeing children “whose bodies had been so pulverized by the bullets fired at them, over and over again, whose flesh had been so ripped apart, that the only clue as to their identities were the blood spattered cartoon clothes still clinging to them.”⁶⁵

The specific features regulated by the Challenged Laws—including (1) pistol grips; (2) forward grips; (3) detachable magazines; (4) LCMs; and (5) grenade launchers—increase assault weapons’ lethality, placing them far outside the category of “quintessential self-defense weapons” at issue in *Heller*, and more akin to virtual machine guns. Thus, “[t]he very features that qualify a firearm as a banned assault weapon—such as flash suppressors, barrel shrouds, folding and telescoping stocks, pistol grips, grenade launchers, night sights, and the ability to accept bayonets and large-capacity magazines—‘serve specific, combat-functional ends.’” *Kolbe v. Hogan*, 849 F.3d 114, 137 (4th Cir. 2017).

1. Pistol Grips⁶⁶

Pistol grips alter the way a weapon functions in practice and increases its lethality, especially during prolonged episodes of rapid fire. By allowing the shooter to place the shooting hand beneath the gun, the shooter can exert leverage on the gun with both hands and maintain greater control and aim during rapid, prolonged firing.⁶⁷ Pistol grips also enable a shooter to shoot from the hip instead of the shoulder, something that is useless for hunting or self-defense, but which allows a shooter to spray fire into a crowd. *See Richmond Boro Gun Club, Inc. v. City of*

⁶⁴ Danielle Campoamor, *Uvalde’s only pediatrician shares the horror of treating school shooting victims*, NBC NEWS (May 29, 2022), <https://tinyurl.com/27hr2p2w>.

⁶⁵ *Dr. Guerrero’s Testimony at Oversight Hearing on Gun Violence Crisis*, HOUSE COMM. ON OVERSIGHT AND REFORM (June 8, 2022), <https://tinyurl.com/y98a4wed>.

⁶⁶ Naperville Ordinance, § 3-19-1(1)(A); Illinois Act §§ 1.9(a)(1)(A)(i), (F)(i).

⁶⁷ *See* Joshua Horwitz, *Killing Machines: The Case for Banning Assault Weapons*, EDUC. FUND TO STOP GUN VIOLENCE (Sept. 2003), at 9.

New York, 97 F.3d 681, 685 (2d Cir.1996) (“[P]istol grips are designed to make [] spray firing from the hip particularly easy.”); *New York State Rifle & Pistol Ass’n, Inc. v. Cuomo*, 990 F. Supp. 2d 349, 370 (W.D.N.Y. 2013), (“New York points to evidence that [pistol grips] aid shooters when ‘spray firing’ from the hip.”), *aff’d in part, rev’d in part*, 804 F.3d 242 (2d Cir. 2015).

2. Forward Grips⁶⁸

Forward pistol grips (such as those found on AR-15 rifles) are located in front of the trigger and are meant to be used by the shooter’s non-shooting hand. Naperville Ordinance § 3-19-1; Illinois Act §§ 1.9(a)(1)(A)(i), (C)(ii)–(iii). Forward grips give shooters “enhanced control” by allowing a shooter to place the non-shooting hand underneath the barrel of the gun, which grants more leverage and control during episodes of rapid firing.⁶⁹ The enhanced control and aim increase the weapon’s lethality, especially during prolonged episodes of rapid fire.⁷⁰

3. Detachable Magazines⁷¹

Detachable magazines equip firearms with a drastically higher ammunition capacity because the number of rounds a detachable magazine can hold is not limited by the size of the gun.⁷² Detachable magazines can hold as many as one hundred rounds without having to reload.⁷³ Detachable magazines also allow shooters to replace an empty magazine with a pre-loaded, full magazine in a few seconds, with little practice.⁷⁴ When combined with other features listed in the Challenged Laws, Naperville Ordinance § 3-19-1(1), Illinois Act §§ 1.9(a)(1)(A), (C), detachable magazines thus render weapons uniquely dangerous. They are especially lethal when used in

⁶⁸ Naperville Ordinance § 3-19-1(1)(B); Illinois Act §§ 1.9(a)(1)(A)(i), (C)(ii)–(iii).

⁶⁹ See Horwitz, *supra* note 69.

⁷⁰ *Id.*

⁷¹ Naperville Ordinance § 3-19-1(1); Illinois Act §§ 1.9(a)(1)(A), (C).

⁷² See EDUC. FUND TO STOP GUN VIOLENCE, *Assault Weapons and Large Capacity Magazines*, <https://tinyurl.com/yjmaba4k> (last accessed May 9, 2023).

⁷³ *Id.*

⁷⁴ See *id.*

combination with firearms that have “features that allow [for] enhanced control while firing multiple rounds.”⁷⁵

4. Grenade Launchers⁷⁶

Grenade launchers change the function of semiautomatic rifles, and render them more deadly—in ways unthinkable in the civilian context—by allowing the user to launch grenades.

* * *

For these reasons, the regulated assault rifles and weapons with the regulated features are uniquely dangerous and unusual weapons, a far cry from the “quintessential self-defense weapons” protected in *Heller*.

E. Regulation of LCMs Likewise Does Not Burden the Individual Right to Self-Defense.

“Evidence suggests that firearms equipped with LCMs are involved in a disproportionate share of mass shootings.”⁷⁷ Indeed, LCMs are designed to perpetrate devastation on a massive scale by enhancing an already uniquely-dangerous firearm’s ability to fire more than ten rounds in rapid succession without the need to reload. LCMs thus increase the lethality of attacks by eliminating the critical pause during which the gunman would have to reload and the gunman’s targets could escape or attempt to disarm him.⁷⁸ For this reason, states that have restricted access to LCMs—usually defined with a 10-round limit—experience 63% fewer mass shootings.⁷⁹ During the large capacity magazine ban that was in effect for ten years, mass shooting fatalities

⁷⁵ *Id.*

⁷⁶ Naperville Ordinance § 3-19-1(1)(D); Illinois Act § 1.9(a)(1)(A)(v).

⁷⁷ Klarevas et al., *The Effect of Large-Capacity Magazine Bans on High-Fatality Mass Shootings, 1990-2017*, 109 *AJPH* 1754, 1755 (2019). LCMs are also considered especially useful in military applications, allowing gunmen “to hit multiple human targets very rapidly,” *Kolbe*, 849 F.3d at 137 (4th Cir. 2017).

⁷⁸ During the 2018 shooting in Parkland, Florida, the shooter’s 13-second pause to reload a new magazine enabled a teacher and ten students to flee. Fla. Dep’t of Law Enforcement, *MARJORY STONEMAN DOUGLAS HIGH SCHOOL PUBLIC SAFETY COMMISSION REPORT*, at 34 (Jan. 2, 2019), tinyurl.com/mvs34fky.

⁷⁹ Sam Petulla, *Here is 1 Correlation Between State Gun Laws and Mass Shootings*, CNN (Oct. 5, 2017), <https://tinyurl.com/bddjjm27>.

were 70% less likely to occur.⁸⁰ When the ban lapsed, there was a 183% increase in high-fatality mass shootings and a 239% increase in deaths from such shootings.⁸¹

In contrast, empirical research demonstrates that this ability to fire more than ten rounds without reloading does not aid in self-defense. For example, the National Rifle Association's own Armed Citizen database shows that, in more than 700 self-defense incidents, less than one half of one percent involved more than ten rounds of ammunition. *See Oregon Firearms Fed'n, Inc. v. Brown*, 2022 WL 17454829, at*10 (D. Or. Dec.6, 2022). Moreover, the average number of shots fired by civilians in self-defense was actually only about two.⁸² Likewise, the U.S. Concealed Carry Association reported that, according to FBI statistics, "the average gunfight includes three rounds fired."⁸³ Lucky Gunner, an online retailer providing (self-proclaimed) "reliable shooting advice for regular people" reported: "In the overwhelming majority of the incidents where an armed civilian fires a shot in self-defense, probably 70 to 90% of them are able to resolve the situation within 3 or 4 rounds, and usually closer to one or two rounds. Every once in awhile [sic], the good guy fires more like 5 to 8 rounds."⁸⁴

Numerous federal and state courts have similarly found no evidence that firing more than ten bullets without the need to reload is necessary or even beneficial for self-defense. *See, e.g.*,

⁸⁰ Charles DiMaggio et al., *Changes in US Mass Shooting Deaths Associated with the 1994–2004 Federal Assault Weapons Ban: Analysis of Open-source Data*, 1 J. Trauma and Acute Care Surgery 86, 11–19 (2019).

⁸¹ Christopher Ingraham, *It's Time to Bring Back the Assault Weapons Ban*, *Gun Violence Experts Say*, WASH. POST (Feb. 15, 2018), <https://wapo.st/2TARTva> (citing Louis Klarevas, *Rampage Nation: Securing America from Mass Shootings* (2016)).

⁸² *See* Claude Werner, *The Armed Citizen - A Five Year Analysis*, GUNS SAVE LIVES (Mar. 12, 2012), tinyurl.com/bdemd7ya (average of 2.2 defensive shots fired per incident from 1997–2001); Decl. of Lucy P. Allen at ¶ 17, *Ass'n of N.J. Rifle & Pistol Clubs, Inc. v. Grewal*, No. 3:17-cv-10507, 2018 WL 4688345 (D. N.J. Sept. 28, 2018) (average of 2.34 shots fired per incident from 2011–17).

⁸³ Kevin Michalowski, *The Statistically Perfect Gunfight*, USCCA (Feb. 25, 2019), <https://tinyurl.com/3upbexr9>.

⁸⁴ Further, Lucky Gunner states that "a small, five-shot revolver should be more than enough to take care of the problem in all but the most extreme cases." Chris Baker, *How Much Ammo Capacity Is Enough?*, LUCKY GUNNER (Sep. 2, 2016), <https://tinyurl.com/47kz2tsh>.

Duncan v. Bonta, 19 F.4th 1087, 1105 (9th Cir. 2021) (observing that “as in other cases,” the record offered no indication that “the added benefit of a[n] [LCM]—being able to fire more than ten bullets in rapid succession—has *ever* been realized in self-defense in the home”); *Worman v. Healey*, 922 F.3d 26, 37 (“[N]ot one of the plaintiffs or their six experts could identify even a single example of . . . a self-defense episode in which ten or more shots were fired.”); *Rocky Mountain Gun Owners v. Polis*, 467 P.3d 314, 331 (Colo. 2020) (“In no case had a person fired even five shots in self-defense, let alone ten, fifteen, or more.”); *Kolbe v. O’Malley*, 42 F. Supp. 3d 768, 787 (D. Md. 2014) (“Maryland law enforcement officials are unaware of any Marylander . . . needing to fire more than ten rounds, to protect himself.”); *State v. Misch*, 214 Vt. 309, 356 (Vt. 2021) (“[I]t appears from the available data that . . . the large-capacity magazine [] is almost never used for self-defense.”); see also *Ass’n of N.J. Rifle & Pistol Clubs, Inc.*, 2018 WL5724371 (Defendant’s Proposed Findings of Fact and Conclusions of Law) (noting testimony by a veteran firearms instructor “that it would be unwise for an untrained civilian to use a firearm with an LCM in self-defense because . . . [u]ntrained civilians are not likely to be good shots”).

As these authorities demonstrate, neither the Naperville Ordinance nor the Illinois Act imposes a burden on an individual’s right to possess a firearm for lawful self-defense. LCMs are not used or useful in self-defense, as even Wayne LaPierre, the CEO of the National Rifle Association, confirms. After the Sandy Hook massacre, Mr. LaPierre was asked about Sandy Hook parents’ assertion that if the shooter had been armed with ten-round magazine clips (rather than LCMs), he would have needed to reload his weapon five times, thus giving their children a chance to survive.⁸⁵ Mr. LaPierre’s blunt response lays bare the fallacy of Appellants’ asserted need for

⁸⁵ Justin Sink, *LaPierre: ‘No evidence’ gun control would have changed Newtown*, THE HILL (Apr. 4, 2013), <https://tinyurl.com/spkys2z5>.

LCMs: “people that know guns [know that] you can change magazine clips in a second.”⁸⁶ As evidenced by these comments, LCMs serve no conceivable defensive purpose.

IV. CONCLUSION

For the reason set forth above and those set forth in the Appellees’ Brief, the Challenged Laws are constitutional, and the Court should reject Appellants’ appeal.

Dated: May 10, 2023

Respectfully submitted,

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⁸⁶ *Id.*

**CERTIFICATE OF COMPLIANCE WITH WORD LIMITATION, TYPEFACE
REQUIREMENTS, AND TYPE STYLE REQUIREMENTS**

1. This brief complies with the type-volume limitation of Circuit Rule 29 because it contains 6,890 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f).

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Dated: May 10, 2023

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CERTIFICATE OF SERVICE

I certify that, on May 10, 2023, a true and correct copy of the foregoing was filed with the Clerk of the United States Court of Appeals for the Seventh Circuit via the Court's CM/ECF system, which will send notice of such filing to all registered CM/ECF users.

Dated: May 10, 2023

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