

WASHINGTON, DC 20510

August 21, 2024

The Honorable Steven Dettlebach Director Bureau of Alcohol, Tobacco, Firearms and Explosives 99 New York Avenue, NE Washington, DC 20226

Dear Director Dettlebach,

According to recent news reports, vending machines that sell ammunition — using artificial intelligence (AI) to approve sales — are being deployed in supermarkets across several states. As our nation continues to grapple with an epidemic of gun violence, these machines threaten to make ammunition more widely available and accessible in our communities, especially to prohibited individuals and those who pose a threat to public safety. The machines also use often unreliable and inaccurate facial recognition technology for identity verification. And there are inherent risks in stocking large amounts of combustible ammunition at grocery stores. We urge the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to closely examine these automated ammunition vending machines and their place in the federal gun safety regulatory scheme, and use the full extent of the Bureau's authority to prohibit them in supermarkets, grocery stores, and other general retailers frequented by people of all ages and walks of life.

Dallas-based American Rounds LLC currently has its "automated ammo retail dispensers" at supermarkets in Alabama, Colorado, Oklahoma, and Texas; according to the company, many more are on the way nationwide. The machines stock and dispense a range of ammunition — "major brands of shotgun, rifle and handgun rounds that are commonly available at other retailers," according to the company's CEO. Each touch-screen machine has "built-in AI technology, card scanning capability and facial recognition software," which is utilized "to verify the identity and age of each buyer." Specifically, a purchaser scans their identification card and "[t]he machine then does a facial recognition scan to match the shopper's face to their ID." The machines — currently in supermarkets in rural areas — are restocked "every two to four weeks, depending on their location." The company places "no limitations" on the amount of ammunition someone can purchase at one time.

¹ Rachel Treisman, *Bread and bullets: Some Southern supermarkets now sell ammo out of vending machines*, NPR (July 11, 2024), https://www.npr.org/2024/07/11/nx-s1-5033748/ammunition-vending-machines-grocery-stores.
² *Id*.

³ The Future of Ammo Sales is Here, American Rounds, https://americanrounds.com/#section-qBj08BGy5B.

⁴ Id

⁵ Rachel Treisman, *Bread and bullets: Some Southern supermarkets now sell ammo out of vending machines*, NPR (July 11, 2024), https://www.npr.org/2024/07/11/nx-s1-5033748/ammunition-vending-machines-grocery-stores.

⁶ *Id*.

⁷ Alia Shoaib, *Ammunition Vending Machines Appear in Grocery Stores*, Newsweek (July 7, 2024), https://www.newsweek.com/ammunition-vending-machines-grocery-stores-1921976.

Easy access to ammunition helps to fuel our country's gun violence epidemic, which now claims more than 44,000 lives annually. Studies show that increasing the availability of firearms and ammunition leads to more injuries and deaths, especially suicides, 9 and that regulation of ammunition purchases can help reduce gun violence. ¹⁰ In June, U.S. Surgeon General Vivek Murthy declared firearm violence a public health crisis. 11 Ammunition plays a major role in this epidemic. As the Center for American Progress has explained, "[m]any of the mass shootings in recent years have involved individuals who amassed a substantial stockpile of ammunition prior to committing their horrific crimes without drawing concern from vendors or law enforcement."12 These shootings include "the deadliest mass shooting in modern U.S. history at the Route 91 Harvest country music festival in Las Vegas in October 2017" — where the shooter had more than 6,000 rounds; the Aurora, Colorado, movie theater shooting in July 2012 where the shooter had "purchased nearly 6,000 rounds of ammunition — all over the internet, without ever having to step foot in a brick-and-mortar gun store;" Sandy Hook Elementary School in Newtown, Connecticut — where the shooter "had more than 1,700 rounds of ammunition at his house;" and Marjory Stoneman Douglas High School in Parkland, Florida where the shooter had more than 300 rounds.¹³

Federal law imposes restrictions on the sale and purchase of both guns *and* ammunition. The Gun Control Act (GCA) makes it unlawful for certain individuals to ship, transport, receive, or possess firearms or ammunition, including persons convicted of a felony or domestic violence-related misdemeanor, and those subject to a domestic violence restraining order. ¹⁴ The GCA also establishes other restrictions on the sale, purchase, and possession of firearms *and* ammunition. Under the GCA, it is unlawful for any person under indictment for a crime punishable by imprisonment for a term exceeding one year to ship, transport, or receive firearms or ammunition. ¹⁵ The GCA also makes it unlawful to sell or otherwise dispose of firearms or ammunition to any person who is prohibited from shipping, transporting, receiving, or possessing firearms or ammunition. ¹⁶

Simply put, automated ammunition vending machines will enable prohibited purchasers to evade these federal statutory prohibitions — and analogous state laws — and buy ammunition

⁸ Chelsea Parsons & Rukmani Bhatia, *Bullet Control: How Lax Regulations on Ammunition Contribute to America's Gun Violence Epidemic*, CAP20 (Oct. 7, 2019), https://www.americanprogress.org/article/bullet-control/; Melissa Barragan et al., *Prohibited Possessors and the Law: How Inmates in Los Angeles Jails Understand Firearm and Ammunition Regulations*, RSF: The Russell Sage Foundation Journal of the Social Sciences (Oct. 2017), https://www.rsfjournal.org/content/3/5/141.

⁹ The Relationship Between Firearm Availability and Suicide, RAND (Mar. 2, 2018), https://www.rand.org/research/gun-policy/analysis/essays/firearm-availability-suicide.html.

¹⁰ S.J. Patel et al., *The Association of State Gun Laws with Pediatric Mortality from Firearms*, Annals of Emergency Medicine, Vol. 70, Issue 4 (Oct. 2017), https://www.annemergmed.com/article/S0196-0644(17)31114-9/fulltext; Bindu Kalesan et al., *Firearm Legislation and Firearm Mortality in the USA: a Cross-sectional, State-level Study*, The Lancet (Apr. 30, 2016), https://pubmed.ncbi.nlm.nih.gov/26972843/.

¹¹ Firearm Violence: A Public Health Crisis in America, U.S. Surgeon General's Advisory 2024, https://www.hhs.gov/sites/default/files/firearm-violence-advisory.pdf.

¹² Chelsea Parsons & Rukmani Bhatia, *Bullet Control: How Lax Regulations on Ammunition Contribute to America's Gun Violence Epidemic*, CAP20 (Oct. 7, 2019), https://www.americanprogress.org/article/bullet-control/. ¹³ *Id*.

¹⁴ 18 U.S.C. § 922(g).

¹⁵ *Id*. § 922(n).

¹⁶ Id. § 922(d).

simply by providing an ID and successfully completing a matching facial scan. While background checks are not required to purchase ammunition, as is the case with most firearm sales, these vending machines have no way to ensure that customers are eligible to purchase ammunition in the first instance.

And therein lies another troubling aspect of the ammo vending machines — their use of facial recognition technology. The reliability and accuracy of such systems in confirming the identity of an individual for ammunition purchases remain dubious. Studies show that facial recognition algorithms misidentify people of color and women at higher rates than white, male faces. ¹⁷ Given the significant error rates with facial recognition technology, ammunition vending machines raise serious concerns about false approvals and potential legal implications for both consumers and vendors.

There are other practical concerns associated with automated ammunition vending machines located in supermarkets. Automated ammunition sales by their nature remove face-to-face interaction between a would-be ammunition purchaser and the seller. This means there is no opportunity for a seller to observe "signs of distress or other warnings that a customer might use the ammo to hurt themselves or others." It similarly means there is no opportunity to identify when a purchaser is procuring ammunition for someone who cannot legally buy it in what is known as a straw purchase. For instance, experienced gun shop employees may be able to detect when someone attempts to straw purchase ammunition for another and stop the transaction. But no such mechanism exists with these vending machines.

Finally, as one columnist has warned, automated ammunition vending machines "make it faster and more convenient to buy the projectiles that wound and kill. Increasing the ease of buying ammunition for people who are struggling to control their impulses and rage will put more lives in danger." And although bulk ammunition may be stable when stored properly, it is combustible, and its presence in supermarkets prompts reasonable public safety concerns.

The introduction of these automated ammunition vending machines in grocery stores, where anyone with an ID showing they are 21 years old or older can purchase ammunition without oversight, is deeply troubling. This unreasonably broad availability of ammunition poses substantial risks to public safety. To help us better understand how the ATF can stop the sale of ammunition through AI-powered vending machines located in supermarkets, grocery stores, and other general retailers, or otherwise reduce the associated risks, we request written responses to the following questions by August 30, 2024:

¹⁷ National Institute of Standards and Technology, NIST Study Evaluates Effects of Race, Age, Sex on Face Recognition Software (Dec. 19, 2019), https://www.nist.gov/news-events/news/2019/12/nist-study-evaluates-effects-race-age-sex-face-recognition-software; Larry Hardesty, *Study finds gender and skin0type bias in commercial artificial-intelligence systems*, MIT News (Feb. 11, 2018), https://news.mit.edu/2018/study-finds-gender-skin-type-bias-artificial-intelligence-systems-0212.

¹⁸ Rachel Treisman, *Bread and bullets: Some Southern supermarkets now sell ammo out of vending machines*, NPR (July 11, 2024), https://www.npr.org/2024/07/11/nx-s1-5033748/ammunition-vending-machines-grocery-stores.

¹⁹ Marla Bautista, *Bananas, diapers and ammo? Bullets in grocery stores is a dangerous convenience*, USA TODAY (July 12, 2024), https://www.usatoday.com/story/opinion/columnist/2024/07/12/ammo-vending-machines-grocery-stores-gun-violence/74363912007/.

- 1. Does the ATF believe these AI-powered vending machines comply with existing federal statutes and regulations governing the sale of ammunition? If so, how do they comply? If not, how are they unlawful?
- 2. What actions can the ATF take to ensure these machines' compliance with federal laws and regulations and prevent unauthorized access to ammunition?
- 3. What steps has the ATF taken to assess the safety of these vending machines and any danger the ammunition stored in them poses to supermarket shoppers and employees and surrounding environs?
- 4. What steps has the ATF taken to ensure that other ammunition retailers, including those that operate online, verify that their customers are legally eligible to purchase ammunition?
- 5. How can Congress support the ATF's efforts to safeguard public safety in this evolving landscape? Should Congress consider legislation requiring background checks for ammunition sales?

The proliferation of these vending machines underscores the urgent need for enhanced regulatory oversight and robust safeguards to prevent unintended public safety consequences. We urge the ATF to promptly provide clarity on the regulatory framework surrounding these AI-powered vending machines, and take all possible steps to prohibit their deployment in supermarkets, grocery stores, and other general retailers, in order to help safeguard our communities from the dangers associated with virtually unrestricted access to ammunition.

Sincerely,

Edward J. Markey

United States Senator

Elizabeth Warren

United States Senator