Special Legislative Commission on Emerging Firearm Technology Final Report

July 29th, 2025

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I. Purpose and Context

This report is filed pursuant to Section 148 of Chapter 135 of the Acts of 2024, An Act modernizing firearm laws ("2024 Gun Safety Law"). This legislation established the Special Legislative Commission on Emerging Firearm Technology ("the Commission") to investigate and make recommendations to the General Court regarding at least two advances in the field of firearms technology - Intentional Firearm Microstamping (IFM, "microstamping") and personalized firearm technology (or "smart guns"). To meet its charge, the Commission met seven times between January and July 2025, including a public hearing during which the Commission gathered testimony from interested parties and a final meeting during which votes were taken on the content of this report. The Commission was charged with issuing a report of its findings and recommendations to the Clerks of the Senate and House of Representatives.

The enabling legislation established compositional requirements for the Commission to ensure representation from all parties that could be interested in legislation regarding emerging firearms technology. Consistent with this requirement, the Commission was comprised of the following 13 members:

Legislative Appointees

- **Representative Kate Lipper-Garabedian, *Co-Chair***, Designee of the House Chair of the Joint Committee on the Judiciary
- **Senator Michael O. Moore, *Co-Chair***, Designee of the Senate Chair of the Joint Committee on the Judiciary
- **Professor Nicholas Ashford**, Massachusetts Institute of Technology Professor of Technology & Policy Director, Technology & Law Program, Appointed by the Speaker of the House of Representatives
- **Todd Lizotte**, CEO of BOLD Laser Automation, Appointed by the Speaker of the House of Representatives
- **Senator John F. Keenan**, Appointed by the Senate President
- **Senator Lydia Edwards**, Appointed by the Senate President
- **Representative Donald R. Berthiaume, Jr.,** Appointed by the House Minority Leader
- **Senator Peter J. Durant**; Appointed by the Senate Minority Leader

Executive Members and Appointees

- **Jeff Farnsworth**, Senior Policy Advisor, Executive Office of Public Safety and Security, Designee of the Secretary of Public Safety and Security
- **Colonel Geoffrey Noble**, Colonel of the Massachusetts State Police
- **Christopher D. Call**, Massachusetts State Trooper, Appointed by the Governor
- **Christina Ronan**, Chief of the Attorney General Office's Enterprise and Major Crimes Division, Designee of the Attorney General

Other Members

- **Jake McGuigan**, Appointed by the National Shooting Sports Foundation, Inc.

The individuals listed above possess substantial professional expertise in the fields of legislation, and policy and/or firearms, and offered a variety of perspectives on emerging firearms technology and firearms regulation.

II. Statutory Charge

Section 148 of Chapter 135 of the Acts of 2024:

(a) As used in this section, the following words shall, unless the context clearly requires otherwise, have the following meanings:

"Microstamp", a microscopic array of characters identifying the make, model, or serial number of a firearm, etched or otherwise imprinted in 2 or more places on the interior surface or the internal working parts of the firearm, that are transferred by imprinting on each cartridge case when the firearm is fired.

"Personalized firearm", a firearm manufactured with incorporated design technology or converted with such technology so that it: (i) allows the firearm to be fired only by an authorized user; or (ii) prevents any of the safety characteristics of the firearm from being readily deactivated.

(b) There is hereby established, pursuant to section 2A of chapter 4 of the General Laws, a special legislative commission to study and investigate emerging firearm technology.

(c) The special legislative commission shall consist of 13 members: the chairs of the joint committee on the judiciary or their designees, who shall serve as co-chairs; the secretary of public safety and security or a designee; the colonel of the state police or a designee; 2 members appointed by the speaker of the house of representatives; 2 members appointed by the president of the senate; 1 member appointed by the minority leader of the house of representatives; 1 member appointed by the minority leader of the senate; 1 member appointed by the governor, who shall be an expert in emerging firearm technologies; the attorney general or a designee and 1 member appointed by the National Shooting Sports Foundation, Inc.

(d) The special legislative commission shall investigate and study the status, feasibility, and utility of emerging firearm technologies, including, but not limited to, personalized firearm technology and microstamp technology. The study shall include: (i) a review of existing and developing personalized firearm and microstamp technologies and any legal or constitutional issues relating to such technologies; (ii) an investigation of the accuracy, effectiveness and utility of personalized firearm and microstamp technologies; (iii) an evaluation of the commercial availability of personalized firearm and microstamp technologies, both in the production of new firearms and modification of existing firearms; (iv) an evaluation of the feasibility and utility of a personalized firearm technology tax incentive program; (v) an evaluation of the risks associated with the use of a digital firearm manufacturing code for machine learning and artificial intelligence; and (vi) an investigation of the cost and impacts associated with requiring the use of personalized firearm or microstamp technologies in the commonwealth.

(e) The special legislative commission shall submit a report of its study and recommendations, together with any legislative recommendations, to the clerks of the house of representatives and the senate no later than March 1, 2025.

III. Work of the Commission

The following table summarizes the work of the Commission throughout its seven hearings. Appendices to this report provide testimonies offered at each Commission meeting and hearing:

Hearing	Purpose	Agenda	Appendix Materials[1]
January 28	To orient the members to their legislative charge and provide background information.	Call to Order Reading of the Special Commission's Charge Chair introduction Member introductions Discussion of Special Commission's Work Confirm Commission's Second Meeting to focus on Microstamping Member Opportunity for Comment Meeting is adjourned	
February 10	To explore the topic of microstamping.	Call to Order Reading of the Special Commission's Charge New Commissioner Introductions Overview of Meeting Topic: Microstamping Guest Testimony • Todd Lizotte, President and CEO of BOLD Laser Automation • Josh Horwitz, Co-Director of the Johns Hopkins Center for Gun Violence Solutions • Monte Frank, Chair of the American Bar Association's Standing Committee on Gun Violence • Lyndsay Ruotolo, New Jersey First Assistant Attorney General, and Ravi Ramanathan, Director of New Jersey's Statewide Affirmative Firearms Enforcement Office Discussion Confirm Commission's Third Meeting Meeting is adjourned	**Appendix B** • Written testimony • Presentations • American Bar Association Microstamping Report • New Jersey 2023-0822 Microstamping Standards and Testing • New Jersey 2024 Microstamping Viability Report • New Jersey Microstamping Viability Certification
March 4	To continue the exploration of microstamping.	Call to Order Reading of the Special Commission's Charge Overview of the Last Meeting on Microstamping Guest Testimony • Evan Lieberman, Assistant Legislative Director to New York State Senator Brad Hoylman-Sigal • Senator Catherine Blakespear, California State Senator	**Appendix C** • Written testimony

[1] All Commission documents may be found on the General Court's website at https://malegislature.gov/Commissions/Detail/656/Documents

		• Jim Wallace, Executive Director of the Gun Owners' Action League Discussion Discuss Commission's Fourth Meeting Meeting is adjourned	
April 10	To explore the topic of personalized firearms.	Call to Order Reading of the Special Commission's Charge Overview of the Last Meeting on Microstamping Guest Testimony • Kai Kloepfer, Founder and CEO of Biofire Smart Guns • Michaela Dunne, Chair of Governor Healey's Firearm Control Advisory Board • Kade Crockford, Director of the Technology for Liberty Program at the ACLU of Massachusetts Discussion Discuss Commission's Public Hearing Meeting is adjourned	**Appendix D** • Written testimony
April 17	To gather oral testimony from members of the public on the work of the Commission.	Call to Order Reading of the Special Commission's Charge Overview of the Prior Meetings on Personalized Firearms and Microstamping Public Testimony Discussion Meeting is adjourned	N/A
June 12	To discuss the two technologies and review presentations.	Call to Order Introductions Microstamping: Review of presentations/comments Discussion Personalized Firearms: Review of presentations/comments Discussion Meeting is adjourned	N/A
July 29	To take votes on recommendations to the General Court.	Call to Order Reading of the Special Commission's Charge Draft Final Report • Review • Recommendations • Votes Meeting is adjourned	N/A

IV. Microstamping

Gun violence is a public health crisis in the United States,[2] with almost 47,000 Americans dying each year from gun-related injuries.[3] Meanwhile, half of gun crimes go unsolved in the United States, with that rate continuing to increase over the last forty years.[4] Pursuant to the 2024 Gun Safety Law, the Commonwealth of Massachusetts requires all firearms possessed, manufactured, or assembled in the state to be registered.[5] Guns rarely are left at the scene of a crime, making their registration insufficient for solving crimes, whereas cartridge casings often remain. As such, this Commission explored microstamping in the hopes that it may prove helpful in solving gun crimes and preventing gun deaths.

The 2024 Gun Safety Law, in its charge to this Commission, defines microstamping as follows: "a microscopic array of characters identifying the make, model, or serial number of a firearm, etched or otherwise imprinted in 2 or more places on the interior surface or the internal working parts of the firearm, that are transferred by imprinting on each cartridge case when the firearm is fired."[6] In other words, intentional firearm microstamping ("IFM" or "microstamping") involves the creation of an indentation mechanism on a firearm's firing pin, which in turn creates indentations on each fired bullet casing with a code linked to that firearm. Law enforcement then can use microstamped bullet casings recovered at crime scenes to identify the firearm from which they were discharged. This allows for a process for tracing firearms used in gun crimes in Massachusetts.

Intentional firearm microstamping may offer a more precise way to identify firearms used in gun crimes than law enforcement's current methods. Traditional ballistics investigation relies on detecting random imperfections found on bullet casings (unintentional firearm microstamping) and analyzing them (firearm and toolmark examinations and analysis) by the National Integrated Ballistic Information Network ("NIBEN"), a program of the federal Bureau of Alcohol, Tobacco, Firearms and Explosives. Further, to properly identify the firearm used in a crime, said firearm must be recovered at the scene and compared to the bullet casings found. Conversely, with microstamping, only bullet casings with their IFM code detectable need to be recovered from a crime scene to determine the firearm used. Todd Lizotte, one of the Commission's members, is a co-creator of microstamping.[7]

This identification method may serve as another tool and opportunity for law enforcement to investigate, solve, and prosecute gun crimes. With a positive identification of an IFM code, investigations may lead directly to the firearm involved in a crime and further empower law enforcement to link separate crimes.

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[2] Office of the Surgeon General (OSG). Firearm Violence: A Public Health Crisis in America: The U.S. Surgeon General's Advisory [Internet]. Washington (DC): US Department of Health and Human Services (US); 2024. Available from: https://www.ncbi.nlm.nih.gov/books/NBK605169/.

[3] Gramlich, John. "What the Data Says about Gun Deaths in the U.S." Pew Research Center, March 5, 2025. https://www.pewresearch.org/short-reads/2025/03/05/what-the-data-says-about-gun-deaths-in-the-us/.

[4] Li, Weihua, and Jamiles Lartey. "As Murders Spiked, Police Solved About Half in 2020." The Marshall Project, January 12, 2022. https://www.themarshallproject.org/2022/01/12/as-murders-spiked-police-solved-about-half-in-2020.

[5] G.L. c. 140, § 121B(a)(1).

[6] G.L c. 148. § 135(a).

[7] See **Appendix B**. Mr. Lizotte disclosed his explicit financial interest in the adoption of microstamping in multiple Commission meetings and has made the patent for microstamping open source.

As such, law enforcement may be able to connect individuals involved with other criminals and crimes, such as irresponsible or illegal gun dealers, human traffickers, and drug smuggling operations. While the technology does not remove all human bias, the purposeful characters of a firearm's IFM code create a more direct link that is less open to interpretation (and therefore less error) than unintentional firearm microstamping. The technology is also commercially available, with no patent restrictions on its adoption and use by third parties. Further, intentional firearm microstamping uses laser printing technology that is already in wide use. These factors contribute to a promising outlook for the use of intentional firearm microstamping in solving gun-related crimes.

While unintentional firearm microstamping has been the standard to identify firearms used in gun crimes, there is debate in the scientific and legal communities about the reliability of toolmark examinations and their admissibility in court. In 2009, a National Research Council report determined that conclusive identifications of firearms using firearm and toolmark analysis were without a strong scientific or statistical foundation.[8] Similarly, a 2016 report by the U.S. President's Council of Advisors on Science and Technology offered skepticism regarding the reliability of firearm and toolmark examinations.[9] Furthermore, several court rulings over the last two decades have limited firearm and toolmark analysis as admissible evidence and testimony due to doubts raised surrounding their scientific rigor.[10] These reports and rulings pose issues for law enforcement and prosecutors, casting a shadow over their work to make communities safer. Intentional firearm microstamping could offer more definitive conclusions if implemented on a large scale.

Intentional firearm microstamping, like unintentional firearm microstamping, has limitations. Primarily, the wearing down of the microstamped firing pin in a firearm over time may prove an impediment to properly identifying the code and, therefore, the firearm. There is also the potential for unauthorized replacement or tampering with a firearm's firing pin. Nonetheless, in such circumstances, it may be possible for unintentional firearm microstamping to be used to identify the firearm used in a crime. It is also important to note that no other state has fully implemented state laws regarding intentional firearm microstamping, though several states that have passed microstamp statutes were studied by the Commission.[11]

Along with the intentional firearm microstamping that the Commission explored, there is another form of microstamping commonly known as the "Miami Barrel." The Miami-Dade Police Department worked in conjunction with firearm manufacturer Glock GmbH to create this microstamping mechanism on the Glock pistols the Department uses. Miami Barrels create indentations on a fired bullet as it passes through the barrel, instead of the mechanism being the firing pin. Unlike the traditional intentional firearm microstamping, the Miami Barrel was created to identify bullets fired by a police officer in officer-

[8] Committee on Identifying the Needs of the Forensic Sciences Community, and National Research Council. "Strengthening Forensic Science in the United States: A Path Forward." National Academies Press, August 2009. https://nap.nationalacademies.org/read/12589/chapter/1.

[9] President's Council of Advisors on Science and Technology, Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods § (2016). chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf.

[10] *See, e.g., United States v. Monteiro*, 407 F. Supp. 2d 351 (D. Mass. 2006); *United States v. Green*, 405 F. Supp. 2d 104 (D. Mass. 2005); *United States v. Glynn*, 578 F. Supp. 2d 567 (S.D.N.Y. 2008); *United States v. Williams*, 506 F.3d 151 (2d Cir. 2007); *United States v. Tibbs*, No. 2016 CF1 19431 (D.C. Super. Ct. 2019).

[11] *See infra* **VI: Legislation in Other Jurisdictions**.

involved shootings. The intent there was to create more accountability for police officers who discharge their weapons while on duty. The technology has considerably less implementation and testing than traditional intentional firearm microstamping.[12]

V. Personalized Firearms

In 2023, 463 people died and over 27,000 people were injured in the United States due to accidental firearm discharges. Separately, over half of the aforementioned 47,000 Americans killed by firearms annually were Americans who committed suicide. Firearm discharges by those with mental health issues were a significant concern of the Commission. Unauthorized use of a firearm is a common characteristic of school shootings, with three-quarters of school shooting perpetrators taking the firearm that belonged to a family member. For most of the century so far, gun deaths have been the leading cause of death for children under the age of 18.[13] As such, this Commission explored personalized firearms in the hopes that the technology may prove helpful in preventing gun injuries and deaths.

The Commission's authorizing statute defines personalized firearms as follows: "a firearm manufactured with incorporated design technology or converted with such technology so that it: (i) allows the firearm to be fired only by an authorized user; or (ii) prevents any of the safety characteristics of the firearm from being readily deactivated." Personalized firearms use biometric data to limit the use of a firearm to its owner and any trusted users that the owner designates. This feature prevents discharge by unauthorized users, whether accidental or intentional.

At present, only two American firms are confirmed to manufacture personalized firearms, Biofire and Lodestar Technology. Lodestar has announced a 9mm handgun design, but its firearm has yet to reach the market, and the firm did not respond to inquiries from the Commission. Kai Kloepfer, founder and CEO of Biofire, informed the Commission that his company is currently the only American manufacturer of personalized firearms. Biofire, a venture-backed startup based in Colorado, unveiled its first personalized firearm in April 2023: a 9mm semiautomatic handgun. A single charge of this firearm's battery can last up to a month, and several alerts will notify the firearm owner before the battery fully depletes.[14] In February 2025, the Massachusetts Firearm Control Advisory Board voted to place Biofire's personalized firearm on the State's Approved Firearms Roster.[15]

Biofire does not have access to biometric data present in its firearms, and that data are wiped when ownership of a personalized firearm is transferred. If the owner of a Biofire personalized firearm passes away unexpectedly and has not designated any other trusted users, the firearm can no longer be used. While Biofire may not retain biometric data for its product, data retention remains a significant concern should other manufacturers enter the personalized firearm market. Biofire is currently the only American company offering personalized firearms, with only one model currently available, resulting in limited

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[12] Fadul, Jr., Thomas G., Gabriel A. Hernandez, Erin Wilson, Stephanie Stoiloff, and Sneh Gulati. "An Empirical Study To Improve The Scientific Foundation Of Forensic Firearm And Tool Mark Identification Utilizing Consecutively Manufactured Glock EBIS Barrels With The Same EBIS Pattern." Office of Justice Programs, December 2013. https://www.ojp.gov/pdffiles1/nij/grants/244232.pdf.

[13] *See e.g.,* Rabin, Roni Caryn. "Gun Deaths of Children Rose in States That Loosened Gun Laws, Study Finds." The New York Times, June 9, 2025. https://www.nytimes.com/2025/06/09/health/gun-deaths-children.html?unlocked_article_code=1.N08.Ja5w.Pe_vB064PmN2&smid=nytcore-ios-share&referringSource=articleShare.

[14] See **Appendix D** for *Written Testimony and Presentation by Kai Kloepfer, CEO of Biofire*.

[15] *See https://www.mass.gov/doc/approved-firearms-roster-22025/download*.

adoption at present. Mr. Kloepfer stated to the Commission that manufacturing a personalized firearm is four times the cost of a traditional firearm, discouraging other manufacturers from entering the market. There was some discussion about a personalized firearm mandate; however, Mr. Kloepfer pointed out that both Biofire's philosophical objections and the nascence of the industry would make such a mandate difficult to enforce.

The Commission acknowledged the degree to which personalized firearms may address gun deaths and injuries. Personalized firearms offer the potential for safe legal gun ownership without the risk of unauthorized discharge by children, people who want use the firearm for illicit purposes, and individuals experiencing mental-health crises.

VI. Legislation in Other Jurisdictions

The Commission explored the laws of three states that have, as of the completion of this report, passed legislation regarding microstamping. New Jersey, California, and New York have yet to fully implement their microstamping requirements, but processes for doing so in all three are underway. The Commission also reviewed New Jersey's state law regarding personalized firearms.

New Jersey

New Jersey enacted microstamping legislation in 2022, directing the State Attorney General's Office to investigate the viability of microstamping technology and to designate a microstamping examiner to create and oversee a statewide microstamp roster.[16] Following enactment of the law, the Attorney General designated the Statewide Affirmative Firearms Enforcement Office (SAFEO) to conduct the viability investigation and further designated the Senior Investigator of SAFEO to serve as the microstamping examiner. In 2024, the New Jersey Attorney General's Office determined that microstamping is viable, prompting the regulation promulgation process to begin.[17] New Jersey's statutory scheme encourages gun manufacturers to join the state microstamping roster. In 2023, the Attorney General issued Performance Standards and Qualifying Criteria for the microstamping examiner to use with applicant-proposed firearms. Once the microstamping examiner approves a microstamp-enabled firearm for inclusion on the state roster, gun retailers statewide will be required to stock at least one gun from that roster. Any person who purchases a microstamp-enabled firearm from a licensed retail dealer shall be eligible for a rebate of 10 percent of the purchase price up to a maximum of $30. The state also established a Microstamp Fund for law enforcement agencies to purchase microstamp-enabled firearms.

New Jersey adopted personalized firearm legislation in 2002, the Childproof Handgun Law, which dictates that all handguns sold in the state must be personalized firearms.[18] This law was revised in 2019 to require the state to develop an approved roster of personalized firearms. Following the implementation of this roster, firearms manufacturers within the state are required to keep at least one personalized firearm in stock.[19]

California

[16] N.J. P.L. 2022, c. 57; *see also* **Appendix G**.

[17] See **Appendix B** for *New Jersey 2024 Microstamping Viability Report* and *New Jersey Microstamping Viability Certification.*

[18] N.J. P.L. 2002, c. 130; *see* **Appendix E**.

[19] N.J. P.L. 2019, c. 164; *see* **Appendix F**.

California first passed microstamping legislation in 2007, requiring all new handgun models manufactured or sold in California to be equipped with microstamping technology. Legal challenges brought by firearm manufacturers and gun rights groups, including the National Foundation for Sports Shooting (represented on this Commission), have delayed implementation of the 2007 law.[20]

In 2023, California enacted a new microstamping law. Beginning January 1, 2028, licensed firearm dealers will be prohibited from selling, offering for sale, exchanging, giving, transferring, or delivering a semiautomatic pistol, unless the firearm has been certified as a microstamping-enabled pistol by the pistol's manufacturer, a licensed firearms dealer, or a gunsmith that services the pistol to install a qualifying microstamping component – if the state's Department of Justice (CDOJ) has determined (1) that microstamping is technologically viable and (2) that microstamping components or microstamping-enabled semi-automatic firearms are available.[21] In July 2025, the California Attorney General's Office announced that the CDOJ determined that microstamping is technologically viable, satisfying the first of the two determinations necessary for the law's 2028 mandate to take effect.[22] California's microstamping law further directs the CDOJ to provide written guidance by September 1, 2025, concerning qualifying criteria and performance standards for microstamping components; to accept applications for licensure of entities to produce the microstamping component by January 1, 2026; and to provide grants or enter into contracts for developing and manufacturing microstamping components that meet its performance standards and make the components available for sale or other distribution by July 1, 2026. California's microstamping law additionally directs the CDOJ to determine by July 1, 2027, whether microstamping components are available at commercially reasonable prices from licensees producing microstamping components and/or whether microstamping-enabled firearms are available for purchase in California. The legislature empowered the CDOJ to adopt rules and regulations to carry out the law. The law further prohibits a person from modifying a microstamping-enabled pistol or microstamping component with the intent to prevent the production of a microstamp.

New York

New York passed a microstamping law in 2022 to require that all new semi-automatic handguns sold, exchanged, transferred, or delivered in the state have microstamping technology in compliance with state standards established by the Commissioner of the Division of Criminal Justice Services (DCJS).[23] The law established a statutory timeline for DCJS to investigate and certify the technological viability of microstamped-enabled pistols, with such certification leading to a subsequent statutory timeline for DCJS to establish performance standards, verification processes, and training and licensure for the servicing of firearms and their components. The legislature further empowered DCJS to issue regulations to carry out

[20] The 2007 law has been challenged three times since 2007, most recently in 2023. A state court ultimately dismissed the NSFD's 2018 challenge. A 2023 case is ongoing. *See, e.g., Pena v. Lindley*, No. 15-15449; *Boland v. Bonta*, 8:22-cv-01421, https://michellawyers.com/boland-v-bonta/.

[21] 2023 Cal Stats. ch.253. *See also* **Appendix H**.

[22] Determination Regarding the Technological Viability of Microstamping Components, Pursuant to Penal Code section 27532, https://oag.ca.gov/system/files/attachments/press-docs/Microstamping%20Technological%20Viability%20Report%202025.pdf

[23] New York Chapter 205 of the Laws of 2022. *See also* **Appendix J.** This legislation was part of a larger gun safety legislation prompted in part by the 2022 racist mass shooting at a Tops grocery store in Buffalo, New York.

the provisions of the law. DCJS currently is exploring the feasibility and viability of the technology.[24] The anticipated annual cost to oversee the microstamping requirements is estimated to be roughly $500,000. The law further prohibits a person from modifying a microstamping-enabled pistol or microstamping component with the intent to prevent the production of a microstamp.

VII. Recommendations and Findings of the Commission

Microstamping

The Commission finds that microstamping technology offers a compelling possibility of contributing to more solved firearm crimes and, as such, providing law enforcement with an additional tool for the investigation and prosecution of firearm crimes. As such, the Commission recommends that the Massachusetts General Court pursue microstamping legislation, modeled on the laws of California and New York, that accomplishes the following:

1. Directs the Executive Office of Public Safety and Security (EOPSS) to determine the feasibility and viability of microstamping technology, including a review of the recommended forensic process to recover microstamp data from crime scene evidence and analyses of the recovery process, required or recommended laboratory equipment needed to regenerate and/or recover data, specialized training for forensic practitioners, and a review of the time necessary to complete data recovery;
2. Directs EOPSS to establish standards and criteria for testing microstamp-enabled firearms;
3. Requires that all semi-automatic handguns newly registered in the Commonwealth be equipped with microstamping technology upon a finding by EOPSS that microstamping technology meets feasibility and viability criteria, pursuant to regulations promulgated by EOPSS;
4. Establishes penalties for handgun manufacturers, distributors, and merchants that are non-compliant with the law;
5. Establishes penalties for individuals who tamper with microstamping technology within a microstamp-enabled firearm;
6. Directs EOPSS to establish training and licensure for individuals and entities to service microstamp-enabled firearms; and
7. Appropriates the funding necessary to support this work, including with for the feasibility and viability analyses and any necessary upgrades to State data systems and lab efforts.

Personalized Firearms

The Commission finds that personalized firearms offer a significant possibility of reducing firearm accidents and deaths. Given the higher price of these firearms, the Commissione recommends that the Massachusetts General Court pursue sales tax exemptions to encourage their purchase. Separate majorities of the Commission members supported creating either (1) a sales tax exemption, which sunsets after five years, for the purchase of a personalized firearm or (2) a sales tax exemption, which sunsets after five years, for the purchase of a personalized firearm with the trade-in of a non-personalized firearm. In both cases, the Commission recommends the Commonwealth study the rate of personalized firearm purchases during the sales tax exemption period.

[24] Request for Information (RFI) DCJS-25-01 New York State Division of Criminal Justice Services Microstamping Viability, https://www.criminaljustice.ny.gov/pio/vendor/NYS%20DCJS%20Microstamping%20RFI.pdf

Appendix A

Commissioner Vote Record on Final Report

The Chairs separated the special commission's recommendation into three distinct recommendations and members voted **YEA** or **NAY** on each. The specific recommendations and member votes are as follows:

Microstamping

The Commission finds that microstamping technology offers a compelling possibility of contributing to more solved firearm crimes and, as such, providing law enforcement with an additional tool for the investigation and prosecution of firearm crimes. As such, the Commission recommends that the Massachusetts General Court pursue microstamping legislation, modeled on the laws of California and New York, that accomplishes the following:

1. Directs the Executive Office of Public Safety and Security (EOPSS) to determine the feasibility and viability of microstamping technology, including a review of the recommended forensic process to recover microstamp data from crime scene evidence and analyses of the recovery process, required or recommended laboratory equipment needed to regenerate and/or recover data, specialized training for forensic practitioners, and a review of the time necessary to complete data recovery;
2. Directs EOPSS to establish standards and criteria for testing microstamp-enabled firearms;
3. Requires that all semi-automatic handguns newly registered in the Commonwealth be equipped with microstamping technology upon a finding by EOPSS that microstamping technology meets feasibility and viability criteria, pursuant to regulations promulgated by EOPSS;
4. Establishes penalties for handgun manufacturers, distributors, and merchants that are non-compliant with the law;
5. Establishes penalties for individuals who tamper with microstamping technology within a microstamp-enabled firearm;
6. Directs EOPSS to establish training and licensure for individuals and entities to service microstamp-enabled firearms; and
7. Appropriates the funding necessary to support this work, including for the feasibility and viability analyses and any necessary upgrades to State data systems and lab efforts.

YEA
Chair Lipper-Garabedian
Chair Moore
Commissioner Ashford
Commissioner Call
Commissioner Edwards
Commissioner Farnsworth
Commissioner Keenan
Commissioner Lizotte
Commissioner Noble

NAY
Commissioner Berthiaume
Commissioner Durant
Commissioner McGuigan

ASBTAIN
Commissioner Ronan

Personalized Firearms

The Commission finds that personalized firearms offer a significant possibility of reducing firearm accidents and deaths. Given the higher price of these firearms, the Commissioner recommends that the Massachusetts General Court pursue sales tax exemptions to encourage their purchase. In both cases, the Commission recommends the Commonwealth study the rate of personalized firearm purchases during the sales tax exemption period.

8. Option One: Creating a sales tax exemption, which sunsets after five years, for the purchase of a personalized firearm

YEA
Chair Lipper-Garabedian
Chair Moore
Commissioner Ashford
Commissioner Berthiaume
Commissioner Call
Commissioner Durant
Commissioner Farnsworth
Commissioner McGuigan
Commissioner Lizotte
Commissioner Noble

NAY
Commissioner Edwards
Commissioner Keenan

ASBTAIN
Commissioner Ronan

9. Option 2: Creating a sales tax exemption, which sunsets after five years, for the purchase of a personalized firearm with the trade-in of a non-personalized firearm

YEA
Chair Lipper-Garabedian
Chair Moore
Commissioner Ashford
Commissioner Call
Commissioner Farnsworth
Commissioner Lizotte
Commissioner Noble

NAY
Commissioner Berthiaume
Commissioner Durant
Commissioner Edwards
Commissioner Keenan
Commissioner McGuigan

ASBTAIN
Commissioner Ronan

Conclusion of Work

The Commissioners of the Special Commission Emerging Firearm Technology voted to submit the report to the General Court and to conclude the Commission's work, having fulfilled its statutory charge.

YEA
Chair Lipper-Garabedian
Chair Moore
Commissioner Ashford
Commissioner Call
Commissioner Farnsworth
Commissioner Keenan
Commissioner Lizotte
Commissioner Noble

NAY
Commissioner Berthiaume
Commissioner Durant
Commissioner McGuigan

ASBTAIN
Commissioner Edwards
Commissioner Ronan