Follow-up to Request for Information (RFI) DCJS-26-02
New York State Division of Criminal Justice Services (DCJS)
Provision of Microstamping-Enabled Technology for Live-Fire Viability Testing

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RFI Timeline and Contact Information	
RFI Released	February 9, 2026
Closing Date for Respondent Questions	March 11, 2026
Responses to Respondent Questions Posted (Estimated)	March 18, 2026
RFI Response Due Date	April 10, 2026, by 5:00PM (ET)
Agency Contact: Respondents must direct all questions and communications in writing to DCJSProcurement@dcjs.ny.gov and include "RFI DCJS-26-02" in the subject line.	

I. Purpose and Background

Pursuant to Chapter 205 of the Laws of 2022 (S4116A/A7926A), the New York State Division of Criminal Justice Services (DCJS) is required to conduct an investigation, including live-fire testing evidence collection and analysis, to certify the technological viability of microstamping-enabled pistols. Should DCJS certify viability, various provisions of law will be triggered, leading to the eventual requirement for licensed firearms dealers to sell only certified microstamping-enabled semiautomatic pistols in New York State.

A "microstamping component" is defined as “a component part of a semiautomatic pistol that will produce a microstamp on at least one location of the expended cartridge casing each time the pistol is fired.” A "microstamp" is a “unique alphanumeric or geometric code that identifies the make, model, and serial number of a firearm.”

This follow-up to the previously issued RFI (DCJS-25-01, issued February 13, 2025) invites respondents to provide microstamping-enabled firearms and/or microstamping components for use by DCJS and the New York State Police (NYSP or State Police) experts in independent live-fire testing and evaluation. This follow-up RFI is for informational and planning purposes to gather the necessary technology for state-conducted testing, and no contract for the purchase or implementation of microstamping technology will be awarded as a direct result of this RFI. To the extent practicable, property (i.e., microstamp components) provided by respondents will be returned to the providing entity through mutually agreed upon protocols established in advance.

II. Key Principles of Viability for Testing

The live-fire testing conducted by DCJS and NYSP will evaluate microstamping technology against several key principles to determine its technological viability.

- **Forensic Utility (Efficacy):** This principle assesses the degree to which the microstamping technology provides usable forensic information. Microstamping aims to laser-engrave or otherwise embed a unique microscopic code on a firearm's firing pin, breech face, or other part contacting the cartridge casing, stamping intentional marks on cartridge casings when fired.

  This technology supplements traditional forensic examination tools, potentially providing additional data points, even if the firearm is not recovered. Partial microstamped impressions may provide valuable investigative information, similar to partial license plates or fingerprints, to narrow possibilities and develop investigative leads.

  In evaluating forensic utility, considerations include:
  - the equipment required to read and analyze the marks (including the type, cost, and general availability in state and local laboratories)
  - the level of examiner expertise needed (e.g., skill and training demands)
  - the accuracy and reliability of correlating casings to firearms under real-world laboratory conditions.

  All cartridge casings produced during the testing shall be collected and recorded, regardless of whether the microstamp is fully legible, partially legible, or not visible. This ensures that every fired round contributes to the dataset, allowing evaluators to distinguish between technical consistency of mark production (whether the mark appears at all) and practical interpretability of those marks (whether they can meaningfully be read and used for forensic comparison). Recording all casings, including those with unreadable or partial marks, provides a complete picture of the

system's overall reliability and real-world forensic utility. Evaluation of forensic utility will rely primarily on comparison microscopy for all analyzed samples. To the extent feasible, analyses may be cross-verified across multiple laboratories or multiple examiners to support reproducibility and established inter-lab / intra-lab agreed upon metrics.

- **Repeatability Under Real-World Conditions (Durability):** This evaluates the technology's repeatability under realistic firing conditions, and any factors that could affect its long-term reliability.

  Intentional microstamping technology produces identifiable alphanumeric and/or gear code structures that are regularly transferred to spent cartridge casings. Alphanumeric characters and gear code structures have shown capability to withstand repeated firing, although some degradation may occur with specific firearms.

  Repeatability focuses solely on the reliability of mark production over time and firing cycles, separate from whether the marks can be practically interpreted (Forensic Utility). Metrics will include all fired rounds, including those with unreadable marks, to ensure repeatability assessment is independent of interpretability.

- **Non-Defeatability (Resistance to Tampering):** This considers the technology's potential for tampering and any existing measures to prevent intentional alteration, whether integral to the microstamping technology or standalone.

  Concerns have been raised that the technology could be defeated if individuals remove factory installed firing pins for an aftermarket replacement. Alternatively, the microstamping mark on the original firing pin may be altered by filing down or filling in.

  All filing and abrasion procedures will be standardized (e.g., tool, load, strokes, duration, skill level simulating novice vs. experienced armorer) to ensure reproducibility. All actions will be documented for full traceability.

- **Universality:** This principle examines whether the specific technology accounts for the range of pistol types, calibers, and ammunition types in the marketplace, and, if not, the extent to which other technologies can cover the range.

  Universality ensures the technology is not narrowly confined to a single firearm model, caliber, or brand, increasing confidence that findings reflect generalizable technical viability.

III. Live-Fire Testing Protocol Overview to be conducted by DCJS/NYSP

The technology provided by respondents will be subjected to a rigorous, independent live-fire testing protocol designed to thoroughly evaluate its viability under sustained and real-world conditions. This protocol aims to quantify performance, durability, defeatability, and examiner workload/accuracy across various firearm platforms. The objectives include:

- To independently determine whether microstamping components are technologically viable for investigatory use in New York, under sustained firing and real-world conditions;
- To quantify their performance, repeatability, durability, forensic utility, defeatability, and examiner workload/accuracy across various platforms; and

- To document evidence supporting each principle of technological viability, including Repeatability (consistency of marks), Forensic Utility (accuracy, lab-readability, equipment, and expertise required), Resistance to Tampering, and Universality.

Primary Points of Evaluation

Point	*Principle Evaluated*	*Assessment / Value*
Imprint Presence Rate	Repeatability	Evaluates consistency of mark production under repeated firing, independent of interpretability
Full-Code Legibility Rate	Repeatability & Forensic Utility	Evaluates both the consistency of mark production and the practical ability of an examiner to recover the mark, bridging repeatability with real-world forensic usability
Partial-Code Utility Rate	Forensic Utility	Explicitly incorporates accuracy, usability, and interpretability, similar to partial fingerprints or partial license plates, reflecting investigative value of incomplete but meaningful microstamps
False Association Rate	Forensic Utility	Explicitly measures practical forensic accuracy and reliability, incorporating examiner judgment, equipment limitations, and operational constraints
Sustained-Fire Consistency	Repeatability & Durability	Evaluates long-term reliability of mark production under repeated use and determines persistence of microstamp quality across firing cycles
Ammunition Sensitivity	Universality	Assesses consistency across multiple conditions and platforms, ensuring generalizability of technological viability across typical operational scenarios
Defeatability Impact	Non-defeatability	Measures resilience of the system to intentional or accidental compromise, documenting skill/time required to defeat the microstamp
Inter-Lab Agreement	Forensic Utility	Ensures reproducibility of forensic utility measurements; evaluates agreement across labs or multiple examiners as a practical proxy when only a single lab is available
Examiner Burden	Forensic Utility	Captures practical usability, required expertise, and workflow considerations for real-world implementation, informing feasibility, training and maintaining competency requirements

Design and Materials for Testing

- **Firearms:** At least six representative semiautomatic pistols, spanning multiple action types and calibers, subject to availability and resource constraints. Target 6-12 firearms, each fitted with certified microstamping firing pins. Original Equipment Manufacturer (OEM) non-engraved pins retained as controls (Universality).
- **Ammunition:** The primary caliber tested will be 9×19mm, including at least three brands that span a range of primer cup hardness and casing finishes (e.g., brass, nickel). Optional sub-cohorts may include .22 LR, .40 S&W, and .380 ACP to support evaluation across representative ammunition types while balancing between depth and breadth (Universality).
- **Rounds per Firearm:** Each firearm will be fired for a total of up to 1,000 rounds, with an endurance tail extending up to 2,000 rounds on a 25% random subsample to support Repeatability and Durability testing.

Firing Schedule and Real-World Variables

- **Break-in Period:** 100 rounds
- **Endurance Blocks:** Nine 100-round blocks will be fired up to 1,000 rounds. Endurance tail sampling fractions were selected to balance resource limits with statistical reliability; all metrics will be recorded for reproducibility

- **Between-Block Stressors:** Environmental stressors (e.g., +40 °C bake for 2 hours, −10 °C cold-soak for 2 hours, ambient return), dust exposure (according to NIJ particulate standard or ASTM equivalent) with light wipe, cleaning/lubrication per OEM manual at 300-round intervals, and handling stressors (e.g., standardized bench drops, holster cycles, dry fires) to evaluate Repeatability, Durability, and Forensic Utility under stress.
- **Rate of Fire:** A mix of controlled pairs/strings and short rapid series will be used, with the firing cycle documented.

Defeatability Arm

- **Pin Swap:** At approximately round 600, an armorer will swap in a fresh non-engraved OEM pin (negative control) for 20 rounds, documenting any effects, and then reinstall the microstamped pin.
- **Abrasive Wear:** On 10% of the guns at approximately 800 rounds, controlled abrasion (e.g., 600-grit for a specified number of strokes under a defined load) will be applied to simulate environmental and operational wear conditions. Firing will continue, and changes in mark legibility, imprint presence, and repeatability will be quantified.
- **Attempted Filing:** A separate subset of firearms will undergo tool filing to simulate intentional defacement. Tools type, effort, skill level (e.g., within capability of novice vs experienced armorer), duration, and observed code loss will be recorded.
- **Attempted Filling**: A separate subset of firearm will undergo an attempt to fill in Microstamp with an epoxy-like substance. Substance, effort, skill level (e.g., within capability of novice vs experience armorer), duration and observed code loss will be recorded.
- **Outcome:** Changes in Repeatability, Durability, and Resistance to Tampering points quantified; time/skill required to defeat the system documented.

Independence, Randomization, and Blinding

- **Independence:** All firing will occur at NYSP range(s). Vendor personnel may not be present during live-fire operations, nor handle or observe cartridge casings or firearms beyond providing installation or quality control documentation as specified and/or requested. They may only advise NYSP personnel in a documented capacity on installation procedures and technology operation.
- **Randomization:** Firearm order, ammunition order within blocks, and which laboratory receives which casings will be randomized, to the extent practicable.
- **Blinding:** Unique case IDs will obscure firearm identity, and examiners will receive only imaging packages and candidate pools. This measure will support objective measurement of Forensic Utility.

Imaging and Sampling Plan

- **Laboratory/Laboratories**: examination of cartridge casings shall be carried out at one or more forensic laboratories accredited by the New York State Commission on Forensic Science.
- **Acquisition:** Comparison microscopy will serve as the primary examination method for cartridge casings.
- **Inter-Laboratory Assessment:** Where feasible, examination shall be carried out at multiple forensic laboratories so that a subset of cartridge casings may be shared in order to assess inter-laboratory reproducibility. These analyses will follow standardized operating procedures, calibration protocols, and blinding procedures to ensure consistency of imaging, measurement, and mark interpretation. In instances where multiple labs cannot be utilized, all testing will be conducted under a rigorously

standardized single-lab protocol, with internal review, blinding, and documentation to maximize reliability and credibility.

- **Automation:** Optional Optical Character Recognition (OCR) and algorithmic aids may be applied as secondary analyses, and all results will be recorded separately.
- **Sampling Fraction:** All casings in blocks 1, 5, and 10 will be analyzed; a 25% random sample will be analyzed in blocks 2-4 and 6-9. For the endurance tail, all casings will be analyzed.
- **Data Package:** Raw images (TIFF), examiner reads, confidence scores, and time-on-task will be recorded. Metrics directly map to Forensic Utility, Repeatability, and Examiner Burden.

IV. Vendor Submission Requirements

DCJS is seeking the provision of microstamping-enabled firearms and/or microstamping components from owners of such technology for use by state experts in live-fire testing. Responding organizations and individuals should address the following points in their application:

1. **Possession and Description of Technology:**
    - Do you possess or otherwise control any firearms (including prototypes) that you believe to be microstamping-enabled within the definition and context of the New York microstamping statute?
        - Please provide a comprehensive description of any such firearm(s), including its applicable make, model, and serial number.
    - Do you possess or otherwise control any microstamping components within the definition of the New York microstamping statute, which can be installed in firearms for testing purposes?
        - Please provide a comprehensive description of any such technology, and a comprehensive description of any such firearm(s), including its applicable make and model, for which such components are compatible.

2. **Microstamping Technology Details:**
    - Describe the microstamping technology utilized on your firearm(s) or component(s), including:
        - Identification of the component part(s) that serve as the microstamping component.
        - Information regarding the compatibility of the microstamping component with various firearms.
        - Data or literature on the effectiveness of the microstamp across a range of firearms.
        - Description of the process used to equip the component to produce a microstamp.
        - Details on the type(s) of unique alphanumeric or geometric code the microstamp features when produced.
        - Any data or literature from previous live testing, including information on its utility, limitations, risk of degradation, durability, longevity across various makes/models, ease of intentional tampering, feasibility, and lasting forensic utility.
        - Include notes on prior inter-lab verification if available, or intra-lab verification by multiple examiners.

3. **Source of Microstamping:**
    - Identify the person or entity that can equip the firearm(s) to produce a microstamp.

4. **Details on Commercial Scalability, Universality, and Incremental Cost:**
    - Details on the ability of the technology to be produced at the magnitude of production required for widespread implementation. Considerations include manufacturing reproducibility across firearm types, consistency of microstamp quality across multiple units, and whether the process could be standardized for large-scale adoption without significant redesign or risk to firearm function, or hindrance of the marketplace.
    - Details on whether the specific technology accounts for the range of pistol types in the marketplace, different calibers and types of ammunition, and, if not, the extent to which other technologies can cover the entire range.
    - Details on the added cost that the implementation of a given technology would impart to the manufacturing cost or purchase cost once retrofitted and, consequently, the consumer cost. It should be evaluated in conjunction with scalability and repeatability (i.e., a technically viable solution may still be impractical if per-unit cost is prohibitive, but cost alone does not define viability).

5. **Willingness for Independent Testing:**
    - State explicitly whether you are authorized, willing, and able to present such firearm(s) to DCJS and NYSP for independent live-fire testing and other evaluation in connection with the State's technological viability investigation, adhering to the outlined protocol for independence from vendors.

6. **Other Considerations (Optional):**
    - Provide any general comments or suggestions related to the proposed project.

V. General Information and Submission Instructions

- **No Marketing Materials or Cost Information:** Please note that pre-printed marketing material and cost information (except as provided in paragraph 4 of section IV) should not be included in your response and will not be considered. This follow-up RFI is for the provision of technology for testing purposes only.
- **Freedom of Information Law (FOIL):** Responses may be subject to disclosure under New York State's Freedom of Information Law. If any information is claimed to be exempt from disclosure as trade secrets that would cause substantial injury to competitive position, this must be clearly noted in a letter accompanying the response.
- **DCJS Reserved Rights:** DCJS reserves the right to reject any or all responses, withdraw the RFI, amend the RFI, seek clarifications, utilize any submitted ideas (unless legally patented or proprietary rights are clearly noted), and request meetings with respondents.

Submission Deadline: Responses to this Follow-up Request for Information must be received by April 10, 2026

Submission Method: Electronic submissions only, via email to: DCJSProcurement@dcjs.ny.gov. Please include "Response to Follow-up RFI DCJS-26-02" in the subject line.

Agency Contact: All questions and communications must be directed in writing to DCJSProcurement@dcjs.ny.gov, and include “Follow-up RFI DCJS-26-02” in the subject line.

Questions Due Date: March 11, 2026.

Responses to Questions Posted (Estimated): March 18, 2026.

Appendix:

- Authorizing legislation (Chapter 205 of the Laws of 2022)
- Request for Information (RFI) DCJS-25-01 issued by the New York State Division of Criminal Justice Services Microstamping Viability