COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss. SUPERIOR COURT DEPARTMENT

DR. SHIVA AYYADURAI *Petitioner,* *v.* WILLIAM FRANCIS GALVIN, in his official capacity as SECRETARY OF THE COMMONWEALTH OF MASSACHUSETTS, *Respondent.*	)	Civil Action No. _ 2684CV01614

PETITIONER'S MEMORANDUM OF LAW IN OPPOSITION TO RESPONDENT'S OPPOSITION TO PETITION FOR WRIT OF MANDAMUS AND EMERGENCY MOTION FOR PRELIMINARY INJUNCTION

Now comes the Petitioner, Dr. Shiva Ayyadurai, a declared and qualified candidate for the United States Senate in the upcoming 2026 election cycle. Petitioner respectfully submits this Memorandum of Law in Opposition to Respondent's Opposition to the Petition for Writ of Mandamus.

Respondent William Francis Galvin, acting as the Chief Election Officer of the Commonwealth, has made an alarming, unprecedented, and legally unsupportable admission to this Honorable Court: Respondent admits that the electronic voting systems certified and deployed across Massachusetts possess the innate, hard-wired capability to generate high-resolution digital ballot

images during vote tabulation but that he explicitly commands local election officials to configure those systems to auto-delete the data. Respondent contends that by choosing to flip a software switch to "disable" memory storage, he can erase the existence of a federal voting record and thereby escape the mandatory retention requirements of federal law.

This defense is a legal fiction that openly violates the Supremacy Clause of the United States Constitution. Under the plain, unambiguous language of 52 U.S.C. § 20701, every election officer *shall* retain and preserve for twenty-two months all records and papers relating to any "act requisite to voting" in a federal election. Because digital voting machines inherently generate digital ballot images in memory to interpret and count votes, Respondent's command to actively intercept and auto-delete these electronic trails constitutes a willful, ongoing evasion of a non-discretionary federal statutory mandate.

Petitioner - who holds four MIT degrees in engineering, including an MIT PhD - has spent 48 years working at the leading edge of imaging systems and digital data architectures - brings direct, expert technical authority to this dispute. As a candidate for federal office whose constitutional right to a transparent, auditable election is directly threatened by this policy, Petitioner respectfully moves this Court to deny Respondent's Opposition, grant the Writ of Mandamus, and issue an immediate Emergency Preliminary Injunction compelling the preservation of all digital ballot images for the 2026 election.

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STATEMENT OF RELEVANT FACTS

A. The Technical Reality of Optical Scan Tabulation via High-Resolution Scanners

The mechanical and electronic features of the electronic tabulators certified and utilized within the Commonwealth are indisputable. According to the Respondent's own evidence, including the official certification records issued by William Francis Galvin for the *ES&S DS200 Precinct Tabulator*, the *ES&S DS450 Central Tabulator*, and the *Dominion ImageCast Precinct Tabulator*, these machines operate through a multi-step digital photographic process.

Respondent's certification document for the ES&S DS200 explicitly defines this technological workflow under the heading **"Overview of System"**:

> *"Both sides of the ballot are processed simultaneously with high-resolution scanners and the resulting **ballot images** are decoded by a proprietary recognition engine. Once voter selections are processed, the ballot is dropped into a secure ballot box. The scanner also has the ability to capture digital images of each ballot, but this function can be disabled to comply with current state law."*

Similarly, the documentation provided for the ES&S DS450 Central Tabulator states:

> *"Both sides of the ballot are processed simultaneously with high-resolution scanners and the resulting ballot images are decoded by a proprietary recognition engine ... The scanner also has the ability to capture digital images of each ballot, but this function can be disabled to comply with current state law."*

The Dominion ImageCast Precinct Tabulator operates under an identical computational architecture:

> *"The system is designed to scan marked paper ballots, interpret voter marks on the paper ballot, and store and tabulate each vote from each paper ballot. The scanner also has the ability to capture digital images of each ballot, but this function can be disabled to comply with current state law."*

Thus, by the manufacturer's own technical specifications adopted by the Respondent, a digital **"ballot image" is not a secondary, optional, or extraneous document manufactured after the fact.** As a matter of established engineering science, it is an indispensable, intermediate computational artifact generated in real time. The hardware scanner captures a physical image, converts it into a high-resolution electronic matrix file (the ballot image) in memory, and then feeds *that exact digital file* into the electronic recognition software to interpret, count, and generate the final tabulation output.

B. Respondent's Admissions of Systemic Interception and Software Manipulation

In his opposition and the supporting Affidavit of Michelle K. Tassinari (First Deputy and Director of the Elections Division), the Respondent makes an explicit factual admission:

"Accordingly, for the subset of voting software that has the capability to capture ballot images, Massachusetts certification documents require said capability to be turned off." "...any ballot imaging capability will be turned off for the November 2026 election for United States Senate."

Respondent actively coordinates with the electronic machine vendors (such as LHS Associates, Dominion Voting Systems, and Election Systems & Software) to intentionally alter the administrative settings of the firmware. This intervention ensures that the digital ballot images generated by the high-resolution internal sensors in memory during the live processing of ballots are automatically purged, overwritten, or denied persistent storage on the inserted flash memory drives.

Respondent claims this policy is required to prevent the public "examination" of ballots outside of authorized recounts under G.L. c. 54, § 109.

C. Petitioner's Irreparable Injury as a Candidate for United States Senate

The Petitioner, Dr. Shiva Ayyadurai, is actively campaigning as a qualified candidate for the United States Senate in Massachusetts for the 2026 election cycle. As a federal candidate, Petitioner's right to a lawful, transparent tabulating environment - and his right to demand a complete federal electronic audit trail under 52 U.S.C. § 20701 in the event of close margins, anomalies, or mechanical software errors - is directly threatened by the Respondent's explicit statement that these digital images *will* be systematically excluded from retention and auto-deleted during the upcoming 2026 contest.

ARGUMENT

I. THE SUPREMACY CLAUSE COMMANDS THAT FEDERAL STATUTORY RETENTION MANDATES SUPERSEDE CONFLICTING STATE ADMINISTRATIVE RULES

Respondent's primary defense is grounded entirely in state administrative autonomy. Respondent argues that because Massachusetts General Laws (G.L. c. 54, §§ 105A, 107, 109) focus exclusively on the manual handling, sealing, and destruction of physical *paper* ballots, the state is permitted to suppress the preservation of concurrent electronic data streams generated by electronic vote tabulation systems. This argument fundamentally misapprehends the structural operation of the Supremacy Clause of the United States Constitution.

Under Article VI, Clause 2 of the U.S. Constitution, federal statutes enacted pursuant to constitutional authority are the supreme law of the land, "any Thing in the Constitution or Laws of any State to the Contrary notwithstanding." Furthermore, Article I, Section 4, Clause 1 (the Elections Clause) vests Congress with the ultimate, overriding power to "make or alter" regulations governing the times, places, and manner of holding elections for United States Senators and Representatives.

When Congress exercises its authority under the Elections Clause, its enactments completely preempt and supersede any conflicting state legislation or administrative practice. As the United States Supreme Court held in *Arizona v. Inter Tribal Council of Ariz., Inc.*, 570 U.S. 1, 9 (2013), "The Elections Clause empowers Congress to pre-empt state regulations governing the Times, Places and Manner of holding Congressional elections... State regulations in this area remain legal

only so long as they do not conflict with an act of Congress." This foundational principle dates back to *Ex parte Siebold*, 100 U.S. 371, 384 (1879), where the Court declared that federal laws regulating federal elections "are supreme, and supreme over the state enactments; the state laws which are inconsistent with them must give way."

Here, Congress has occupied the field regarding the preservation of federal election data through 52 U.S.C. § 20701. The federal statute leaves no room for state-level narrowing or modifications. If an optical scan tabulator creates a digital record in memory during **a federal election** - which is the race for U.S. Senate that the Petitioner is involved in right now -, the state cannot invoke its domestic statutes to systematically order the auto-deletion or non-retention of that electronic file. **Respondent's insistence that state laws require these capabilities to be disabled is completely irrelevant when a federal transparency mandate commands their preservation.**

II. DIGITAL BALLOT IMAGES ARE "RECORDS AND PAPERS REQUISITE TO VOTING" UNDER THE PLAIN TEXT OF 52 U.S.C. § 20701 AND DEPARTMENT OF JUSTICE MANDATES

Respondent attempts to evade the federal retention mandate by arguing that 52 U.S.C. § 20701 does not explicitly use the words "digital ballot image," and that 52 U.S.C. § 21081 (HAVA) does not textually mandate the creation of electronic files. Respondent attempts to use his domestic authority under G.L. c. 54, § 32 - which governs the examination and approval of voting equipment - to argue that the Commonwealth can certify a system configuration that actively suppresses these records. This statutory interpretation violates long-standing principles of administrative and election law. A state official cannot utilize domestic equipment approval laws under Section 32 to

systematically bypass an explicit federal criminal mandate. The plain language of 52 U.S.C. § 20701 commands that election officials must retain and preserve:

> *"...for a period of twenty-two months from the date of any general, special, or primary election... all records and papers which come into his possession relating to any application, registration, payment of poll tax, or other act requisite to voting in such election...."*

The phrase "**all records** and papers... relating to any... act requisite to voting" is inherently comprehensive. It encompasses every physical paper and every piece of digital data generated as an integral step in the path toward casting, processing, tabulating, and finalizing an individual's vote.

The U.S. Department of Justice (DOJ), which is tasked with the enforcement of Title 52 records preservation laws, has issued formal guidance regarding the integration of modern digital voting systems into § 20701. In administrative guidance, the DOJ has established that:

1. The 22-month federal preservation mandate applies fully to electronic data, metadata, and digital files generated by electronic voting and tabulating systems.
2. Because modern electronic optical scanners utilize digital ballot images to mechanically interpret voter intent and calculate final election tallies, these digital images constitute foundational records "requisite to voting" and *must* be preserved.
3. Respondent's assertion that "paper ballots constitute the official records" under state law does not diminish the status of the electronic files. The physical paper ballot and the corresponding digital image generated by the scanner in memory are separate records under

federal law. Both exist, both are part of the electronic chain of custody, and both are subject to the 22-month federal retention requirement.

III. A STATE WRIT OF MANDAMUS IS THE PROPER COMMON-LAW VEHICLE TO COMPEL A STATE OFFICIAL TO OBEY A NON-DISCRETIONARY MANDATE IMPOSED BY THE SUPREME LAW OF THE LAND

Respondent seeks to evade judicial review by raising a procedural strawman, arguing that 52 U.S.C. § 20701 does not contain an explicit "private right of action" for individual candidates and that Petitioner cannot use federal law as the predicate for a state court writ of mandamus. This argument represents a profound misdirection that conflates a standard statutory civil lawsuit with an extraordinary common-law petition to compel ministerial compliance.

Petitioner does not bring a private, statutory cause of action under Title 52 seeking civil damages, nor is Petitioner asking this Court to invent an implied private right of action within the text of 52 U.S.C. § 20701. Rather, Petitioner invokes this Court's ancient, native common-law jurisdiction to issue a Writ of Mandamus against a state official who is openly refusing to perform a non-discretionary, ministerial duty imposed upon him by the supreme law of the land.

Under long-standing Massachusetts jurisprudence, a writ of mandamus is completely appropriate where: (1) the petitioner has a clear legal right to the performance of a specific duty; (2) the respondent has an absolute, non-discretionary legal duty to act; and, (3) no other adequate remedy

at law exists. The source of that absolute legal duty can - and under the Supremacy Clause, must - be derived from federal statutory mandates when a state official administers a federal election.

The text of 52 U.S.C. § 20701 dictates that every election officer "shall retain and preserve" these records. The statute leaves zero administrative discretion, rendering the duty purely ministerial. Under the Supremacy Clause (Art. VI, cl. 2), this federal command is directly binding upon Respondent William Francis Galvin in his official capacity as the Chief Election Officer of the Commonwealth.

To assert that a state court cannot issue a writ of mandamus to compel a state official to obey a supreme federal mandate simply because the federal statute lacks a private civil enforcement mechanism is a dangerous legal fallacy. It implies that state officials are completely immunized from state court oversight whenever they choose to violate federal transparency laws, leaving candidates and the public entirely defenseless against the automated destruction of voting records. State courts possess concurrent jurisdiction and a constitutional obligation to enforce federal mandates. Where a federal statute commands that a record "shall" be preserved, and a state official explicitly states an administrative intent to execute an automated software purge of that data packet, a state common-law writ of mandamus is not only an appropriate remedy—it is the only available vehicle to prevent a permanent violation of the supreme law of the land.

IV. THE "TEMPORARY CACHE" DEFENSE IS A LEGAL FICTION: THE SYSTEM INHERENTLY GENERATES FEDERAL RECORDS IN MEMORY BEFORE EXECUTING AN AUTOMATED PURGE

Respondent offers a highly technical semantic defense to justify its practices: it argues that by instructing machine vendors to configure the administrative firmware of the ES&S and Dominion tabulators to "disable" storage, the digital images are never officially "created," and therefore "the requested records do not and will not exist." This argument attempts to exploit an automatic-deletion software loop to circumvent federal criminal record-retention obligations.

As confirmed by the manufacturer documentation attached to the Respondent's own filings, a digital ballot image is **an unavoidable, non-discretionary computational step** in the electronic tabulation process.

For example, the official certification for the ES&S DS200 Precinct Tabulator states:

> "Both sides of the ballot are processed simultaneously with high-resolution scanners and the resulting ballot images are decoded by a proprietary recognition engine."

The machine's hardware scanner physically photographs the paper ballot and transforms it into a high-resolution electronic data file (the ballot image). The proprietary software engine then analyzes *that exact digital image* to decode and tabulate the votes.

Therefore, the statement that these records "do not exist" is factually and scientifically false. The digital image **is generated** in memory the instant the paper ballot passes past the internal high-

resolution scan sensors. Without the generation of this digital file in memory, the computer engine is blind and cannot calculate or record a single vote.

As an expert who holds an MIT PhD in systems engineering and who has engineered advanced data, imaging, and communication systems for 48 years, Petitioner notes that from a computational systems perspective, the data packet containing the multi-matrix bitmap representation of the ballot must be fully generated in memory before any feature extraction or vote recognition algorithms can execute.

When Respondent instructs local officials to configure the software to "disable image storage," Respondent is not preventing the *generation* of the record. Rather, Respondent is actively instructing the computer system to **intercept a generated federal record in memory and execute an automated delete command** before that data can be committed to permanent storage drives. Toggling an administrative software switch to trigger an instantaneous "auto-delete" or data-overwrite of a live data trail does not mean the record never existed - it means the record was intentionally destroyed.

V. PETITIONER HAS ESTABLISHED ALL EQUITABLE REQUIREMENTS FOR A WRIT OF MANDAMUS AND AN EMERGENCY PRELIMINARY INJUNCTION

To obtain relief in the nature of mandamus under Massachusetts law, a petitioner must demonstrate:

1. A clear legal, non-discretionary duty on the part of the public official.
2. A corresponding right in the petitioner to the performance of that duty.
3. The absence of an alternative, adequate remedy at law.

Petitioner satisfies each of these rigorous standards, alongside the traditional requirements for immediate injunctive relief.

A. Clear Legal Non-Discretionary Duty and Correlative Right

The statutory language of 52 U.S.C. § 20701 is mandatory: "Every officer of election **shall** retain and preserve...." **The use of the word "shall" strips the Respondent of any administrative or regulatory discretion.** Respondent has an absolute duty to ensure that all records generated during a federal election are securely stored for 22 months.

As an active candidate for the United States Senate in the 2026 election, Petitioner has a clear, individualized right to ensure the integrity, auditability, and legal compliance of the tabulation process for his own race. If the margin on election night is close or if software anomalies occur, the digital ballot images form a critical electronic component of the audit trail. Respondent's configuration policy deprives the Petitioner of this essential federal verification resource.

B. Absence of an Adequate Alternative Remedy

There is no alternative mechanism available to protect Petitioner's rights. Once the 2026 ballots are fed into the optical scan tabulators and the automated software commands overwrite or delete the intermediate memory registers, those digital ballot images are permanently lost. A post-election lawsuit or a standard state-law recount under G.L. c. 54, § 135 cannot recover digital data that has already been purged from electronic systems. Mandamus is the necessary and proper vehicle to compel the Respondent to issue preservation directives before the election occurs.

C. Irreparable Harm to Candidate Standing and the Balance of Public Interests

Respondent argues that there is no "actual controversy" because the ballot images do not currently exist for the 2026 election. This argument ignores the standard for pre-election relief. Respondent has stated an explicit administrative intent to configure the systems to disable image retention for

the upcoming 2026 U.S. Senate election. This creates an immediate, predictable threat of harm to a declared candidate.

The balance of harms heavily favors the Petitioner. Granting the requested relief requires no structural or financial re-engineering by the Commonwealth. The voting machines already possess the innate capability to save these high-resolution images onto standard, secure flash drives as part of their federal certification. Toggling the administrative setting from "disable" to "enable" requires minimal technical effort and imposes no cognizable burden on the state.

In contrast, denying the petition results in the permanent destruction of a federal electronic audit trail, undermining public confidence and violating clear federal law.

VI. THE INTENTIONAL INTERCEPTION AND AUTO-DELETION OF GENERATED DATA VITIATES THE RECORD-RETENTION MANDATE OF 52 U.S.C. § 20701

Under the plain text of 52 U.S.C. § 20701, the federal preservation mandate attaches the very instant a record "comes into the possession" of an election officer or an automated election device acting under the state's authority. Because the certified hardware components inherently generate these high-resolution digital images in memory to count the vote, those records are legally in the system's custody during the "act requisite to voting."

Respondent cannot use chosen software architecture or targeted firmware configurations to evade federal statutory mandates. If an agency were permitted to bypass federal record-retention acts by simply programming its computers to auto-delete and write over data trails in memory before

hitting a permanent storage directory, every transparency statute enacted by Congress could be systematically nullified by an IT department or an administrative configuration switch.

The United States Department of Justice has repeatedly clarified that Title 52 records mandates do not permit states to design or configure electronic tabulating devices to intercept and automatically purge intermediate digital files or metadata generated in the ordinary course of vote calculation.

By openly admitting in his filings that the imaging functionality is built directly into the scanners but is required to be configured to auto-delete to prevent long-term data storage, Respondent has confessed to an ongoing administrative practice of **systemic, automated record destruction.** Mandamus is entirely appropriate to compel the Respondent to reverse this configuration and ensure that data inherently generated by the scanners in memory is securely committed to permanent storage drives for the 22-month federal preservation window.

CONCLUSION AND REQUESTED RELIEF

For the reasons stated above, the Respondent's administrative practice of systematically disabling and deleting digital ballot images violates the federal record-retention requirements of 52 U.S.C. § 20701. Petitioner respectfully requests that this Honorable Court:

1. **DENY** Respondent's Opposition to the Petition for Writ of Mandamus;
2. **GRANT** the Petition for Writ of Mandamus and enter an Order compelling Respondent William Francis Galvin to issue immediate, binding written directives to all municipal election officials throughout the Commonwealth, instructing them to configure all certified

electronic voting tabulators to actively save, retain, and preserve all digital ballot images generated during the 2026 federal election cycle;

3. **ISSUE** an immediate Emergency Preliminary Injunction prohibiting the Respondent, his agents, and local election officers from implementing any software configuration or administrative policy that permits the deletion, overwriting, or non-storage of digital ballot images for a minimum period of twenty-two months following the 2026 federal election;
4. **ENTER** a Declaratory Judgment establishing that digital ballot images generated by electronic optical scanning machines constitute "records and papers" under the mandatory protection of 52 U.S.C. § 20701; and
5. **FORMALLY CENSURE** the Respondent and his legal counsel for breaching their duty of candor to this Tribunal by introducing technically fraudulent and deceptive statements claiming that ballot images “do not exist,” when the state's own evidence demonstrates they are actively generated and then systematically subjected to an automated software deletion loop.

Dated: June 9, 2026

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Dr. Shiva Ayyadurai , hereby certify that a true and correct copy of the foregoing *Petitioner's Reply and Response to Respondent's Opposition* and the accompanying *Petitioner's Memorandum of Law* were served via electronic mail on this 9th day of June, 2026, upon the counsel of record for the Respondent:

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