



Preserving the Judicial Record

The Essential Role of Court Reporters in the American Justice System

Executive Summary

An accurate and reliable record of courtroom proceedings is fundamental to the American justice system. Appellate review, due process protections, and public confidence in the courts depend on a complete and verifiable transcript of what occurs during trials and hearings. A fair and equitable justice system strengthens the public’s confidence that elected officials are using all means at their disposal to protect and fairly treat all citizens.

Trial transcripts form the foundation of appellate review, support judicial decision-making, and preserve public confidence in the legal system. For over a century, trained stenographic court reporters have served as impartial officers of the court responsible for creating and certifying the official record.

Court reporters are highly trained and tech-savvy professionals who not only have embraced new technology over the decades but have mastered its use in bringing the spoken word to text faster and more accurate than ever. However, such an embrace of new technology only comes after the technology is proven reliable, trustworthy, and strengthens transcript production, accuracy, access, and speed. (NCRA, 2023)

AI is defined as a “machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. (National Artificial Intelligence Act, 2020)

Artificial Intelligence (AI) and all its subsets are only the latest in over a century of technological advances -- from electric typewriters, cassette tapes, digital recorders to computerized-aided transcription -- that have impacted court reporting professions. Many of these advances have ultimately had a positive impact on our professions.

A lack of accountability and certification issues inherent in an AI product erodes the public trust that should be and is placed in any courtroom proceeding. Recording technologies may serve as supplemental tools, but they cannot replace the judgment, oversight, and accountability provided by trained professionals.

Maintaining professional court reporters is essential to protecting due process and preserving the integrity of the judicial system and the confidence the public has in the system specifically designed to protect them and their rights.

Individuals charged with determining the future of people’s lives – from juries to judges – must have total faith that the record reflects the actual stated words and/or testimony of those involved in or presenting a case. There is no third-party company that has any loyalty to the rule of law and the public that we serve. Our service is to all citizens regardless of gender, race, national origin, or age.

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I. The Judicial Record and the Right to Appellate Review

The judicial system depends on the availability of a complete record for appellate review. Without a reliable transcript, errors that occur during a trial cannot be properly examined.

A criminal justice journalist reporting on the issue summarized this importance succinctly: “The system is designed to ensure that people convicted of crimes were convicted in a fair proceeding. If meaningful appellate review is impossible, the justice system suffers and public confidence erodes.” (The Marshall Project, n.d.)

As legal experts have noted, the justice system relies on a reliable record to ensure that convictions and rulings were reached through fair proceedings. (The Marshall Project, n.d.) Without such a record, both due process protection and public confidence in the courts are undermined.

II. The Unique Function of Professional Court Reporters

Human oversight is particularly important in courtroom environments where rapid dialogue, emotional testimony, strong accents and dialects, and overlapping speech are common. Machines cannot interpret context or intervene when clarity is needed.

Court reporters actively ensure that proceedings are captured clearly. Recording systems offer no such protection. Problems are often discovered only after the proceeding has ended when testimony cannot be reconstructed.

III. Limitations of Digital Recording Systems (DRS), Artificial Intelligence/Automatic Speech Recognition (AI/ASR), and Transcription

Many courts have tested digital recording systems to replace court reporters. These systems rely on microphones and later transcription by third-party “outside house” individuals who were not present during the proceeding. Such lack of firsthand knowledge makes it impossible to guarantee chain of custody in the record. Court reporters ensure an unbiased certification that is verified easily through the embedded watermark that are personal shorthand notes contained within the file. (NCRA, 2023)

Additionally, transcripts prepared by anyone other than the person digitally recording the proceedings do not comply with Federal Rules of Civil Procedure (FRCP) 80. (NCRA, 2023)

Legal professionals have raised several recurring concerns:

Loss of Testimony

Recording devices cannot intervene when problems occur in the courtroom. The resulting audio gaps cannot be corrected later. Such gaps are not noted until often long after the proceedings are completed and a record is being compiled for appellate review or attorney briefing.

Transcriptionists working from recordings must frequently mark sections of testimony as “inaudible,” permanently losing portions of the record. (Legal Media Experts, n.d.)

Equipment Malfunction

Even modern recording systems are vulnerable to technical failures. As Melissa Dineen of Massachusetts’ Committee for Public Counsel Services noted: “One error or an unnoticed malfunctioning of a taping system can do irreparable harm.” (Boston Globe, n.d.)

IV. Financial and Operational Realities of DRS, AI/ASR

Courts must invest in:

- Recording equipment installation
- Infrastructure upgrades for courtrooms
- Technology maintenance and replacement and/or purchase of software vendors “keys”
- Monitoring staff to manage recordings
- Storage systems for large digital audio files

- Additional transcription services which are performed “out of house”

A cost comparison conducted in California found that producing 1,000-page transcript from a digital recording cost approximately \$2,000 more than producing the same transcript through stenographic reporting when all costs were considered. (North Carolina Newsline, n.d.)

According to reporting from CBS Boston, transcriptionists may require three to four hours to transcribe a single hour of recorded audio. (CBS Boston, n.d.)

V. Lessons from State Court Systems

Several jurisdictions that attempted to replace stenographic reporters with recording systems ultimately reversed course after encountering operational failures or unexpected costs. Those states have either completely returned to stenographic reporters or employ a hybrid system:

Texas; New Mexico; Oregon; Hawaii; Kentucky; Nevada [Federal Courts]

VI. Artificial Intelligence and Automated Transcription

Recent proposals suggest that AI/ASR could replace human reporters. Experts caution that such systems remain unreliable for courtroom environments and their unreliability will only become apparent long after the proceedings. While these technologies may assist in limited contexts, they present serious risks when used to create official legal records when appellate courts or parties need accurate, complete, and certified written transcripts.

Accuracy Challenges

Researchers have found that speech-recognition systems (AI/ASR) perform less accurately with **regional accents, dialects, overlapping speech, and specialized legal terminology**, all common in courtrooms.

Stanford University researchers found that there was an error rate of 20% for White male speakers, 40% for Black male speakers, and 35% and 19% for White female and Black female speakers. There was an even higher error rate when speakers spoke in the African American English dialect (AAE). Similarly, additional linguistic research indicates that automated systems perform poorly with the diverse speech patterns found in real-world courtroom environments. (CalMatters, 2025)

Linguist Nicole Holliday of the University of California, Berkeley, explains: “Humans do language imperfectly... but they have the edge over automated systems because they can pause and ask for clarifications.” (CalMatters, n.d.)

As Mark Twain famously observed, “The difference between the almost right word and the right word is really a large matter—it’s the difference between the lightning bug and the lightning.” (Twain, 1888)

Privacy and Security Risks

AI transcription systems often rely on cloud-based processing, raising concerns about the protection of sensitive legal information and the potential exposure of confidential proceedings. In Alabama, we have a robust “in-house” system that maintains all judicial documents. To allow a third-party access to any proceedings maintained “out of house” without any controls we currently maintain to protect the privacy of citizens is taking a risk that the judicial system cannot and should not gamble with.

Additionally, all guidelines/recommendations by the GDPR, ISO/IEC 27001, SOC 2 TYPE 2, and HIPAA should be strictly followed. It only takes one data breach for a catastrophic event to occur. (NCRA, 2023) One can only imagine the damage caused from released audio or transcripts in closed courtroom settings such as juvenile proceedings.

VII. Professional Standards and Accountability

Certified stenographic court reporters operate under rigorous professional and ethical standards. They are trained to capture speech at high speeds, maintain verbatim accuracy, and certify transcripts as the official record of proceedings.

Over half the states have statutes regulating all facets of court reporting where legislatures have found it necessary to regulate the practice of court reporting with licensure and certification requirements all in an effort to protect the public safety and wellbeing. An “adequate” rather than “accurate” record will never suffice for something that must stand the test of time and be reliable for review over years or decades. (NCRA, 2023)

Unlike certified court reporters, AI systems cannot assume legal responsibility for transcript accuracy. Questions of accountability, chain of custody, and evidentiary reliability remain unresolved (NCRA, 2026). It is not appropriate to shift legal responsibility to a computer or an algorithm or a “third-party” software vendor rather than the responsible people and legal entities. (ABA, 2023)

The United States Senate recently unanimously approved the Disrupt Explicit Forged Images And Non-Consensual Edits Act, or DEFIANCE Act, to strengthen legal protections for individuals targeted by nonconsensual deepfake imagery. Legislators supporting the bill said existing legal frameworks are insufficient to address the growing prevalence of deepfake technology and the harms it causes. This Act gives victims the right to sue and hold creators accountable. It supplements state laws that vary widely in enforcement and penalties.

While the DEFIANCE Act deals with imagery, the same logic applies to ANY AI/ASR generated product. Acknowledging that AI can create highly realistic, but completely false, records of events that cause real harm and that victims need legal remedies fully underscores the need for regulation of the use of AI/ASR in any setting.

These concerns are not expressed in terms of cost, speed, or neutrality but, rather, in terms of integrity, chain of custody, and accountability. That the United States Senate fully recognizes the

harms caused by fake imagery should only embolden legislators to address those same issues at the state level.

A transcript is not just text; it is evidence.

Professional organizations such as the National Court Reporters Association (NCRA) emphasize that while technology may assist reporters, the responsibility for the official record must remain with trained human professionals. (NCRA, 2026)

VIII. Conclusion

NCRA and ACRA are not against unique solutions. In fact, our members incorporate technology constantly into their record-making processes. The difference is that our integrations assist our record-making process without compromising the accuracy or validity of the record. (NCRA, 2024)

The integrity of the judicial record is fundamental to due process, appellate review, and public trust in the courts. Although DRS/AI/ASR offer potential efficiencies, they cannot replicate the oversight, judgment, and accountability provided by professional court reporters.

The official court record forms the foundation of appellate review, judicial accountability, and public trust in the legal system. Ensuring the integrity of the official record is not merely an administrative choice — it is a fundamental safeguard of justice.

ACRA Executive Board of Directors, May 2026

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DEFINITIONS

- The General Data Protection Regulation (GDPR) is the toughest privacy and security law in the world. Though it was drafted and passed by the European Union (EU), it imposes obligations onto organizations anywhere, so long as they target or collect data related to people in the EU. The regulation was put into effect on May 25, 2018.
- ISO/IEC 27001 is an information security standard. It specifies the requirements for establishing, implementing, maintaining and continually improving an information security management system (ISMS). Organizations with an ISMS that meet the standard's requirements can choose to have it certified by an accredited certification body following successful completion of an audit. There are also numerous recognized national variants of the standard. Apple, Amazon Web Services are examples of corporations that comply with this standard.
- SOC 2, TYPE 2 - The System and Organization Controls 2 (referred to as SOC2) is a voluntary compliance standard for service organizations. SOC 2 is maintained by the American Institute of Certified Public Accounts (AICPA). The purpose of an SOC 2 audit is to test an organization's internal controls for information security and privacy. It ensures that the organization processes and stores client data securely and aligns with established best practices outlined in the American Institute of Certified Public Accountants (AICPA) Trust Service Criteria (TSC). Beyond mere compliance, a SOC 2 Type 2 certification serves as a symbol of trust and transparency for organizations handling sensitive data in the constantly changing world of digital technology. The resulting report demonstrates that a business's security and confidentiality controls, meet or exceed the requirements established by the AICPA.