



**Emerging Ethical and Legal Issues Related to the  
Use of Artificial Intelligence (AI), Automatic  
Speech Recognition (ASR), Voice Cloning, and  
Digital Audio Recording of Legal Proceedings**

***Executive Summary***

**National Court Reporters Association (NCRA)**

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**Author:** The National Court Reporters Association (NCRA) and its 12,000 members are recognized worldwide as the top authorities on capturing and transcribing the spoken word into writing. With 124 years of leadership and innovation, the organization partners with courts and the bar to develop and apply the expertise of verbatim stenographic reporters to improve the criminal and civil justice system in ways that best serve the public good.

Court reporters are highly trained, technology-savvy professionals who quickly and precisely convert the spoken word in court and/or deposition proceedings into information that can be read, searched, and archived by all parties.

As impartial officers of the court, these “guardians of the record” then prepare verbatim transcripts of proceedings. Their critical role in America’s judicial system helps safeguard the legal process by guaranteeing accuracy, authenticity, access, and integrity in the chain of custody of all transcripts.

**Background:** The exponential global growth of artificial intelligence (AI) and its related technologies such as automatic speech recognition (ASR), voice cloning, and digital audio and video recording have disrupted nearly every government, industry, and profession, including that of court reporters.

Concerned about fallibility, ethics, bias, and unrecognized risks, NCRA established a STRONG Committee in 2019 to explore the realities and potential of AI, ASR, and other so-called “Large Language Models” (LLM). These models generate, predict, and recognize content in many formats. The committee’s review is compiled in this white paper, which draws from the combined 525 years of professional experience by its esteemed committee members in 11 states. NCRA also passed a related policy statement, which is contained in the report.

**Summary Research Findings and NCRA Positions:** Nearly three years of research into AI and ASR reveal the urgent need to strengthen protections of America’s established court processes to ensure that early-stage technologies such as AI and ASR do not either inadvertently or purposely corrupt the integrity of the nation’s judicial system and the rights of all people engaged in it.

While these technologies offer great opportunities such as mass data management, their programmed algorithms must not be relied on to perform tasks that require the expertise, critical reasoning, and interpretive skills unique to specifically trained humans.

The life-changing risks of incorrect, unverifiable versions of court transcripts; the known biases built into AI and ASR systems; and the mistaken assumptions around speed, accuracy, and cost savings in transcript preparation and processing are all key reasons why NCRA strongly encourages policy makers to commit to the use and best practices of human-based court reporting. The same holds true for other stakeholders such as judges, court administrators, bar associations, and justice protection organizations. The integrity of court reporting is vital to maintaining the public’s faith in America’s judicial system by ensuring fairness, transparency, and barrier-free access regarding court proceedings. Studies show this faith and commitment to rule of law have rapidly eroded in recent years for many reasons. Allowing flawed technology,

rather than trained human experts, to capture and ensure “the truth” of court proceedings and documents will likely further degrade public trust.

Some other review findings include the following:

- **The increasing quality of “deepfake” (voice cloning) technology — which creates and inserts false audio, video, or text content — is making confirmation and certification of original court transcripts difficult, often impossible,** even for audio and video experts. Free, widely accessible programs allow even minimally trained professionals to corrupt original files by falsifying or eliminating content that could influence court decisions. Court proceedings, including depositions, also may become targets for impersonations of parties.
- **Transcripts prepared by anyone other than the person who has digitally recorded the proceedings make chain of custody hard to track and do not comply with Federal Rules of Civil Procedure (FRCP) 80.** Stenographic court reporters are required to certify that they have reported the legal proceeding, and that the transcript of the proceeding is a true and complete record of their stenographic notes; this establishes proper chain of custody and enables courts to verify transcript veracity.
- **One quality control management challenge for ASR is that it is less accurate than human court reporters and can demonstrate systemic bias against immigrants, people of color or with speaking disabilities, older adults, and others.** A Stanford University study found that non-human transcription contained nearly double the number of errors (40 percent) for Black speakers as for white speakers (20 percent), and mistakes were even higher for African American English (AAE) dialect speakers. Today’s court reporters can accurately capture in writing 225 or more spoken words per minute in realtime.
- **The common promise of cost savings when using non-human technology instead of court reporters is misguided.** A record made and transcribed from digital recording can cost thousands of dollars more than that of a skilled stenographer, depending on the accounting methods, personnel, and court setup. A statewide staffing study by the Pierce County Superior Court in Washington determined that “actual cost savings would be minimal at best, with the court performance suffering greatly from the lack of realtime reporting. There is no court recording equipment which has the performance level of a court reporter.”
- **The hijacking of digital accounts is among the greatest of risks for administrators of high-volume courts.** Rising numbers of court cases mean more personnel will require access to the cloud accounts, boosting the chances of successful phishing or scams. The integrity of court transcripts compiled and stored via cloud computing also can be compromised due to cybersecurity threats such as cryptojacking, data breaches, and denial-of-service attacks.

Protecting judicial ethics and integrity and maintaining public faith in American courts are core to a secure democracy. Although AI, ASR, and other emerging technologies are increasingly

competent tools for myriad tasks, bearing the serious responsibilities of court reporting should not be among them.

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*View the full white paper:*



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