

Digital Audio/Visual Recording Technology (DART) Committee

Final Report & Findings

(December 30, 2009)

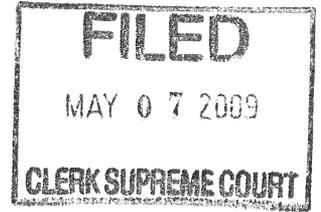
Appendices*

1. Order of the Judicial Council of Iowa: Establishing the Digital Audio Recording Technology Committee (May 7, 2009)
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***Note:** The Appendices are available on the Iowa Judicial Branch website at:

www.iowacourts.gov/Advisory_Committees/Digital_Audio_Recording_Technology/

JUDICIAL COUNCIL OF IOWA



**IN THE MATTER OF)
APPOINTMENTS TO THE)
DIGITAL AUDIO RECORDING)
TECHNOLOGY)
COMMITTEE OF THE)
JUDICIAL COUNCIL)**

ORDER

Having conducted a preliminary assessment of digital audio recording technology as a method of making the official record of trial court proceedings, the Judicial Council finds that this technology warrants further appraisal. To this end, the Judicial Council appoints a committee to further examine this type of digital recording equipment for purposes of assessing the reliability of this technology, the accuracy of a record made with this technology and the cost of acquiring, installing, operating and maintaining this technology. The committee shall report the results of its examination to the Judicial Council by January 1, 2010.

The council hereby appoints the following persons to this committee:

- Honorable Charles Smith, Chief Judge, 4th District, co-chair
- Beth Baldwin, District Court Administrator, 5th District, co-chair
- Honorable Amanda Potterfield, Court of Appeals
- Honorable Bobbi Alpers, Chief Judge, 7th District
- Honorable Kurt Wilke, Chief Judge, 2nd District
- Honorable Monica Ackley, 1st District
- Honorable Bill Pattinson, 2nd District
- Honorable Lucy Gamon, 8th District
- Honorable David Larson, 3rd District
- Scott Hand, District Court Administrator, 2nd District
- Tyler Johnston, Public Defender, 6th District
- Martha Lucey, Assistant Appellate Defender
- Mary Tabor, Assistant Attorney General
- Guy Cook, attorney, 5th District
- Esther Dean, attorney, 7th District

John French, attorney, 4th District
Darin Raymond, Plymouth County Attorney, 3rd District
Gerald Olson, retired court reporter, 2nd District

Members shall be reimbursed for necessary and reasonable travel expenses according to Iowa Court Rules 22.16 through 22.2.

Dated this 7th day of May, 2009.

JUDICIAL COUNCIL OF IOWA

By Marsha Ternus
Marsha K. Ternus, Chief Justice
Chair, Judicial Council of Iowa

Appendix 2

DART Committee Schedule for Meetings & Tasks

May 21, 2009	<u>1st Committee meeting – at Judicial Branch Building in DM</u> <ul style="list-style-type: none">• Organizational meeting of committee
June 26	<u>2nd Committee meeting – at Judicial Branch Building in DM*</u> <ul style="list-style-type: none">• Live demonstrations by four DART vendors• Identify locations and dates for site visits
July – Oct.	<i>Site visits</i> – Arrangements made for committee sub-groups to visit courts utilizing DART in neighboring states
July 31	<u>3rd Committee meeting – at Judicial Branch Building in DM*</u> <ul style="list-style-type: none">• User perspectives from: (1) Judges Association; (2) Court Reporters Association; (3) Iowa State Bar Association; (4) Others• Select vendors for test courtrooms in Iowa• Recommendations by the DART Test Evaluation Subcommittee
Aug. 24 – Sep. 14	Install DART systems in 5 test courtrooms in Iowa <ul style="list-style-type: none">• Train judges & staff; inform/instruct local attorneys on DART
Sep. 14	Begin tests of DART in selected Iowa courtrooms
Oct. 30	End tests of DART in selected Iowa courtrooms
Oct. 9	<u>4th Committee meeting – at Judicial Branch Building in DM*</u> <ul style="list-style-type: none">• Status reports on tests of DART in 5 Iowa courtrooms• Reports on site visits
Nov. 18	<u>5th Committee meeting – at Judicial Branch Building in DM*</u> <ul style="list-style-type: none">• Discuss evaluations of DART tests in 5 Iowa courts• Invite judges, attorneys, court reporters from test courts• Develop set of initial conclusions/findings
Dec. 4	Send 1st draft of final report to committee members
Dec. 11	<u>6th Committee meeting – at Judicial Branch Building in DM*</u> <ul style="list-style-type: none">• Discuss 1st draft of final report
Dec. 16	2 nd draft of final report emailed to committee members
Dec. 22	<u>Deadline for comments on report / committee conference call – if needed (time TBA) – Discuss 2nd draft of final report</u>
Dec. 30	Committee submits Final Report to Judicial Council

*Meetings 2 through 6 were open to the public.

Appendix 3
Notes from All Six DART Committee Meetings – Approved by the Committee

Notes from the 1st DART Committee Meeting May 21, 2009; Des Moines
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Attendance: All committee members attended, except Chief Judge Kurt Wilke (presiding at a jury trial). Also attending were Chief Justice Marsha Ternus (for the first half-hour only) and from State Court Administration: John Goerdt and Steve Davis.

1. Welcome and introductions.

The meeting began at 9:30 AM. The committee's co-chairs, Chief Judge Charles Smith and Beth Baldwin, welcomed the committee and invited members to introduce themselves, which they proceeded to do.

2. Summary of the Remarks by Chief Justice Marsha Ternus

The Chief Justice thanked members for contributing their time to this committee. She explained that the idea to use DART to make the official court record was suggested several months ago as the magnitude of the national economic crisis and the state's budget crisis became increasingly apparent. By the start of 2009, the judicial branch was expecting to face unprecedented budget cuts in FY 2010 – up to \$15 million – almost 10 percent of our operating budget. Given the potential severity of the cuts, and as responsible stewards of state resources, state court administrators and the judicial council felt compelled to seriously consider every reasonable cost-saving idea. The proposal to use DART in our courtrooms was -- and continues to be -- just one of a wide range of options for reducing costs if we continue to face budget cuts in the future.

According to the Chief Justice, the purpose of this committee is to perform the first crucial step in the analysis of DART: to determine whether this technology can reliably produce an accurate record of court proceedings. This is a narrowly focused objective. If the committee concludes that DART meets this requirement, the judicial branch will still have to consider the needs of judges for clerical and administrative support and whether the benefits of DART outweigh the overall costs.

Committee members have been chosen for this important assignment because each has a unique perspective to bring to bear on this issue. Members are not here to advocate for the interests of any particular group. Instead, each member is here for the same purpose: to objectively consider the evidence on the reliability of DART for producing an accurate record of court proceedings. We are confident that the committee can achieve this goal on behalf of the citizens we serve.

3. Review of DART materials provided to the committee (John Goerdt, Deputy State Court Administrator)

The folder of materials given to committee members includes 13 documents. Most are reports, manuals, or instructions developed by other states and the federal courts on some aspect of DART in the courts. They were obtained as part of the research effort to determine whether there was a reasonable basis to believe that DART is a reliable means to produce an accurate court record. The various reports and other documents could guide similar efforts in Iowa, if the committee concludes that DART meets these basic

requirements. Also included is a report from the California Official Court Reporters' Association (see Tab 11), which delineates many of the arguments against the use of DART in lieu of court reporters. The documents include:

- Tab 1: The supreme court's order creating the committee
- Tab 2: A list of committee members with contact information
- Tab 3: Summary table on the use of DART in state and federal courts (2009); the information in this table is based on a variety of sources including a search of the internet; use of email list-serves involving court managers; and phone calls to various state courts.
- Tab 4: Executive summary of an evaluation of DART in 12 federal courts (1999)
- Tab 5: Memo summarizing current use of DART in federal courts (March 2009)
- Tab 6: Answers to FAQs about DART in the federal bankruptcy court in New Mexico (2004)
- Tab 7: Michigan's Standards for Audio Recording Systems in the Courts (2007)
- Tab 8: Wisconsin's Policy and Procedures Manual on Digital Audio Recording of Court Proceedings (2006)
- Tab 9: Arizona's Instructions for Judges, Lawyers, and Other Court Participants Regarding Electronic Recording Systems in the Courtroom (2005)
- Tab 10: Final Report of the Oregon Judicial Department's Workgroup on Qualifications for Transcriptionists (2007)
- Tab 11: California Official Court Reporters' Association: Preserving Access to Justice Task Force Final Report (2009) [This is the source quoted most often for arguments against using DART for court proceedings.]
- Tab 12: Iowa Code and Court Rules on Reporting/Recording Requirements for Court Proceedings (a summary of the Code sections and Court Rules on this issue; 2009)
- Tab 13: Proposed "Request for Information" (RFI) – to solicit information from vendors regarding digital audio/visual recording equipment and software

At the end of the overview of these materials, committee member Gerald Olson distributed a letter to the other committee members in which he expressed his views on the important role of court reporters. He indicated that it should be read by members at some other time and should not be the focus of discussion at this meeting.

4. Discussion on allowing the news media to attend this committee's meetings

One of the chairs asked the committee to adopt a policy on whether to permit the news media to attend the committee meetings. As an advisory group to the judicial council on administrative matters, the committee is not subject to the requirements of the open meetings law. Members agreed, however, that transparency in this process would

contribute to the legitimacy of the committee’s final recommendations. Members unanimously agreed to open future committee meetings to the public and news media.

5. Discussion of the “Proposed DART Committee Tasks & Timeline” (handout)

Prior to this meeting, the committee co-chairs and staff discussed the tasks this committee would probably need to perform to meet the December 31st deadline for submitting a final report and recommendations to the judicial council. The handout includes their initial proposal for tasks and dates when they would need to be completed. As discussion of the tasks and timeline progressed, the committee decided the following:

- a. *Testing of DART in multiple courtrooms in Iowa.* Actual testing of various vendors’ DART systems in Iowa courtrooms should begin in August, rather than October 1 (as suggested on the Proposed Tasks & Timeline) to provide a longer test period. These tests are a crucial part of the evaluation process; we need more than one month to effectively test DART in multiple settings. Starting the test sites earlier means other key tasks must be completed sooner.
- b. *Request for information from DART vendors/manufacturers*
 - i. Committee staff should distribute the “request for information” (RFI; see Tab 13 in materials) as soon as possible; the deadline for responding to the RFI should be approximately 21 days later. The RFI should solicit information and demonstrations on digital video as well as audio recording technology. (Note: Committee staff emailed the RFI to DART vendors and posted it on the judicial branch website on May 21; the deadline for RFI responses is June 11.)
 - ii. **RFI Subcommittee:** A subcommittee will review the responses to the RFI and recommend three or four vendors/manufacturers to conduct demonstrations for the committee. The subcommittee will include: Judge Amanda Potterfield, Judge Bill Pattinson, Beth Baldwin, Esther Dean, Scott Ruhnke, and John Goerd.
- c. *Demonstrations by DART vendors.* The live demonstrations should be conducted at the Judicial Branch Building on Friday, June 26 (rather than July 31); this will be the second meeting of the committee. (Note: Committee staff confirmed the availability of the auditorium and two courtrooms on June 26 for purposes of the demonstrations.)
- d. *Site visits to other states using DART.*
 - i. By not later than July 15, committee staff should arrange site visits by subgroups of the committee to jurisdictions in nearby states that are already using DART. Staff will disseminate information about the sites and arrangements to the members via email and allow members to choose which sites they would visit.
 - ii. Each site visit should include observation of court proceedings, plus discussions with judges, attorneys, and court staff that have experience

in using the technology -- and with judges and attorneys who have experience with the transcripts obtained from audio/visual recordings.

- iii. Likely site visit locations include state courts in Minnesota (Minneapolis and possibly others); Rock Island, IL; Fargo, ND; and the federal district court in Lincoln, NE. There was also significant interest in a small group visiting Salt Lake City, UT. Committee staff will explore the availability of funds for such a site visit. A phone conference with judges, attorneys, and court staff in Utah might be an alternative.

e. *Evaluation of the DART in multiple courtrooms* (see 5.a., above).

- i. **DART Evaluation Subcommittee**: After considerable discussion of how to evaluate the courtroom testing of DART in Iowa, the committee agreed to appoint a subcommittee to recommend (1) where the tests should occur and (2) a protocol for evaluating: (a) the reliability of DART and (b) the accuracy of the transcripts obtained from digital audio or video recordings.
- ii. The subcommittee will include: Judge Bill Pattinson, Judge Lucy Gamon, Guy Cook, Darin Raymond, Mary Tabor, Martha Lucey, Gerald Olson, Scott Hand, and Scott Ruhnke.
- iii. A member recommended that committee staff contact states that use DART to determine whether they have conducted a similar evaluation of this technology. If evaluations have been done, staff should obtain any pertinent reports or information about those evaluations.

f. *Need for training judges, attorneys, and court staff in DART test sites*. One member observed that the first few weeks of the testing of DART will be problematic until the judges, court staff, and attorneys are used to conducting proceedings in courtrooms relying on DART to obtain the record. The vendors who install their equipment for the test period will have to train judges and staff on the use of their systems before the test period begins. We will also have to inform attorneys – through handouts, signs, and pre-hearing instructions from the judges – regarding how to conduct themselves in proceedings where DART systems are being used to record the proceedings.

g. *Updated list of tasks and timeline*. Committee staff will update the tasks and timeline in accordance with the decisions made at this meeting and send the update to committee members with the meeting notes. (*See attachment.*)

6. Next meeting: Friday, June 26, at 9:30 AM in D.M. (vendor demonstrations)

7. Meeting adjourned at 11:55 AM

Notes from the 2nd DART Committee Meeting
June 26, 2009; Des Moines

16 Committee members in attendance; two were absent: Martha Lucey and John French
State court administration staff attending: John Goerdt, Scott Ruhnke, and Steve Davis
Other non-members attending: several court reporters and two judges

1. Welcome and meeting overview

The meeting began at 9:30 AM. The committee's co-chairs, Chief Judge Charles Smith and Beth Baldwin, welcomed the committee and reviewed the agenda.

2. Presentation by For the Record (FTR), Inc.

Two representatives from FTR's home office in Phoenix, AZ, conducted the presentation. The key points of the presentation include:

- FTR has more audio recording systems in courtrooms in the U.S., Australia, and elsewhere than any other company; many in Illinois and Missouri
- Their systems are sold and installed by more than 200 resellers in the U.S. – including Pratt A/V in Des Moines and two others in Iowa
- FTR offers three general types of digital audio recording systems:
 - (1) FTR Reporter Deck 2: a stand-alone hardware solution; built for FTR by Marantz:
 - a. 4 channels (separate tracks that can be isolated during replay/listening)
 - b. 40 Gigabyte internal hard drive (500 hours of audio recording)
 - Saves the last 500 hrs only (62 eight-hour work days = 3 months)
 - Will not over-write files on HD until they have been archived
 - c. Linux operating system
 - d. Automatically saves to the hard drive and the network (if set to do so)
 - e. Can archive to the network or a CD (9.5 hrs/CD)
 - f. Creates files in a proprietary format that can be replayed using FTR's free audio player (downloadable by anyone from FTR's website) – which allows listener to isolate up to 8 channels/tracks when listening; can save the files in an MP3 format, but you lose ability to isolate tracks
 - (2) FTR Reporter Gold 5.X: a computer & software solution that includes:
 - a. Windows Vista compatible
 - b. 4 channels (default), but can capture 8 channels (optional)
 - c. Can be used to capture & manage video
 - d. Can add FTR's Log Notes software to annotate the audio/video record
 - i. Can be done by courtroom staff, by the judge, or both
 - ii. Each annotation automatically given a timestamp
 - iii. Can search on annotation date, text, etc.
 - iv. Can add more notes after hearing is completed
 - v. Log notes are saved separately from audio file

- e. Audio files can be sealed by setting option at start of hearing or after hearing is completed; saved to a secure folder on the network or a CD
- f. Audio files are saved in five-minute segments; can never lose more than 5 minutes of recording
- g. Transcripts from audio files can include hyperlinks to time stamps in the audio file; need Wordlink to do this (an MS Word-based utility)
- h. Can use Record Edge, an additional development tool, to integrate audio files into the case management system

- (3) Portable System includes 4 (or 8) microphones & a small audio mixer
 - a. Transportable in a luggage-type case with a handle and wheels
 - b. The mics plug into the mixer; the mixer plugs into a laptop or desktop

- FTR service: 24/7 technical assistance hotline
 - Local/regional vendors provide on-site service
- Costs (assuming a large order)
 - Reporter Deck 2 systems: approximately \$4000 per courtroom for basic system (4 mics)
 - Reporter Gold 5.X systems: \$8000 to \$10,000 per courtroom for hardware and software
 - Ongoing service & support
 - Software: 5% of the software purchase price per year
 - Hardware: support provided through local resellers/vendors (varies)
 - Support for daily operation: best practice is to have a courtroom staff person monitor the equipment and enter annotations; but not all courts do this
- Keys to obtaining an accurate & complete audio recording:
 - High quality microphones & audio mixer
 - Expert installation
 - Best practices in managing court proceedings

3. Presentation by Court Smart Digital Systems, Inc.

- Presentation by the CEO (from Massachusetts) and the Director of Midwest Sales (from Chicago)
- Founded by CEO in 1995
- The company has been on the Inc. Magazine list of 500 fastest growing companies 4 consecutive years; nominated again this year
- They emphasize that they offer an “Enterprise Class” solution for courts
 - Any A/V company can set up an effective digital recording system in individual courtrooms
 - Large enterprises (like state court systems) with many locations need to efficiently and effectively manage the recording systems and to integrate

- o the digital recordings into their case management systems and to enhance services to their clients/customers
 - o This is Court Smart's strength
- Court Smart has implemented (or is in the process of implementing) centrally managed digital recording systems in:
 - o Many of the state courts in Florida
 - o All of Alaska's state courts (which used to use FTR)
 - o Most Superior (trial) Courts in New Jersey
 - o Hennepin Co. (Minneapolis) and Ramsey Co. (St. Paul), MN
 - o Du Page Co. (Wheaton), IL – which they claim is the best-managed digital recording system in any courthouse in the U.S.
 - 28 centrally-managed courtrooms for the past 10 years
 - They have never lost a single minute of audio recording
 - Saved the court \$5 million in the last three years
 - A certified court reporter manages the program
 - Court reporters monitor multiple courtrooms from a central location
- Components of their enterprise class solution
 - o Centralized monitoring & management of digital recordings
 - o Multi-level security for access to digital recordings
 - Passwords for users
 - Individualized levels of access tailored to (for example):
 - Judges
 - Attorneys
 - Staff
 - Public
 - No other vendor offers this feature
 - Cannot erase or modify digital recordings with Court Smart
 - Sealing digital recordings is an option: can require randomly assigned password to access it
 - o Link digital recordings to case management system
 - o Remotely monitor and manage recordings from a central location
 - o Can completely automate recording start and stop times; avoid human error
 - o Video conferencing can be integrated into the system
 - Judge could do video arraignments from any location
 - o Video integrated for use in courthouse security
 - o Evidence presentation (audio/video) can be integrated into system
 - o Fully automated backup and archival of recordings (best system on the market)
 - o Can generate reports on each courtroom (who logs onto system; hours of recording; etc.)
- No proprietary hardware in a Court Smart system
 - o Use standard top quality name brand, microphones, cameras, audio/video mixers

- Court Smart software for managing the system will run on all Windows-based computer systems with ODBC compliant databases (ICIS uses Oracle for its database; it is ODBC compliant)
- Blue light on judge's bench – when ON: indicates system is recording; will flash when a microphone is turned off or the system is not recording
- Software for entering & managing log notes/annotations
 - Each annotation automatically time-stamped
 - Searchable by text, time, etc.
- Costs (per courtroom)
 - Basic digital audio system: \$18,000 to \$20,000; includes:
 - Installation by Court Smart technicians
 - 1 year warranty
 - 5 microphones, cables, wiring
 - audio mixer; sound card
 - software for management and annotations
 - Additional features cost more
 - Video (\$500 per camera plus wiring & installation)
 - Evidence presentation (\$5000)
 - Video conferencing
 - Public address (PA) system
 - Annual maintenance/service fee from Court Smart = 12% of hardware and software purchased from CS (per year); if \$20,000 per courtroom – this would equal \$2400 per year.
 - Replace servers every 3 to 4 years (mission critical equipment)
- Need for court staff to monitor equipment in courtroom?
 - Practices vary; not necessary where there system is monitored from a central location
- Any proof of the accuracy of digital recordings?
 - No definitive study
 - Depends on: high quality equipment and installation; effective management of the court proceedings; and expertise of transcriptionists
- Recording in judges' chambers?
 - Use wireless microphones or mics installed in chambers
- Recording of telephonic testimony?
 - Conference phone can be integrated into audio system
 - Treat phone as a separate channel – like a microphone

Lunch break at 12:40 PM

Committee re-convened at 1:10 PM

4. Presentation by Jefferson Audio Visual Systems (JAVS), Inc.

- Presentation by two professional staff from JAVS' home office in KY
- JAVS installed its first A/V system in a courtroom in 1985
- 1998 – introduced its first digital video recording system
- Have installed systems in 3000 courtrooms in 33 states, Canada, Australia, and Malaysia; from Las Vegas, NV (40 courtrooms) to Rabbit Patch, KY (1 courtroom)
- KY courts use JAVS statewide; many courts in Michigan also use JAVS
- Massachusetts' courts are currently implementing JAVS statewide
- They have 3 levels of turnkey systems – for small, medium, and large venues
 - Basic system: digital audio only
- JAVS believes that audio is not sufficient for creating a clear, accurate record
 - Video allows you to know who is speaking, plus see expressions of witnesses
- Kentucky court system uses JAVS – one central monitor for 3-4 courtrooms
 - The video recording (on DVD) can be used as the record on appeal
 - Log notes link to the time stamp on the video
 - On appeal - attorneys note the time segment(s) at issue on the video
- Components of a JAVS video system – which would be installed by JAVS technicians:
 - Digital recorder (JAVS manufactures its own 4-track audio mixer)
 - Case scheduler
 - Auto Log
 - JAVS scheduler
 - JAVS viewer
 - JAVS finder
 - JAVS server (optional)
 - A PA system is part of the standard JAVS installation
- All recordings are in a nonproprietary format (WMV), viewable on any Windows Media Player (on computer) or standard DVD player
 - Standard 4-track recording; plays in 5.1 surround sound (which makes 4-track better)
 - With video -- you can see who is speaking, so 8 tracks are not necessary
 - High quality, very sensitive microphones and audio mixer
 - JAVS presenter walked to the back of the courtroom while speaking in a normal voice (volume), then replayed the recording; his voice and words could be heard on the recording
- JAVS' Level 1 (Precision) System - basic audio only: \$13,000 to \$14,000 installed
 - JAVS' audio/video mixer (with optional video input)
 - 2 recorders: automatic backup; fail safe strategy
 - 8 microphones – recording onto 4 tracks
 - Software for managing recordings
 - Audio only: the computer screen includes a blue rectangle (where video would be shown with a video recording system)
 - Inside the blue rectangle: identifies the 4 tracks as:
 - Judge

- Attorney-Left
 - Attorney-Right
 - Witness
- 2 zoned PA outputs
- Installed by JAVS' technicians: hide all wiring, set up & test equipment
- JAVS' Level 2 (Precision Plus) System: audio & video:
 - All features of basic system plus:
 - 2 video inputs
 - 2 zoned A/V outputs for A/V conferencing
- JAVS' Level 3 System: Advanced options for multi-camera courtrooms
 - Cost depends on options; up to 12 video & 20 audio inputs
 - Some KY courtrooms with "all the bells & whistles": \$40,000 - \$50,000
 - Multiple cameras in courtroom – plus in chambers
 - Evidence presentation system
 - Central monitoring
 - All the software options
- Evidence of the accuracy of the recordings?
 - No study on this issue
 - Talk to judges and attorneys who have used the system for years; the quality of the record from JAVS' systems is what sells the systems
- JAVS is limited to 4 channels/tracks; wouldn't 8 tracks be better?
 - You can see who is speaking on video; don't need 8 tracks as you might in an audio-only system
 - Many basic audio-only systems use only 4 tracks and that seems to be OK for most courts
- How does JAVS deal with old courtrooms that have bad acoustics?
 - You need a highly skilled and experienced installer
 - JAVS uses its own technicians for installation and service
- Can JAVS provide central monitoring and management of the system?
 - Central management is built into JAVS' systems; it's easy with JAVS
 - Las Vegas: 40 courtrooms in 1 building; centrally managed
- Annual service fees?
 - 10 – 12% of the initial sale price
 - 24/7 tech help line; can do remote diagnosis
 - Express mail parts or get technician to site next day, if necessary
 - So many Michigan courts use JAVS, the company has 5 technicians who reside in MI
- Security and backup of recordings?
 - Each courtroom has its own recorder/hard drive plus backup to network
 - If one recorder malfunctions, it doesn't affect others in the courthouse
- Ability to integrate JAVS recordings with the case management system?

- They are working on this; should be ready by January 2010

5. Presentation by High Criteria, Inc. (Liberty Court Recorder)

- Presentation by one of the owners of High Criteria; three partners have been friends since childhood
- Company began in 1998 with its product: “Total Recorder” – a software program for recording audio on a PC
 - Sold more than 200,000 copies of Total Recorder
- Launched “Liberty Court Recorder” software in 2004
- Have sold more than 3500 in the U.S. & Ontario
 - 1,200 NY State Courts, as selected by the NY State Office of Court Admin.
 - 150 in MN
 - 400 in NC
 - 50 in AR
 - More than 100 in each of these states: AZ, CA, OH, MI, NJ, and TN
- High Criteria distributes its software through local & regional A/V vendors
 - They believe it’s best to have local installers and service providers
 - Their vendors use high quality, standard, nonproprietary equipment
- Advantages of Liberty Court Recorder (software)
 - Very user-friendly interface; can train a court clerk how to use the basic features and effectively record and annotate the proceedings in 5 to 10 minutes
 - Certified by Microsoft to be compatible with Windows XP, Vista, and version 7 (when released)
 - Minimal computer system requirements
 - Easy on-screen monitoring of each channel
 - Simple file and folder structure for storage of recordings
 - Includes very sophisticated noise reduction and “gain control” for obtaining clear audio recording – which is more important than having 4 or 5 cameras in a courtroom
 - Automatically (in real time) records to hard drive and a network drive (or CD)
 - Can easily archive to a network drive or to CDs
 - Can record from 1 to 12 discreet channels – and isolate channels during playback using their free Liberty Court Player
 - Log Notes/Bookmarks utility is very easy to use, but also has advanced features
 - Automatically time-stamps log entries
 - Many log entries using pre-set abbreviations
 - Search log entries, which are linked to the time-stamp on the audio recording for easy search and playback
 - Can export all or part of a recording to a PDF file, which can be emailed
 - The PDF file opens like a document with all the bookmarks (annotations) next to time-stamps that are hyperlinks

- Click on a time-stamp/hyperlink and it plays the recording starting at that point
 - Can play back a segment of the proceeding while the system simultaneously continues to record
 - Can incorporate and manage video recordings with Liberty Recorder
 - Integrated file saves audio, text notes, and video into a single standard file
 - Can import the list of cases on the docket into Liberty Recorder; click on the next case – and automatically enter the case name (or other info) into the annotations – with a time stamp indicating when that case began
 - Easily installed and used on a laptop for portable recording systems
 - Add a small audio mixer and microphones
- Estimated costs (from HC’s response to the RFI); resellers’ prices might vary:
 - \$3,395 - Liberty Court Recording Software
 - \$850 - Standard Recording PC with Monitor, mouse and keyboard
 - \$1,299 - Multi-channel sound card and pre-amp
 - \$1,650 - Microphones (package of 4)
 - \$495 - Video capture card
 - \$770 – 1 video Camera, power supply, mount, lens and cable
 - \$8495** – Total cost for basic software and equipment package (excluding installation)

\$600 – to expand recording from 4 channels to 8 (max. 12)

\$400 – digital courtroom clock

Additional costs to provide utilities for integrating court docket into Liberty Recording program and for various enhancements to the management of video recordings.
- Confidence monitoring: by viewing channel indicators on PC screen and by listening to recording in real time on head phones
- Any proof of the accuracy of the recordings from your system?
 - No studies on this issue
 - Need high quality microphones, mixer, sound cards
 - Need 4 to 8 microphones; uni-directional (not omni-directional)
 - Need experienced installer to place the microphones effectively
- Can your system be integrated with a central monitoring & management system?
 - He doesn’t recommend this strategy; try to keep it simple
 - This requires at least one camera in each courtroom being monitored
 - Adds another level of complexity
- The recording system produces 30 megabytes of audio files per hour (audio only)

Break at 4:30 PM

6. Discussion of preliminary recommendations from the DART Evaluation Subcommittee

- a. Committee members received a draft of meeting notes from a conference call conducted by the Evaluation Subcommittee, which was charged by the committee

with making recommendations on how to best evaluate the reliability, accuracy, and costs of DART systems used in courts

- b. Darin Raymond summarized the subcommittee's discussion and preliminary recommendations:
- (1) Costs: We received estimated costs from the vendors who responded to the RFI in June. We can also obtain cost information from courts that have been using DART systems for several years.
 - (2) Reliability of the technology and accuracy of the records it produces
 - (a) The subcommittee concluded that the most valid sources of information on these key issues would come from site visits to courts that have used DART for several years – and from sending surveys to court managers, judges, and attorneys in additional jurisdictions that have used DART for several years, but are too far away for conducting site visits.
 - (b) The subcommittee recommends inviting vendors to install their DART systems in some Iowa courtrooms for a 6 to 8 week test period. However, an evaluation of recordings obtained during a short test of DART in a few courtrooms should be given less weight by the committee than the assessments obtained from other jurisdictions that have used DART for several years.
 - (c) The subcommittee ran out of time during its discussion of how to evaluate recordings obtained from test courtrooms in Iowa – and tabled that issue for further discussion at a later date.
 - (d) However, the subcommittee did agree to recommend that the evaluation of digital recordings in the test courtrooms could be done by assessing the clarity and completeness of the recordings (e.g., by determining the number of inaudible utterances per one-hour recording) -- without having to compare transcripts from a digital recording with the written transcripts from the court reporters for those proceedings.
 - o One committee member suggested that court reporters might welcome the comparison between their transcripts and those obtained from digital recordings – and we should give them that opportunity.
- c. Committee members want to be certain that there is some kind of assessment of the accuracy and completeness of the digital recordings obtained during the test period in some Iowa courtrooms.
1. Members want to evaluate at least some recordings from different settings (e.g., juvenile court, high volume criminal court, serious criminal trials)
 2. The Evaluation Subcommittee should develop a proposal for conducting such an evaluation.
 3. It is important to understand, however, that there are many potential factors that can affect the outcome of such an evaluation – and a small sample of recordings cannot provide statistically significant results. This is why the subcommittee recommends that the findings from other jurisdictions where

DART has been used for many years be given more weight than the evaluation of a small sample of recordings made during a short test period in Iowa.

4. Chief Judge Smith indicated that he would contact all the other chief judges and ask them to nominate at least two courtrooms in their respective districts where vendors might install their DART systems. At its meeting on July 31, the full committee will decide which courtrooms will become the test sites.

7. Discussion of the presentations by the four vendors today

- a. General agreement that the presentations were interesting and well-done
- b. They varied from a “keep it simple” approach to very high-end, centrally managed digital systems
- c. At some point, some direction will have to be provided on whether we are expecting a simple \$10,000 car or a high-end \$40,000 car
- d. The Iowa courts already have an excellent centralized case information system and will soon begin implementing a centralized electronic filing and document management system. Consequently, if the committee concludes that DART is reliable and produces an accurate record -- the state courts will probably want to centrally manage at least the back-up and archiving of digital recordings.
- e. One member reiterated the point made by one of the vendors that the accuracy of digital recordings depends on the quality of the equipment and installation. It will also be affected by how well judges insist that attorneys and parties follow protocols for creating a digital record of proceedings.

8. Next meeting: Friday, July 31 at 9:30 AM at the Judicial Building in Des Moines

9. Meeting adjourned at 5:25 PM

Notes from the 3rd DART Committee Meeting
July 31, 2009; Des Moines

All committee members in attendance except: Judge Kurt Wilke, Judge Bill Pattinson, and Gerald Olson. (See the list of committee members on the judicial branch website at the link shown in item 2, below.) State court administration staff attending: John Goerd, Scott Ruhnke, and Steve Davis. Other non-members attending some or all of the meeting: several court reporters and persons conducting presentations for the committee (see below).

1. Welcome and approval of the notes from the meeting on June 26

- a. The meeting began at 9:30 AM. The committee's co-chairs, Chief Judge Charles Smith and Beth Baldwin, welcomed the committee and reviewed the agenda.
- b. A motion was made and seconded to approve the meeting notes from June 26; motion passed unanimously.

2. Presentation by the Iowa Court Reporters Association

- a. Presentation by Sheryl Culver, President; and Karen Teig, Immediate Past President
- b. The general theme of the presentation was that the ICRA opposes the use of DART rather than certified court reporters.
- c. Following their presentation, the two presenters answered questions from Committee members. For example:
 - i. How does a court repeat or replay a witness statement or an attorney's question if DART is being used? Answer: It's difficult and disruptive in some places; they have to stop the proceedings and find the place on the recording.
 - ii. The Iowa courts will soon begin implementing electronic filing and document management (EDMS). How will this impact the work of court reporters and the need for support staff in the courtroom? Answer: It's difficult to know at this time. It will evolve as it becomes part of the process.
 - iii. How is the accuracy of a court reporter's transcript evaluated? Answer: Attorneys or the judge in the proceeding can challenge the accuracy of transcripts.
 - iv. What are the qualifications or required credentials for people who produce transcripts from digital recordings of court proceedings? Answer: It varies. In some places there aren't any specific qualifications.
 - v. Comment by a presenter: DART records sound, while court reporters record voices; background noise can sometimes be so great that voices can be obscured on a digital recording, whereas a court reporter would ask the speaker(s) to repeat what they said so they can capture the statement clearly.
 - vi. How can a DART system accurately record voir dire of jurors? Answer: This is one of the big problems with DART. They need wireless microphones.

- d. (The text of their presentation and a handout on certification requirements for court reporters are on the Iowa judicial branch page created for this committee at: http://www.iowacourts.gov/Advisory_Committees/Digital_Audio_Recording_Technology/Information/ Listed under: “Materials from the 3rd Committee Meeting (July 31, 2009)”.

3. Presentation by the AIB College of Business (Des Moines)

- a. Presentation by Jane Weingart, Chair of the AIB Board of Trustees (and former certified court reporter) and Nancy Williams, President of AIB
- b. The general theme of the presentation was that AIB provides high quality education and training in the field of court reporting; certified court reporters provide high quality services for the courts; and there continues to be demand for court reporters throughout the U.S.
- c. (The text of the AIB presentation and two handouts [the curriculum for a degree in court reporting and a list of jobs openings for court reporters] are on the Iowa judicial branch page created for this committee; see the link in section 2, above.)

4. Presentation by the Iowa State Bar Association

- a. Presentation by Bob Waterman, an attorney from Davenport
- b. Iowa attorneys want a reliable, accurate, and accessible record. Until the ISBA learns more about the available technology and the experience in jurisdictions that use it, the organization will not be taking a position on the issue.
- c. (Mr. Waterman did not use a prepared text for his comments, so there is nothing on the judicial branch web page from the ISBA.)

5. Presentation by the Iowa Public Defenders Association

- a. Presentation by Stephan Japuntich, President of the IPDA
- b. The general theme of the presentation was that the IPDA opposes the use of DART rather than certified court reporters.
- c. Committee members asked some questions; for example:
 - i. Have you heard of any problems in juvenile courts where judges recently lost their court reporters? Answer: He heard of some problems in District 2.
 - ii. Any ideas regarding who would do a professional evaluation of DART for this committee? Answer: Possibly the National Center for State Courts
 - iii. Do you have any knowledge of military courts, federal courts, or state courts where DART is used exclusively or for most cases – where they have the same kinds of due process concerns as the IPDA? Answer: He has contacts in some of these jurisdictions and will check with them.
 - iv. Are you aware of any criminal cases on appeal where the decision hinged on a single word or phrase in a transcript? Answer: Yes, there was a recent case (*State v. Lofton?*)
- d. (The text of Mr. Japuntich’s presentation and a copy of the letter he sent to Chief Justice Ternus regarding court reporters and DART are on the Iowa judicial branch page created for this committee; see the link in section 2, above.)

6. Presentation by the Iowa Judges Association

- a. Presentation by Hon. Robert Blink, District Court Judge, 5th Judicial District
- b. The general theme of the presentation was that the IJA opposes the use of DART rather than certified court reporters.
- c. After the presentation, committee members asked some questions; for example:
 - i. What are the advantages of real-time reporting? Answer: Allows judges to focus on listening to what's being said in court without having to take notes; can quickly refer back to the written text if someone questions what was said or asked in court.
 - ii. Apparently, a few judges have anonymously said that DART could be an effective tool for keeping the record. Response: A vast majority of judges in Iowa oppose using DART instead of court reporters. There might be some routine matters that are rarely appealed where it could be used, but it should not be used for most District Court matters.
 - iii. If judges did not have court reporters, how many support staff would they need? Answer: Most judges, especially in rural counties, have no other support staff. Court reporters perform a whole array of support functions.
- d. (The text of his presentation and two handouts (a list of court reporter duties provided by Judge David Christensen; and a letter from Professor Robert Rigg, Drake University Law School) are on the Iowa judicial branch page created for this committee; see the link in section 2, above.)

7. Presentation by Jeff Farrell, Assistant Chief Administrative Law Judge, Iowa Department of Inspections and Appeals

- a. He does not have a position on whether the Iowa courts should use DART. However, the ALJs in Iowa have been using a handheld single-track digital recorder to record their hearings for the past 3 to 5 years. They used tape recorders for many years before that. The digital recorders are a huge improvement.
- b. They have 18 ALJs who handled more than 6,000 hearings involving disputes from OSHA, Dept. of Human Services, Dept. of Public Health, and Dept. of Natural Resources. Most hearings are one hour or less; some are a few days. They can record 21 hours of audio on one chip. They download the audio file to their computer at the end of the day.
- c. The quality of the recordings is very good; he listens to parts of recorded proceedings about 2 to 3 times each week.
- d. He lost a couple minutes of a hearing once because he forgot to turn on the recorder. He asked everyone to start over.
- e. He's had his digital recorder for 3 years and has never had a technical problem with it.
- f. (Mr. Farrell did not have a prepared text for his remarks, so there are no materials from his presentation on the judicial branch web page created for this committee.)

Lunch break at 12:15 p.m.; the meeting resumed at 1:15

8. Discussion of the plan for site visits to jurisdictions that use DART

- a. The committee reviewed and approved the plan to have teams of committee members visit 6 jurisdictions: (1) Federal District Courts in Omaha & Lincoln, NE; state courts in: (2) Salt Lake City, UT; (3) Rochester, MN; (4) Minneapolis, MN; (5) Wheaton, IL; and (6) Willmar, MN.
- b. (The “Schedule for site visits to 6 courts with DART” is on the judicial branch web page created for this committee; see section 2, above)

9. Discussion of the proposed surveys to obtain information from judges, attorneys, and court staff at site visit locations

- a. Committee members had reviewed the survey forms and suggested some additional questions. The revisions will be made and the surveys will be sent to the courts prior to the site visits.

10. Discussion of DART tests in 4 or 5 locations in Iowa

- a. The committee agreed unanimously to invite all four of the companies that did presentations for the committee on June 26 to install their DART systems in one court in Iowa.
- b. The companies to be invited include: (1) FTR (For the Record); (2) CourtSmart Digital Systems; (3) JAVS (Jefferson Audio/Video Systems); and (4) High Criteria.
- c. The committee also approved the recommendation of the DART Evaluation Subcommittee to have these companies install PC-based systems in 4 to 5 courts that meet the following criteria:
 - i. 1 courtroom that handles mostly felony cases
 - ii. 1 DAJ courtroom with a high volume of criminal cases
 - iii. 1 courtroom that handles mostly juvenile cases
 - iv. 1 courtroom that handles a lot of civil and domestic cases

The committee also requests that one company provide a portable recording system for:

- v. A juvenile judge who travels to multiple counties
- d. Chief Judge Smith will ask each of the other chief judges to nominate 2 or 3 courtrooms from their districts that meet these criteria; he will have a list of nominated courtrooms ready within a week.
- e. The committee authorized the Evaluation Subcommittee to review the nominations and decide which of the nominated courtrooms to include in the DART test and which vendor should be invited to install a system in each of those locations.
- f. The goal should be to have the installations completed and the courtrooms ready to begin testing the DART systems by the second week of September.

11. Discussion of the recommendations of the Evaluation Subcommittee regarding strategies for evaluating the reliability, accuracy, and costs of DART

- a. The committee had received and reviewed the subcommittee’s 10 recommendations prior to the meeting.

- b. After some discussion, the committee unanimously approved recommendations 1 through 9.
- c. Recommendation 10 provided four options for evaluating the accuracy of digital recordings produced during the test period of DART systems in 4 or 5 courts.
- d. After some discussion of the options, the committee unanimously approved employing recommended strategies 2 and 4:
 - i. Strategy 2: Have committee members review digital recordings of some court proceedings from jurisdictions that have been using DART for several years.
 - ii. Strategy 4: The co-chairs will select on hearing (20 to 30 minutes in length) from each of the 4 – 5 test courtrooms and have the court reporter produce a written transcript for the hearing; the digital recording will be sent to an independent contractor/transcriptionist to have a transcript produced from the digital recording. Each committee member will listen to the digital recording from one (or more) of these hearings and evaluate the transcripts from that hearing compared to the digital recording.
- e. (The “Recommendations of the DART Evaluation Subcommittee” are available on the judicial branch web page created for this committee; see the link in section 2, above.)

12. Discussion of revisions to the committee meeting schedule

- a. After some discussion of the tasks and timeline that had been drafted after the first committee meeting, the committee agreed to amend the meeting schedule.
- b. (The “Revised Tasks and Schedule for the DART Committee” is on the judicial branch web page created for this committee; see the link in section 2, above.)

13. Discussion of process for producing a final report

- a. One committee member inquired whether there would be a single final report with recommendations agreed to by a majority of the members, or would there be an opportunity for those who do not agree with the majority to offer a minority report.
- b. One of the co-chairs indicated that a minority report would be acceptable, but reiterated that the committee should remain focused on the charge from the Judicial Council: to evaluate the accuracy, reliability, and costs of DART.

14. Next committee meeting: October 9 in Des Moines

Adjourned at 2:30 p.m.

Notes from the 4th DART Committee Meeting
October 9, 2009; Des Moines

All committee members in attendance except: Guy Cook and Gerald Olson. State court administration staff attending: John Goerdts and Scott Ruhnke. Other non-members attending some or all of the meeting: District Judge Robert Blink, court reporters: Sheryl Culver, Karen Teig, and Di Schleisman, and attorney Bill Wimmer.

1. Welcome and approval of the notes from the meeting on June 26

- a. The meeting began at 9:30 AM. The committee's co-chairs, Chief Judge Charles Smith and Beth Baldwin, welcomed the committee and reviewed the agenda.
- b. A motion was made and seconded to approve the meeting notes from the committee meeting July 31; motion passed unanimously.

Reports on Site Visits

NOTE: *The written reports from each site visit team are available on the judicial branch website at: www.iowacourts.gov [click on "DART Study" – then click on "Information" – then scroll down to "Materials from the 4th Committee Meeting (10-09-09)"].*

2. Report on the Federal Courts in Omaha and Lincoln, NE

- a. A group of five visited both courts in one day (Committee members: Judge Smith, John French, and Darin Raymond; plus John Goerdts, Kent Wirth (4th District Court Administrator), and Terri O'Grady (Judge Smith's court reporter)).
- b. Both courthouses are relatively new (1970s construction). Two tech staff serves these two courthouses. They spent \$50,000 on just the PA system in one courtroom in Lincoln.
- c. The courtrooms were very quiet; just one case at a time with two attorneys, the defendant, the judge, and the judge's courtroom clerk, who manages the DART equipment and keeps the log notes; Iowa district courts are rarely so quiet, especially on court service days.
- d. All the magistrate judges, plus Judge Richard Kopf in Lincoln (an Article III judge), use digital recording only to capture the verbatim record; they started using started using Sony analog tape recorders in the early 1990s and moved to a digital recording system (**VIQ**) five years ago. All other Article III judges use court reporters.
- e. The team met with Magistrate Judge F.A. Gossett in Omaha and Judge Kopf in Lincoln. Both use DART exclusively and are strong supporters of the technology.
- f. Judge Kopf reported only one incident in the past five years (since they started using a digital recording system) in which they lost the audio recording due to a technical problem; fortunately there was no appeal from that proceeding.
- g. In Lincoln, the team also met with a U.S. Attorney, a federal public defender, and a private defense attorney. All three were strong supporters of DART. They have never encountered a problem with the digital recordings, and they are not

aware of any problems with transcripts produced from digital recordings for appeals.

- h. Attorneys especially like the quick access to the recording of a proceeding. Recordings from the morning are uploaded to the federal courts' PACER system by 12:30 PM; the afternoon proceedings are uploaded by 5:30 PM. They can be accessed by anyone and listened to using Windows Media Player.
- i. The team also met with a couple court reporters. They reported that the Article III judges like the benefits of real-time reporting, which the DART system cannot provide. The court reporters said it takes 3 to 4 times longer to produce a transcript from a digital recording compared to producing a transcript from their own reporter notes. They also indicated that there are no specific standards or qualifications for people who do transcriptions from the digital recordings. (Judge Kopf said they use a list of experienced transcriptionists.)
- j. Discussion: One member of the site visit team said he does not like having microphones on the attorney desks; they are intrusive. He also believes attorneys often rustle through papers on the desk and that noise would obscure voices on other microphones. (Another team member noted that the transcriptionist could mute the microphones from everyone but the person speaking – which would reduce or eliminate the paper rustling noise.)

3. Report on the state district court in Rochester (Olmsted Co.), MN

- a. In Minnesota, each judicial district decides which DART system to use. Rochester uses **FTR**; Minneapolis uses CourtSmart; Willmar uses High Criteria.
- b. Rochester (and some other districts) used analog tape systems prior to purchasing digital recording systems a few years ago.
- c. They moved to electronic recording in most or all courtrooms because they were having a hard time finding sufficient applicants when court reporter positions opened up. They did not replace court reporters (CRs); the CRs operate the equipment in most courtrooms, but some are operated by "electronic reporters (ERs)," who are paid the same as certified court reporters. There is a separate certification for ERs. The district maintains one CR or ER per judge, as provided by state statute.
- d. CRs and ERs report much less trouble with carpal tunnel since ERs and sometimes the CRs rely on the digital recordings to produce transcripts.
- e. Everyone interviewed during the visit (judges, attorneys, CRs, ERs, and staff) was very satisfied with the digital recording system. They have never lost the recording of even a part of a hearing due to human or technical failure. They emphasized the importance of having experienced and knowledgeable CRs/ERs operating the equipment in each courtroom.
- f. If someone requests a copy of the digital recording of a court hearing, it will be provided on a CD within 3 days at a cost of \$10.00.
- g. It takes only a few seconds for the court reporter to playback a recorded statement, when requested. (It took a little longer to do this in Minneapolis.)

4. Report on the state district court in Minneapolis (Hennepin Co.), MN

- a. This court uses a CourtSmart DART system that features a camera in each courtroom, which allows multiple court reporters in a central control room in the courthouse to simultaneously monitor and keep log notes for up to four courtrooms each. The video is not recorded. The system creates only audio recordings of court proceedings.
- b. One team member was surprised that the people doing the monitoring in the central control room were not frantically busy; it was mostly relaxed. Seldom have something going on in all 4 courtrooms at the same time. They typically entered less detailed log notes than in Rochester.
- c. They try to maintain one CR or ER per judge, consistent with state statute, but there are always a few vacant positions.
- d. They use DART for all cases, though judges often use steno CRs for serious criminal or civil cases because they like real-time reporting. For short hearings, they use the central monitors only.
- e. They have 2 microphones installed on the rail in front of the jury box (1 on each end) and use DART to record jury selection. These 2 mics pick up the voices. Fixed microphones are less obtrusive than handing a portable mic to each juror.
- f. Like Rochester, the court in Minneapolis has never lost the recording of even a part of a hearing due to human or technical failure. They also attribute their success not just to the quality of the DART system, but to the role played by court reporters in running and monitoring the system.
- g. Long-term storage of recordings on DVDs; 1 drawer – about 3 feet wide X 3 feet deep – contains all the recordings from Hennepin Co. for the past 3 years.
- h. Transcripts are produced by the CR or ER employed by the court – usually on their own time; they get per page as in IA.
- i. One of the managers in Hennepin Co. did an extensive study of electronic recording in their courts. She reviewed 520 transcripts from electronic recordings. Most problems with those transcripts came from a single transcriptionist/reporter
- j. One team member noted that in Minneapolis the microphones are so sensitive and the recordings are so complete that attorneys have to be careful what they say; there is a toggle button on the microphones that allow the mics to be muted while the button is held down.
- k. Court reporters claimed they have fewer health problems (e.g., hands, carpal tunnel) than before DART was installed; overall the court reporters were very happy with the system.
- l. The team talked with a state appellate court judge; the judge found no difference between transcripts from digital recordings or from steno reporters – and no difference between districts with different DART systems. They were all very good.

5. Report on the state district court in Willmar (Kandiyohi Co.), MN

- a. Kandiyohi Co. is one of 13 rural counties in MN's 8th judicial district, which is in the western part of the state; the district is very similar to Iowa's rural areas
- b. All courts in the district use High Criteria's Liberty Court Recorder system (audio only), which they chose because it is user-friendly, costs less than FTR or CourtSmart, and produces high quality recordings.
- c. The team talked with judges, attorneys, and staff; everyone is very satisfied with the DART system, the quality of the recordings, and the transcripts produced from the recordings. Judges in Willmar believe the transcripts from digital recordings are more accurate than transcripts solely from steno notes because the recordings are very clear and the transcriptionist can listen to sections multiple times.
- d. A court reporter -- either a certified steno reporter or certified electronic reporter -- monitors the equipment and keeps log notes during proceedings. Judges and staff believe that having a trained staff person responsible for ensuring a clear and complete recording is a key to the effective use of DART in courtrooms. The court reporter is the one who tells attorneys to speak louder or stand near a microphone.
- e. Certification requirements for an electronic reporter are much less rigorous than for certified steno reporters.
- f. Each judge has a steno or electronic CR in the courtroom -- plus a clerk who helps prepare orders and prints them out in the courtroom.
- g. Most judges leave it up to the reporter to decide whether she or he wants to keep a steno record (if there's a steno reporter). Court reporters will often do this when there is a substantial likelihood that there will be an appeal --because it takes less time to produce a transcript from a steno record than from a digital recording.
- h. Judges typically don't allow playback for recorded statements; they usually ask the person to repeat what they said. However, a reporter can do a playback that if requested.
- i. Attorneys are also very satisfied with the DART system. No problems with inaudible; no problems with transcripts.
- j. The DART systems are separate from the PA systems in each courtroom in the judicial district.

6. Report on the state circuit court in Wheaton (DuPage Co.), IL

- a. This is a courthouse in a relatively affluent western suburb of Chicago; it is a very nice facility with 40 courtrooms -- for about 46 judges.
- b. They installed DART equipment (CourtSmart) 10 years ago because they were having trouble recruiting enough certified court reporters.
- c. Like Minneapolis, they have a central monitoring room where several court reporters monitor 3 or 4 courtrooms at a time.
- d. Judges have 3 support staff in the courtroom (whereas Iowa's judges usually have just a court reporter).

- e. Steno reporters always report felonies and juvenile cases.
- f. The equipment in Wheaton is 10 years old. They have never budgeted for replacing the equipment. They pay \$90,000/year for a maintenance agreement.
- g. One team member observed that Minneapolis also uses a CourtSmart system with central monitoring; the Minneapolis system is newer and much better managed than the one in Wheaton.
- h. A court reporter told the team it takes three hours to produce a transcript from one hour of recording, which is much longer than it takes from steno notes.
- i. One of Iowa's court reporters contacted a court reporter in Wheaton who thinks the quality of the recordings in Wheaton is terrible. Also, the central monitors enter few log notes, so it's difficult to know who was speaking when trying to produce a transcript.
- j. The 2 judges and 2 attorneys who were selected to meet with the team said they thought the DART system was fine.
- k. One team member said they learned that the manager at the court in Wheaton who organized the site visit – including selection of the judges, staff, and attorneys who were available to meet with the Iowa team – did not allow the team to speak with court reporters that had negative views about the DART system. Consequently, some team members believe they were not allowed to obtain a complete or accurate review of the DART system in Wheaton.
- l. A team member expressed concern that court managers in other site visit locations also might have skewed the selection of the people our teams were allowed to meet so we would hear only positive reviews about DART. Other site visit team members who visited Salt Lake City, Rochester, and Minneapolis expressed the view that they were given the opportunity to meet with a wide range of judges, attorneys, and staff and felt their team obtained an objective picture of the DART systems in those cities.

7. Report on the state circuit court in Salt Lake City, UT

- a. Utah is similar to Iowa in geographic and population size. One very large urban center (SLC) and many very rural, sparsely populated counties.
- b. All the courtrooms have FTR systems; most are audio only; some have video.
- c. They began implementing electronic recording systems in courtrooms almost 20 years ago due to a shortage of certified court reporters; they started installing digital recording systems about 5 years ago. During the last recession, they laid-off of many court reporters but continued to use CRs in serious criminal and complex civil cases. Last year, they laid-off the last group of CRs. They now rely solely on DART, though attorneys may bring their own CR to report a trial. They will also report capital murder trials.
- d. The site visit was very well organized. They had the opportunity to speak with several attorneys, court managers, the state court administrator, judges -- including appellate court judges – who are in the same building as the trial courts in SLC.
- e. Each judge has 2 to 3 support staff.

- f. They observed a civil trial; the DART system appeared to be unobtrusive. A judicial assistant monitors the recording equipment in each courtroom, keeps minutes of testimony (doesn't use FTR log notes utility), and ensures that attorneys stay near a microphone and speak loudly enough.
- g. They started implementing FTR systems with video recording, but they encountered some problems with the video system -- so they now record only audio; the judges liked the video and hope to eventually return to video recording throughout the state. The audio recording system works well, however.
- h. FTR video system: included 4 cameras in each courtroom; each one sends video to one of 4 panels on the courtroom monitor screen (so the video doesn't jump around depending on who is speaking). This 4-camera system adds about \$4500 to the cost of DART per courtroom.
- i. Cost of their current FTR software and equipment: \$18,000 per courtroom.
- j. Staff said performing a playback is easy, but it's seldom required.
- k. Voir dire of juries: they have microphones installed on the jury box railing. This seems to work well.
- l. Attorneys seem to like the system
- m. Ordering a recording: Court staff will burn a CD with the recording of a hearing upon request, for pick-up at the end of the day. Cost = \$10 per CD.
- n. Ordering transcripts: They recently implemented a centralized online ordering system for transcripts. It's operated by the Clerk of the Appellate Courts. Fees go to the courts to support court technology. Order online and the audio recording is delivered to the transcriptionist via email. They have reduced time from request to the delivery of a transcript from 137 days to 11 days!
- o. One of the SLC judges reported on a survey that there were "persistent problems with inaudible" on the recordings. The team talked with that judge, who seemed more positive about the DART system than was expressed in the survey. Sometimes they get a transcript that reports an inaudible, but if you go back and listen to the recording you can hear what was said.
- p. Attorneys prefer to have court reporters produce the transcripts.
- q. Judges in SLC were amazed at how much work IA judges have to do (and how few support staff we have); UT judges never have to type their own orders, decrees
- r. The UT state court administrator explained that they are engaging in an effort to re-think the way they organize their clerk office and judicial support staff; forming teams that handle cases from start to finish
- s. The UT Judicial Council is also interesting; it includes Supreme Court chief justice, 1 district judge elected from each judicial district, 2 juvenile judges, and a lawyer who serve 1 6-year term. They make policy and court rules; not just advisory.
- t. Question: A UT judge says litigants are entitled to a record, but not a perfect record. Are we settling for less if we move to DART, rather than actual court reports?
Response: Court reporters aren't perfect either.

- u. Comment: UT moved to DART because they had to; IA doesn't have to. UT also took 20 years to phase in DART and phase out CRs – and they still have 3 support staff for each judge.

8. Report on the state courts in Anchorage, Alaska

- a. Chief Judge Smith visited the courts in Anchorage in September (without expense to the Iowa courts) on the day before his niece got married there. He called a couple weeks before his visit to arrange meetings with judges and staff.
- b. Alaska is celebrating its 50th anniversary since statehood. The Alaska courts have never used court reporters; they've always used electronic (tape, more recently digital) recording systems.
- c. They used FTR for a few years, but switched to CourtSmart (audio only) about 3 years ago because CS has a backup system that Alaska's court administrators preferred over FTR's. However, they do not use the central monitoring approach that CS is most noted for. They do conduct centralized backup of recordings, which are stored on central servers for 2 years – then moved off to permanent archive on DVDs.
- d. A courtroom clerk monitors the DART equipment and enters very brief log notes.
- e. Central ordering of transcripts: The state court administrator's office hired 11 transcriptionists; 9 are court reporters; 9 live in the lower 48 states. The transcript manager tests the transcriptionists. She sees no difference between the CRs and the other transcriptionists in the quality of work. If an "inaudible" appears on the transcript, she checks the recording. Sometimes it actually is audible.
- f. Judge Smith spoke with 2 judges from the Alaska Court of Appeals (both from Iowa!). They both practiced law in other states before moving to Alaska, so they have some experience with court reporters. They both prefer a transcript from a DART recording because they can listen to the recording if they have any questions about it.
- g. The judges do not believe video is necessary; audio recordings are fine.
- h. The AK courts bought the CourtSmart software, but installed their own audio equipment (microphones, mixers, etc.) – which saved them money.
- i. Bottom line: the Court of Appeals judges are satisfied with the quality of the transcripts.

9. Report on a site visit to the state court in Phoenix (Maricopa Co.), AZ

- a. Beth Baldwin, DART Committee's co-chair, was in Phoenix at a meeting (not related to the DART Committee). She learned from materials handed out at the first DART meeting that AZ used DART for many types of cases, so she called the court in Phoenix to arrange a short visit while she was there.
- b. The courts in Phoenix started installing electronic recording systems in 1996 (audio only). They use FTR software. A local audio equipment vendor provides support.

- c. Many courtrooms now have video recording systems. Attorneys like video; they've learned to use it to impeach witnesses.
- d. There's a judicial assistant in each courtroom that monitors the DART equipment; they do not use FTR's log notes software; they use their own notes program.
- e. They still have about 50 court reporters who report all serious criminal cases and complex civil.
- f. Since 1996 the AZ state court administrator's office has had a "Keeping the Record Committee" that developed standards and policies for keeping records of court proceedings and to monitor progress and issues as they arise. The group continues to meet periodically. This seems like a good idea that Iowa might emulate.
- g. Comment: AZ also took a decade to get where they are now. They did it with the oversight of a statewide committee. They were deliberate about it. This is a good model for Iowa.

10. General Conclusions/Observations Derived from Site Visit Findings?

- a. One key: Having trained and skilled staff running the equipment and ensuring an accurate audio record.
- b. DART equipment is reliable. It operates without technical problems or failure for long periods, sometimes for years. Everyone in all the sites we visited agree on this.
- c. The challenges involve the management of the system, ensuring proper staffing and courtroom procedures, transcript production, etc.
- d. Costs are also an issue. Costs vary by vendor, the type of recording system (audio-only vs. video), nature of the courtroom (e.g., size, acoustics, need for new wiring and PA system). You won't know the cost for a specific courtroom until you go there. There are also possible implications for "network" upgrades (e.g., servers), regional and/or central tech support staff, and expansion of cabling/bandwidth – especially if we adopt video recording, which creates much larger recording files (i.e., more kilobytes of storage space).
- e. Question: Is this a cost-saving measure? Response: Utah moved to DART as a cost-saving measure. It could save money over the long-term.

Reports from DART Test Locations in Iowa

11. Report on test of DART (VIQ Solutions) in Story County (Judge Bill Pattinson)

- a. Using a system installed by Voice IQ Solutions (VIQ), Inc., from Canada
- b. 8 microphones – each recorded on a separate channel
- c. 1 camera
- d. The courtroom in Nevada is relatively new with very good acoustics.
- e. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: VIQ installed a system toward the end of September. It includes one video camera, which is focused on the

witness. The judge has a very good staff person monitoring the equipment and keeping the log notes. VIQ staff trained her how to operate the system.

- f. *Question: How is the system working?* Response: After some initial technical problems were resolved, the system has worked well.
- g. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: He reads instructions to the parties and attorneys at the start of each hearing to remind people about the DART system, to have everyone speak into a microphone, not to talk at the same time, etc. This seems to help. A district associate judge ran a “rocket docket” in his courtroom and did not read instructions, but you could still hear everyone who spoke during the proceedings.
- h. *Question: Have you had any problems with the DART system?* Response: No problem on the first day when the VIQ staff were there; conducted a divorce trial that went well. There were technical problems the next day; system didn’t work. The help desk at VIQ was not very helpful. It took a while to get the problem fixed. It works well now.
- i. *Question: How is the quality of the DART recordings?* Response: The microphones installed by VIQ in his courtroom pick up everything. We asked for 8 microphones, which is probably too many. The voices bleed over into all the microphones. However, in VIQ’s free recording player you can mute the sound on the various tracks and focus just on the sound from one track. The sound is excellent.
- j. *Question: Other comments or observations?* Response: The judge visited Rochester and Minneapolis with the site visit team and has concluded that the systems in Rochester (FTR) and Minneapolis (CourtSmart) are more user-friendly.

12. Report on DART system in Dickinson County (District Associate Judge David Larson)

- a. Using a system installed by **High Criteria**, Inc., from Canada (their Liberty Court Recorder software system for management of audio/video recordings)
- b. 8 microphones – each recorded on a separate channel
 - i. 2 on each attorney table
 - ii. 1 for the judge
 - iii. 1 for the witness
 - iv. 1 for the jury (jury selection)
 - v. 1 for bench conferences
- c. 1 camera mounted above and behind the judge
- d. Courtroom is relatively new, quiet, and has a very good PA system
- e. There are probably too many microphones; the sound is picked up by all the microphones
- f. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: Excellent. They trained 2 clerks via a 2 to 3 hour webinar, then came to Spirit Lake to personally train and demonstrate the system. Gordon Bennett, from High Criteria, stayed through the

first entire day of court sessions to ensure the system worked correctly and to answer any questions.

- g. *Question: How is the system working?* Response: It's working well. The court attendant enters only very basic log notes. We would need more training and standards on this.
- h. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: The system picks up voices from throughout the courtroom. A parent in a juvenile case was in the back row and her voice could be heard on the recording.
- i. There are no mute buttons on the attorneys' microphones. Attorneys don't like this. We should recommend mute buttons.
- j. The judge cannot enter his own log notes, though this is an option with a permanent installation.
- k. For juvenile cases, they turn off the camera. There's some debate about whether we can record video in juvenile cases.
- l. The courtroom clerk turns the system on when the judge enters the courtroom and turns it off when the judge leaves the courtroom.
- m. *Question: Have you had any problems with the DART system?* Response: No technical problems, though there are probably too many microphones (8).
- n. *Question: How is the quality of the DART recordings?* Response: Yes. Our first recorded session involved an attorney participating via telephone conference call. His voice was heard through the PA system and picked up by the microphones in the courtroom. This was a good test of the system. You should be able to get a good transcript because you have the ability to listen to it multiple times, slow down the speed of the audio when playing it back, and isolate each track.
- o. *Question: Other comments or observations?* Response:
 - i. We should have a mute button on microphones for attorneys and the judge so you can mute it while holding the button down.
 - ii. The wide angle camera helps identify who is speaking.
 - iii. 1 microphone at the jury box is probably enough to pick up juror voices.
 - iv. Easy to use: The judge received no training. He learned how to operate it on his own time. Very user-friendly.

13. Report on DART system in Polk County (District Associate Judge Greg Brandt)

- a. Using a system installed by For the Record (**FTR**), Inc., from Arizona (their FTR Gold Recorder software system for management of audio/video recordings)
- b. 8 microphones – each recorded on a separate channel
- c. 1 camera to help identify speakers
- d. It's a long and narrow courtroom. 25 criminal hearings on a slow day; 75 on a busy day. Often have many people in the courtroom with many conversations going on.

- e. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: They installed 2 microphones on the bench; 1 for sidebars. But we seldom do sidebars, so that 1 is unnecessary
- i. Attorney microphones have mute toggle-buttons, which mute when the button is pressed down
 - ii. The installers worked on the installation to get good recordings in this long and narrow room with bad acoustics. They turned down the recording volume on the microphones for attorneys and turned it up on the judge's microphone.
 - iii. The judge operates the system without the assistance of a court attendant. It's very easy to run. He turns it on and off for each case. He keeps his own log notes. He enters a "bookmark" at the start of each case (case number and title). He keeps "Notes" in a separate on-screen column from the bookmarks.
 - iv. There's a digital time clock on his bench facing the attorneys and parties; it has very large red numbers so everyone can see them. If the time digits are in operation, everyone knows that the DART system is operating. It's a good visible reminder to everyone.
- f. *Question: How is the system working?* Response: It seems to be working well. Before the DART system, he had a court reporter keep the record about 40% of the time. Now he's recording everything with DART and has a CR only when required by the Code.
- g. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: He doesn't give verbal instructions to attorneys. He posted written instructions on the doors outside the courtroom and on the attorney tables. Attorneys are now more likely to talk to their clients out in the hallway, rather than in the courtroom. This has probably reduced the noise level in the courtroom.
- h. *Question: Have you had any problems with the DART system?* Response: None so far. There was a problem with the video cable they installed. FTR sent one by FedEx and it's been fine since then.
- i. *Question: How is the quality of the DART recordings?* Response: The recording quality is good. Slightly less quality than live.
- i. The camera shows the tables for attorneys and parties and the witness stand. The judge is not visible.
 - ii. Microphones on attorneys' tables are on long arms, which get moved around. But parties/attorneys sit at the tables only 25% of the time. Pleas and sentencings are done at the front of the room and recorded by the microphone at the bench.
- j. *Question: Other comments or observations?* Response: The judge likes the system. He sometimes takes the DART recording into his chambers to listen and confirm his written notes on the case. You can see the witness and assess credibility.

14. Report on the portable DART system in District 8 (Associate Juvenile Judge Bill Owens, who participated via conference call)

- a. The judge travels regularly to five counties for juvenile hearings.
- b. The courtrooms vary in size, acoustics, etc.
- c. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: FTR delivered a portable laptop-based system, with a small audio mixer and 4 portable microphones with small stands. This all fits in a small suitcase on wheels. Very light and portable. FTR trained 2 court attendants on how to set it up and operate it. FTR staff stayed during the first 2 hearings. They were very helpful.
- d. *Question: How is the system working?* Response: There are 4 microphones: one for the judge, one for the county/state's attorney, one for child's attorney, and one for witnesses. His court attendant is skilled at setting everything up, monitoring the system, and keeping log notes. Albia's courtroom has the worst acoustics, with a high ceiling. It sounds like a cave. The system seems to be working well. The court attendant enters the case number in the log notes at the start of the hearing and enters the name of each attorney or witness when she or he begins to speak in court.
- e. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: He doesn't give verbal instructions to attorneys. He places the 1-page set of written instructions on the attorney tables. The attorneys don't always identify themselves at the start of a hearing, so the judge will say their names on the record.
- f. *Question: Have you had any problems with the DART system?* Response: They had a technical problem with the software on the first day. The FTR tech staff solved it in 10 minutes. No problems since then.
- g. *Question: How is the quality of the DART recordings?* Response: The microphones appear to be very sensitive. In Albia, a father was whispering to the mother. The judge couldn't hear what they were saying. The attorney sitting next to the mother said he couldn't hear what was said. But the court attendant, who was monitoring the recording system while wearing head phones, said she could hear what was said. (The recording monitor hears what's been recorded, so the recording also picked this up.) The court attendant (who also participated with Judge Owens via conference call) said that when you play back a recording, you can mute all the tracks except the one on which the speaker is recorded, which reduces background noise. You can also slow down the speed of the playback in case someone was speaking too fast.
- h. *Question: Other comments or observations?* Response: The recordings seem clear. He'd like to see a transcript from a contested proceeding.

15. Discussion of the next steps for the committee

- a. Evaluation of recordings from the 5 DART test courtrooms in Iowa

- (1) Next week the co-chairs will contact the judge in the 5 test courts and ask that each judge select one hearing -- 20 to 30 minutes in length -- that has already been conducted in the previous few days.
 - (2) The judge's court attendant/DART equipment monitor should email a copy of the recording for that hearing to John Goerd, who will forward copies of the digital recordings to the committee members.
 - (3) We will ask the court reporter for each of these judges to produce a written transcript of the hearing and send a copy of the transcript (and a bill) to John Goerd.
 - (4) We will contract with an independent transcription company to have written transcripts produced based solely on the digital recordings for the same 5 hearings.
 - (5) Each committee member will be expected to listen to at least one of the recorded hearings and compare the two transcripts (tasks 3. and 4., above) to the recording. We will provide committee members with an evaluation form to assist with this part of the evaluation.
 - (6) Committee members must be prepared to report on their evaluations at the next committee meeting.
- b. Reports from judges and others in the DART test locations
We will ask judges, court reporters, and court attendants who worked in the DART test courtrooms to participate in the next committee meeting to discuss their experiences with the DART systems.
 - c. Identify general findings and conclusions on the main issues before the committee

16. Next meeting: November 18 in Des Moines at 9:30 AM

The agenda will focus on the three tasks in item 15 (above)

Notes from the 5th DART Committee Meeting
November 18, 2009; Des Moines

1. Welcome/overview by co-chairs

- The co-chairs reviewed the agenda
- Motion to approve notes from last meeting (Oct. 9) – approved unanimously

2. Report by Justice Served – for the Iowa Court Reporters Association

- A report, *Examination of How the Stenographic Reporter Enhances the Delivery of Business*, had been distributed to committee members prior to the meeting
- It was written by Chris Crawford (CC), President of Justice Served and consultant to ICRA
- *Mr. Crawford (via conference call) explained the key points set forth in the report:*
 - Digital AV recording is a viable alternative to using steno court reports
 - But a lot more involved than just recordings
 - Need good staff to annotate record;
 - Costs of DART are nearly identical to having a CR
 - Transcription services companies charge more than CR.s because it takes them longer to produce transcripts from recordings
 - ◆ Committee staff noted that the private transcription company that produced transcripts from the five test courtrooms charged the same per page rate as CRs; same as stated in the IA Code/Court Rules
 - Hidden admin costs usually not counted
 - Florida has had a lot of problems; pay attention to their situation; unattended consequences
 - ◆ Need a digital recording monitor; most dissatisfaction due to lack of a DART monitor in the courtroom
 - ◆ Un-annotated digital recordings are a big problem – takes much longer to review to; reduces productivity
 - ◆ DART works, but it requires planning and staffing
 - ◆ FL experience: Inappropriate conversations get recorded; attorney-client privilege conversations
 - Need assurances that private transcriptions companies use domestic transcribers; problems sending recordings to overseas transcribers
 - Work with CRs to ensure the recordings are done right and so you get top quality transcripts
 - Question: For which types of cases should we require CRs?
 - CC: Higher stakes, higher likelihood of appeal – use CRs

- --Lower stakes hearings – most appropriate for digital recordings; but have equip monitored
- Question: Have you heard about experiences in Ohio?
- CC: Ohio is having budget problems. Locally funded; each county determines how to make record, how to staff courtroom
 - ◆ OH Courts of Common Plea – Magistrates have to learn how to turn on DAR equip.
- Comment: It would be very helpful if you could provide the committee a report version that has footnotes where you provide citations to studies that support your assertions
- Question: Is digital better than analog recording in terms of reliability or accuracy?
- CC: You definitely need to use digital. Better. Much higher quality. Easier to manage and store records. Need standards and protocols.
- Question: Are problems in CA and FL related to analog systems?
- CC: Some are; not all. Ongoing replacement; lack of protocols are also a problem.
- Question: When's the last time you sampled the newest technology?
- CC: At Court Tech Conference in Denver in Sept. 2009. They are all good and improving. Approaches are different. Avoid getting into proprietary software and platforms.
- Comment: On page 14 of your report you cite anecdotes from single courts to suggest that electronic recordings are not reliable or the transcripts are not as accurate. Are you aware of the 1983 study by the Federal Judicial Center in 11 Federal District Courts? It's the most methodologically sound study ever done on the comparative accuracy of transcripts. The FJC randomly sampled 2400 pages of transcripts and compared the steno reporters' versions to the transcripts prepared solely from audiotape recordings. It found transcripts from the audiotape recordings to be more accurate, and the findings were statistically significant.

Discussion of DART test courtrooms, recordings, and transcripts

3. Story Co. recording & transcripts

- Report by District Judge Bill Pattinson
- VIQ installed the system; they did a nice job
- Very clear recordings; Kris Magill – a former court reporter helped with the DAR equipment, monitored the equip; entered notes
- A district associate judge also did rocket docket in the courtroom
- Used remote mics in the chambers and for jury selection – worked well
- Interface wasn't as user friendly as some of the others – but it wasn't a permanent installation

- Problem on day 2; didn't work; VIQ help line was difficult to understand; judge emailed Leo Halperin at VIQ and he got on it right away
- Whatever can make my life easier is good; VIQ program allowed him to see the judicial assistant's annotations – and to add his own
- Judge could get his notes from home and annotations through the VIQ server; can search the notes; there's a lot of utility in these programs
- Question: What problem caused you to call the help line?
- Judge: Trying to search the annotations; couldn't get it to work
- Question: When you fixed the playback – did you go right to the question or did you have to play around with it?
- Judge: We went right to the spot in the recording. Kris Magill was very helpful; would be good to ask her at noon.
- Question: Any problem with parties moving around in courtroom and staying near mics?
- Judge: I gave attorneys and parties instructions before each hearing. When they did walk away anyway, the mics still picked it up. Went to the back of the courtroom to speak – as a test -- and mics picked it up.
- Question: How did you work with ICIS?
- Judge: We didn't; it wasn't necessary for this pilot test.
- Comment: ICIS didn't connect the DART in Story Co. to the ICIS network. ICIS staff did provide Dickinson Co. with a quick program to load the list of cases on the calendar each day into the DART management program – at the request of High Criteria.
- Judge: If I was anywhere that I could get access to the VIQ server, I could access the recording.
- Comment: These are all temporary DART setups; we didn't see all the features from any of the vendors.
- Comment: Didn't hear much background noise in the Story Co. recording of the divorce proceedings. The sound was excellent.
- Judge: Mics on counsel tables – mute buttons; had to press to mute, then press again to un-mute; that was a problem a couple times.
- Comment: Story Co was very clear and audible. CR recorded all “uh” and “um” sounds; “gonna” – not “going to”. Digital transcript cleaned this up throughout. There were some minor errors in the transcript from the recording
- Comment: Almost all CRs and digital transcribers cleaned up the “uh” and “um” and “gonna” sounds/language. Is that a policy? Trained to do this?
- Court reporter: Never cleans up a witness. It shows something about the person.
- Court reporter: We were taught to clean it up for attorneys and judges.

- Comment: It seemed to be the same for most transcripts
- Court reporter: If the CRs knew they would be compared to DART, they probably included all the sounds and didn't clean it up.
- Comment: DART transcribers chose not to include those sounds.

Additional Observations about Story County (via conference call)

- Kris Magill (judicial assistant): her observations RE: **Story Co.**
 - CR for 25 years, moved to clerk office (carpel tunnel)
 - VIQ system not very user friendly
 - Tech problems early on; had to shut down during a jury trial
 - Quality of recording is fabulous; amazed at it.
 - Used wireless mic in chambers, motion in limine; she was in courtroom monitoring – she could hear it very well.
 - Attorneys from Chicago; mumbled something; I could hear them clearly on the recording
 - Quirky things; it would pop up with errors; restart – and would work fine
 - Software not so user friendly
 - Recording/sound was excellent
 - Used for jury trial – four stationary mikes; four wireless; jurors passed wireless mike around. Could hear them better on playback than in the courtroom live. Very impressed with how it worked with jury selection
- Question: Did jurors feel inhibited by holding a mike?
 - Answer: Didn't seem like it, but attorneys worried about it.
- Question: Did each juror ID self?
 - Answer: She entered a lot of annotations; she entered names even if they didn't ID self
- Q: Problems with attorneys moving around during trial?
 - Answer: Not usually. Someone in back of courtroom made a comment in regular voice and you could hear it on recording.
- Holly – Observations by Judge Pattinson's court reporter **RE: Story Co.:**
 - She didn't experience any problems. First day was a trial, which went well. Second day there were problems, which took a while
 - Question: Do you think DART affected the way attorneys behaved?
 - Answer: They sat by the mikes, didn't walk around

4. Dickinson Co. recording & transcripts

- *Transcripts discussion*
- One attorney participated via conference call; sounded a bit tinny on the recording

- Judge: The courtroom is newer and good acoustically
- Comment: I thought the recording was clear
- Comment: Substantive error in court reporter's transcript: "insured" vs. "insurer" –had to listen using the slowest speed and headphones ... and listened multiple times.
- Comment: Digital transcriber didn't understand the IA Court Rules; the court reporter did
- Comment: Liked the video from Dickinson Co.
- Comment: Software from Dickinson was also easiest to use.
- Judge's judicial assistant: Annotations are very easy

Dickinson Co. – discussion of recording & transcripts (participants joined via conference call)

- Report by District Associate Judge David Larson (*via conference call*)
Also participating via conference call:
Clerk of Court – Marcia Eckerman
Missy Webber – Clerk office; did confidence monitoring, log notes
- Judge: He had a positive experience with the DART system from High Criteria
- Gordon Bennett from HC was very helpful in setting it up, and he stayed to assist for a day.
- System has 8 mikes and a camera behind judge looking out to courtroom
- Decided didn't need wireless mikes; mikes picked up everything
- Attorneys complained mikes were too sensitive
- Bennett (from High Criteria) thought we over-miked the room
- Use in court room: very unobtrusive; set up in the corner of courtroom
- Didn't give much instruction to attorneys
- With a camera you don't need to know who was speaking; attorneys don't need to ID selves each time they speak
- Audio only: with log notes – you can tell who was speaking.
- Good acoustics, newer courtroom
- Recordings much better than little recorder he currently has for small claims
- Downloaded the recording to send to committee staff; no problem downloading it to CD or flash drive
- HC customer support was very helpful.
- Download their player; need latest version --- HC gave us a link to it, very helpful
- Overall experience with HC was very good – called help desk 5 times
- Equipment is very reliable
- Question: Does your program let you take notes yourself?
- Judge: No. We didn't get that function. We could get it with HC if requested.

- Question: Any tech problems at all?
- Judge: Only tech issue was when another judge was using it. Caught him by surprise. Marcia / Missy helped him. Audio records right away; video takes about 5 minutes to start.
- Judge: He evaluated the Polk County hearing and transcripts; there were more transcript errors by the CR. Logical; CR gets just one shot at it. DART: you can play it back multiple times. Slow down speed. Isolate mikes. Certainly true in the Polk Co. hearing. Almost none of the errors were major. CR left out stuttering type sounds. Digital transcript was more accurate. Overall completeness and clarity of recordings: Excellent
- Question: Two people in courtroom to monitor DART in Dickinson Co.?
- Judge: No, only one at a time. Very brief training. Need more if we do this full-time. Thinks we should have someone with CR skills/knowledge running the system. He likes the Willmar, MN, model with a CR/ER running the system and ensuring a good recording. Cross-training of ER/CR is important. Judges shouldn't have to enter log notes.
- Question: Clerks – any observations?
- Answer: Very simple to learn, to use. Didn't have much training. Mostly how to navigate around the program. Learned what log notes to enter from the judge.
- Question: Did you sit in on hearings?
- Answer: Yes, we made log notes.
- Judge: Do you ever go back and add log notes later?
- Answer: Once or twice.

5. Polk County recording & transcripts

- (Note: Judge Brandt, from Polk Co., had not arrived at this point)
- Comment: This particular CR didn't do as well as the DART transcriber
- Comment: The power of the DART really struck me. This was a daunting task. Listened generally, then listened while reading the DART transcript.; then to the CR transcript; far more errors by CR in this case; a few errors in meaning. The quality of the recording is good. They come out with two different versions.
- Comment: CR can see mouth move to discern words; DART transcriber cannot. But cannot account for errors. Human factor... anticipating what will be said next... results in errors by CR. "Can" vs "can't".
- Comment: The CR for Judge Brandt is relatively new. She used to work for a judge in another district, but she's been a CR for at least 6 years.
- Comment: Also saw an error by the CR in Black Hawk County due to anticipation.

- Comment: Polk Co. recording was the most difficult to understand. CR transcript isn't as good as we usually see. Both cleaned up the lawyers' language. What's said at counsel table.... Shouldn't necessarily be included.
- Comment: Lawyers were hardest to hear in Polk Co. Sitting at table.
- Comment: Using headphones or ear-buds when listening to the recordings helped a lot.
- Comment: Important to analyze where to place microphones. Polk: very difficult acoustically. Probably had too many mikes. Need to examine each courtroom.
- Comment: That's why ability to isolate tracks is key. Also – problem if a recording includes attorney-client conversations.
- Comment: Salt Lake City, Omaha, and Lincoln – attorneys knew they shouldn't have private conversations in the courtroom.
- Comment: Hennepin Co., MN – no one gets a copy of the DAR recording. Transcript is official record. This is to ensure no private conversations become public.
- Comment: The CR in Polk is an anomaly. Not as good as other CRs.

BREAK (10:58)

Polk County recording & transcripts (continued)

- *District Associate Judge Brandt, from Polk Co., arrives to present his report*
- He thinks the system works; he hasn't seen the transcripts; there have been issues with this CR. Generally his experience over years with CRs is good
- No instances of failure during test period. Randomly picked a hearing to see if it's still working. Haven't found any inaudible.
- High volume courtroom. Mostly guilty pleas. Most things take place at the bench. Turn off mikes at counsel table. Tells attorneys sometimes that we're recording – which makes them shut up.
- Hasn't tested to see if you can hear what people say in back. Gallery is very close to counsel tables. Could pick up voices from gallery.
- Use it for hearings we wouldn't usually make a record for – since the DART is there. Not enough CRs now, so I have to wait to get a CR for some hearings. Budget driven.
- Recommendation for DCA in Polk: Absolutely we should use FTR equipment rather than the hand-held digital recorder currently used. FTR system is head and shoulders above it. He does small claims appeals. The recordings from the hand-held recorders are inferior.
- Question: How much coaching do you do with the parties?
- Judge: He decided not to give instructions every time. Judges just aren't going to do this every time, so decided to test by not giving instructions. Today: defendant said "uh-

huh” etc. Had to instruct him. Occasionally tells people to speak louder. Tell people in gallery to be quiet.

- The mikes at front set at 80% and at counsel table at 50%. Defendant usually stands in front of CR. Have mike at CR table.
- Question: Was the victim at an 80% mike?
- Judge: No. 50%. Victim used a prepared text. Attorney for the defendant was subbing for his partner; not well-prepared
- I run the system from the bench. Ct attendant is getting files, making copies, just too busy to run the machine. Wasn't really distracting. A longer hearing... Mostly do guilty pleas. Don't annotate short hearings. Enter case number, title (state v. xxxx), type of hearing. That's it. Longer hearings... motion to suppress... also enter witness names when they start speaking.
- He learned some tricks. When you turn off system. Then start again... you have to adjust the time to the current time. Just have to learn this. Not hard to do. Have to remember to do this. Have to turn off or it continues to record.
- Attorneys asked if they could get copies of recordings... Judge said No.
- Question: Any difficulties?
- Judge: Called FTR help to learn how to copy files from a hearing to send to JG. Never had any trouble running the system.
- Question: Ever use the hearing recording to create orders?
- Judge: Used it to check a couple facts, dates. Short hearings. He questions how it might work if you have a 5 day trial. 10 minutes guilty plea gets appealed? Easier to just send the recording. Very small percent of cases get appealed in DAJ courts. DART works for his type of cases. Huge discussion of cost/benefit of doing this for a long hearing.
- Question: Did you do any CINA cases?
- Judge: No.
- Question: Appeal of a guilty plea? Currently just paper signed.
- Judge: Small claims cases: \$10 fee for a digital recording. 90% of misdemeanor cases are just on paper.
- Question: Are you tech savvy?
- Judge: He chaired Judicial Tech Committee... Yes, he's savvy.
- But for most judges, it would be very difficult to have to pay attention to a long trial and effectively annotate the digital record; most judges would have no interest in doing this
- Question: Do you edit yourself knowing there's a DART recording?
- Judge: I don't think so.

- Question: Have attorneys started having conversations with their clients in the hallway, rather than in the courtroom?
- Judge: No. It hasn't changed their behavior. They don't even notice it's there.
- Question: Would you be comfortable that an accurate record could be made if you just let the recording system go... day after day?
- Judge: I think it would be OK
- Question: What are annotations like?
- Judge: Short phrase, indicate who was speaking, time-stamped.
- Question: Hypothetical: CINA, 7 attorneys. Would you feel comfortable being the person to monitor the equipment if you had a contested case like this?
- Judge: Probably not. It does temporarily take your attention away from parties. Should have someone focus on notes
- Question: Did you try doing annotations on FTR system?
- Question: No. He kept his own hand-written notes.
- Comment: FTR and most other DART vendors – judge's annotations can be kept/saved separate from DART recording; you pay more for this function.
- Comment: The judge had this function with the VIQ system in Story Co.

6. Black Hawk Co. recording & transcripts

- (Note: None of the judges who worked in the test courtroom in Black Hawk County were able to attend the meeting.)
- Comment: Liked the video recording from Black Hawk; the audio was also good.
- Comment: Surprised at the part where you couldn't hear the prosecutor, and the judge talked over her. The CR heard part of what she said. The digital transcriber caught only a part of it. "It's in the order..." Prosecutor was soft-spoken, difficult to hear. Conference between the attorney and client; hadn't seemed a problem at first, but when you isolated the attorney's mike; CR heard "is that your understanding?" Digital transcriber ... doesn't know.
- Comment: The CR at the end of the hearing heard the judge say "you have a right to appeal" when he actually said "you have no right to appeal." CR reported "fine only"... dig transcriber reported "final lee (sic)" – which didn't make sense. Some other differences... except when you couldn't hear. Short hearing. Judge was always clear and well spoken. Lawyers not so clear. She didn't use headphones and had trouble with the playback function. It was hard to be precise. Fun to isolate different mikes. Didn't work well enough to hear what prosecutor was saying.
- Comment: The video was very nice. Very helpful.

- Comment: The video is truly better -- you can see who's talking. The JAVS video is much better than FTR video (in Polk Co.).
- Comment: The video in VIQ's recording (Story Co.) was very good.
- Question: If appellate judges could get the video, would you start making new findings of fact?
- Answer: If de novo review, we could.
- Comment: Courtroom in Black Hawk is huge, acoustically bad. Prosecutor should not have stood up; they should have stayed seated by their mikes. Need to be able to mute attorney mikes.
- Comment: He evaluated the Black Hawk recording and transcripts. He used headphones and isolated tracks. Could hear the prosecutor. CR: "Right to appeal" – dig: "No right to appeal" – is correct.

LUNCH BREAK (11:50)

Meeting continued at 12:15 PM

NOTE: Some participants joined the meeting via conference call during the lunch hour

7. Jefferson Co. recording & transcripts

- *Participating via conference call:* Assoc. Juvenile Judge Bill Owens and Kasey Vogel, Judge Owens' court attendant during the DART test
- Judge Owens: He takes the FTR portable DART system to five different counties. Courtrooms vary in acoustics, from very bad to OK.
- Court attendant could hear quite well (using the headphones while monitoring the proceedings) despite acoustic problems
- Acoustics in Jefferson Co – about 4 or 5 on a 10 scale: high ceilings, large room
- User-friendliness? – Having recordings to listen to... once figured out how to do this. It's very easy to use the FTR Player. Listen to one or all the tracks. Misplaced his own personal notes for one hearing, so Kasey emailed him the recording. Worked well... he could write his ruling. Tech issue the first day – FTR handled it quickly.
- Courtroom management issues: No attorneys complained about using the equipment. Judge usually introduced the attorneys and called them by name each time before they spoke. "Mr. Smith, what record would you like to introduce on behalf of the state...."
- Checked completeness and accuracy: Listened a few times. Quality is very good. Has a set of headphones. He recognizes the voices.
- Experience with the company? FTR seemed like it did what we needed; worked just fine. Lawyers, clerk staff, attorneys have asked how it's working.... The real proof is in what the transcripts look like.

- Recommend: Need mikes with a MUTE button.
- One parent whispered to another parent. History of domestic violence between the two of them. Attorney – sitting 2 feet from his client -- came to me (judge) afterward and asked what his client had said. Kasey said she heard everything while monitoring the recording of the proceeding.
- *Kasey: Ct attendant:* FTR was excellent, no problems with software, tech assistance – very helpful, responded quickly. Some of problems were our own; could have used more training. Probably didn't use all the features. No tech problems. Biggest problem was emailing the large file size to committee staff. No courtroom management problems. Had to move into another courtroom one day. Mixer was quite a distance from the mikes. Recordings turned out great. Very good clarity and completeness
- Recommends: Have someone to run the equipment. Example: A person participated by phone. Put microphone next to speaker phone, right next to Judge Owens. Person on phone spoke very softly. Had to raise volume for participant on phone, turn it down for Judge Owens.
- Can hear the recordings much better if you use headphones! More clear.
- Question: Would you (judge) recommend a portable system?
- Judge: Have to be careful about wires on the floor; but takes only 5 minutes to set up; it's probably workable.
- Question: Was there a backup drive or function besides the main hard drive?
- Court attendant: FTR guy said they would install a second backup if we bought a permanent system. Somehow the files are also saved to the web, so FTR guy could access them. Could also save to a network drive. Confidence monitoring – hear the sound from the hard drive.. a few seconds later than actually spoken.
- Comment by a judge from one of the other test courtrooms: I've concluded that the equipment is not a replacement for a CR. DART is just another way to obtain a verbatim record. You still need a qualified, knowledgeable staff person to monitor equipment. He likes the Willmar, MN, model: a CR/ER (electronic recorder/reporter) in each courtroom.
- Comment: The transcripts from the court reporter and digital recording from Jefferson Co. were equally accurate.

8. General conclusions from the research by this committee

A. Costs of DART

- Committee staff explained tables in the Costs report (distributed prior to the meeting)
 - Tables show estimates for courtroom hardware & software, plus centralized storage devices for backup & archiving, plus costs for additional T-1 lines for 25

larger counties (for backing up video recordings to Des Moines), plus ongoing costs that include: four ICIS/DART tech staff, monthly T-1 charges, and annual contributions to a fund to replace/upgrade equipment every five years

- Table 1 shows mid-level estimates based on \$20,000 per courtroom for audio-only and \$25,000 per courtroom for an A/V system
- Table 2 shows higher-level estimates based on \$25,000 per courtroom for audio-only and \$30,000 per courtroom for an A/V system
- The tables do not include the costs for courtroom support staff salary & benefits
- Comment: Cost estimates *must* include staff support costs to monitor courtroom equipment
- Committee staff provided figures on the average annual salary and benefits for three support staff positions:
 - Court reporters: \$90,074 CR salary & benefits
 - Judicial assistants: \$58,701 salary & benefits
 - Court attendant II: \$44,156 salary & benefits
- Comment: We also need to see the average salary & benefits for a “Court attendant/clerical” position, which wasn’t shown on the handout at the meeting
- Comment: A Judicial Assistant position requires one year of law office experience plus + four years of courtroom experience – or a paralegal degree and 2 years of courtroom experience
- Comment: What type of support judges need is a whole issue for another study; this committee’s report can refer to this issue, and refer to the costs of support staff. Recommending which types and how many support staff is not part of this committee’s charge.
- Comment (by a judge): I don't have all the support that some people claim judges need
- Comment: We need to give a range of costs for providing support
- Comment: The problem is there are a lot of tasks that need to be done in the courtroom. Assess what needs to be done in the courtroom.
- Comment: The chief justice has said we need more support for judges.
- Comment: We can a table on this in the appendix; it's not this committee’s charge to determine an adequate number and type of staff each type of judge should have
- Comment: These are questions of policy and administration. The needs are very different from one county to the next. We can’t factor all that into this report.
- Comment: If we could be more uniform, its’ much cheaper.
- Comment: In the tables we added four new staff for ICIS/Central DART support; they will do ICIS & DART support. Cross train for ICIS and DART hardware support
- Question: How would DART system interface with EDMS? Want it to be compatible

- Answer (by ICIS staff): Not clear how that will work at this point; they are two separate systems. We can back up and archive DART recordings without affecting EDMS. We could link the AV files to online case records, like the federal courts in Omaha and Lincoln do.

BREAK

- Question: How would we purchase DART now or any time soon?
- Answer: Very difficult given the current budget situation
- Question: Judicial assistants in Polk: is it one for each judge?
- Answer: It used to be. Could be one for each DJ on civil bench plus criminal trial bench; DAJ court needs 1 to 1; juvenile court needs 1 to 2 judges
- Comment: I think .8 FTE support per judge seems appropriate
- Question: Can something less than a CR tend the DART equipment? That's the Q.
- Comment: It could depend on seriousness of the case... Use CR.s for serious cases
- Question: Why is that distinction important?
- Comment: The stakes are higher
- Comment: Yes. We don't want it coming back on appeal
- Comment: We should have at least a certified electronic reporter; they worked well in the Minnesota courts we visited
- Comment: Electronic Recorders (ERs) and CRs are paid the same in Minnesota: about \$10,000 less than Iowa's CRs
- Comment: The quality of the printed transcript is the bottom line; need some kind of certification for transcribers; don't need high level skills running the machine in the courtroom
- Comment: Utah has trained people from the clerk's office run the DART equipment; they think it works well
- Comment: In most places nobody continually monitors the recording volume
- Comment: Only need skill to monitor equipment; the key is having a skilled transcriber
- Comment: We really need two levels of staff: lower skilled staff to run the courtroom equipment, and a higher skilled person to do transcript
- Comment: Transcribers need to be skilled and certified
- Comment: Judges still need other support besides having someone to watch the DART equipment
- Comment: In the report, we can say: If we use a certified CR in every case, here's the cost (referring to average cost for salary and benefits; see above); if we use a judicial assistant for every case – here's the cost; if we outsource transcripts – the cost is the same price per page as in the Iowa Code or Court Rules. The rest is all policy. It's not one of our charges

- Co-chair: Committee staff will update the table with the cost of different types of support staff. Add the “court attendant/clerk” position. And add the minimum and maximum salary and benefits for each position. We'll include it in the first draft of the report and discuss it at the next meeting.

B. Reliability of DART

- Comment: Everyone in the site visit locations agree that the DART equipment and software are very reliable. Very few problems or failures over a period of five years.
- Comment: Would like to see a study of the accuracy of transcripts like the one the Feds did in 1983.
- Comment: Digital recording systems are better now
- Comment: Agrees; it's surprisingly good
- Comment: Agrees. But none of the five recordings we listened to were very challenging. However, the clarity was excellent
- Comment: Staffing is still a key; must have trained staff in the courtroom
- Comment: Not worth the effort to spend the money like the federal courts' study in 1983; shouldn't ignore that other courts have done this successfully and are satisfied.
- Comment: Are we getting an accurate comparison? She's impressed from what she's seen here, but one hearing from each of five courts is a limited sample.
- Comment: Appellate judge who have experience with DART have been doing it for a long time – they think it's good enough. But the examples we saw were very limited; she's persuaded that there are hearings that deserve CRs
- Comment: Wouldn't you like to have a recording to verify the transcript?
- Comment: Yes.
- Comment: People seem to think CRs' are error free. It's clear that they aren't. As a lawyer, he had a case in which he was convinced the CR got his witness' statement wrong. But CR was convinced she was right. But no way to verify it.
- Comment: CRs have a voice recorder in their equipment. Redundant. “AudioSync” – records on the PC. Just like with DART. Murder trial a few months ago. Attorneys came to her during a break. Asked to listen to a segment of testimony. They listened to verify.
- Question (to a district judge): Would you just run DART with a clerk monitoring the equipment for a 2 week felony jury trial?
- Judge 1: Yes
- Judge 2: Yes
- Comment (appellate judge): I disagree

- Comment: What we've seen... DART is at least equally reliable and accurate as court reporters; judges in other jurisdictions that have DART like having the audio to verify
- Comment: He likes the backup of DART – recording to two places for security
- Question (to district judges): Is it reliable enough to do a long, complex trial?
- Comment (court reporter): He uses AudioSync; green light can be on... but it's recording just noise. So it isn't always reliable.
- Question: Are we talking about comparative reliability .. compared to CRs?
- Comment: We are charged with determining whether it is reliable; not whether it is better than CRs
- Comment: I visited three courts; they all claim the equipment is reliable. If occasionally it didn't work, they fixed it quickly or replaced it.
- Comment: Hennepin Co. (MN) has never lost one word of a record.
- Comment: Salt Lake City lost a recording, but the guy was acquitted
- **Co-chair: Calls for a vote on the reliability of DART**
- **Motion:** *"If a qualified and trained court employee manages the DART equipment in the courtroom, DART can reliably record court proceedings."*
 - **Vote: YES (no dissent)**

C. Accuracy of DART

- Comment: Yes; I started skeptical, but turned around on this. With the right equipment and trained staff
- Comment: Agrees
- Comment: Agrees; recordings are impressive. What kind of trans will I get? If I can get an accurate transcript from DART, that's fine
- Comment: Need a certified CR to transcribe; need to know the transcriber is highly qualified
- Comment: Can we recommend a certain level of certification for transcribers?
- Co-chair: Yes; make a motion
- Comment: In Utah, former CRs did the transcripts
- Comment: Yes if well-trained/qualified staff monitor the equipment & and a qualified & certified transcriber (– by AAERT?) does the transcript – it can be accurate
- **Co-chair: Calls for a vote on the accuracy of records obtained from DART**
- **Motion:** *"Accurate transcripts can be obtained from DART recordings if there is a well-trained/qualified person to monitor the courtroom equipment and a qualified and certified transcriber produces the transcript."*
 - **Vote: Yes - Unanimous**

- **Co-chair: Calls for a vote on the costs of DART:**
- **Motion:** *“The committee finds that the cost estimates in Tables 1 and 2 (discussed at the meeting) reasonably reflect the expected costs for the purchase and installation of hardware and software, ongoing maintenance, and central support staff for a statewide DART system (assuming they include the cost of installation) – but not for courtroom support staff.”*
- **Vote: Yes – Unanimous**
- Question: Does this include a PA system?
- Answer: Can build speakers into the DART system; it shouldn't cost too much
- Comment: Many IA courtrooms do not currently have a PA system. Add a footnote in the report that this needs to be addressed.
- **Cost for courtroom support staff**
- Comment: Committee staff should drop the court attendant I and II positions in the table handed out after the break, and put in the costs for a “court attendant/clerical” position
- Comment: Include in the updated support staff table a 1-to-1 support staff per judge, and the .8 FTE per judge
- Comment: What about secretary? Most CR.s provide secretarial assistance
- Comment: A judicial assistant and a court attendant/clerical are secretarial/paralegal
- Comment: Include entry level and top of range salary and benefits for each position
- Comment: Include job descriptions; include Judge Christiansen's description of CR duties
- Comment: Our charge does not include recommending what adequate staffing would be for judges
- Comment: Other jurisdictions that have done DART have more support staff for their judges; it's about more than just equipment
- Comment: : Alaska and Utah have just one person in the courtroom; we should just report the facts
- Comment: We need to be clear we aren't recommending staff levels
- Comment: We can report what we've learned; that's about it.
- Co-chair: The updated table with the minimum, average, and maximum salary and benefits for a court reporter, a judicial assistant, and a court attendant/clerical position, should adequately reflect the costs for courtroom support staff. It will be included in the draft of the final report.

Next meeting: Dec. 11 in Des Moines. Draft report will be sent to the committee by Dec. 4
Adjourned: 3:45 p.m.

Notes from the 6th DART Committee Meeting
December 11, 2009; Des Moines

1. Welcome/overview by co-chairs

- The co-chairs reviewed the agenda
- Motion to approve notes from last meeting (Nov. 18) – approved unanimously

2. Review and discussion of the first draft of the committee’s final report

- The first draft was prepared by the co-chairs and distributed to the members via email a few days before the meeting.
- The committee proceeded to review the draft one page at a time.
- A couple of the committee members commended the co-chairs on drafting a very balanced and well-written report.

Executive Summary

- The first paragraph in this section of the draft report briefly stated that due to the national recession, state revenues began to decline in early 2009 – so the judicial branch began looking for ways to save money, and that this was one of the reasons the Judicial Council appointed this committee. However, some members pointed out that, since the committee was not appointed to determine whether DART would save money for the judicial branch – and its final report would not address this question – it seemed inappropriate to begin the report with a statement that would lead readers to think the committee was intended to do such an analysis. The group agreed that the opening paragraph should be dropped from the Exec. Summary and the
- At the committee meeting on November 18, the group agreed that DART could be reliable and transcripts obtained from digital recordings could be accurate, and expressed those conclusions in wording that was later included in the first draft of the final report – and stated in the Executive Summary and in the “Introduction” section of the report (see below).
- Most of the discussion on this section focused on the wording of the “findings” regarding the *reliability* of DART and the *accuracy* of the transcripts obtained from digital recordings.
- After spending substantial time on how to reword these “findings” – the group decided to put these issues on hold and to review the remainder of the report first, since the Exec. Summary is a concise restatement of the findings at the end of the report.

Introduction

- The group agreed to drop the background information in the opening paragraph regarding the economic recession and DART as a possible cost-saving initiative.

I. The Committee's Information Gathering Process

- *D. Site Visits to seven jurisdictions that use DART*
 - There were some suggestions for amending the descriptions of a few of the site visit jurisdictions – to point out where parties or attorneys could obtain a copy of the digital recording of the hearing on a CD (e.g., Rochester, Willmar, and Salt Lake City) for \$10 or less.
 - Members who visited Wheaton, IL, requested revision of a paragraph describing concerns of court reporters in Wheaton regarding their DART system.
 - Members who visited Rochester and Minneapolis corrected a statement about the Minnesota courts.
 - The group agreed to highlight the finding mentioned in the descriptions of a couple site visits that most of the seven jurisdictions provide more support staff for their judges than the courts in Iowa – in addition to using DART. The group recommended adding a table that shows the number of support staff per judge in each site visit location – and to highlight this finding in the report.
- *I. Assessment of DART Costs*
- 1. DART Hardware Components in the Courtroom
 - The group agreed to add some clarification that the costs for cabling and wiring are included in the hardware installation costs.
 - They also recommended adding a footnote that the costs estimates do not reflect possible discounts that would accompany a large order.
 - There was some discussion of whether the cost estimates in Tables 4 and 5 included installation costs and whether they take into consideration the many old courthouses and courtroom that pose difficulties when new wiring is required. Scott Ruhnke, a senior manager in the judicial branch's Information Technology Services (ITS) division, explained that he and ITS staff have substantial experience in this area because they have been involved in wiring and installing computer systems to support the Iowa Court Information System (ICIS) in all the courthouses. He was involved in developing the cost estimates in Tables 4 and 5 and believes that the estimates do take these issues into account.

- 2. DART Management Software
 - A member recommended that the report include a sentence to describe “confidence monitoring” as a critical feature of a DART system – and to clearly explain what that means.
 - Another member recommended a better explanation of what “log notes”.
 - The group agreed that the report co-chairs should add a “Glossary of Terms” section to the report – and include confidence monitoring and log notes in it.
- 3. Central I.T. Costs
 - The judicial branch ITS division already manages ICIS primarily from Des Moines, and backs up ICIS data from each county every night to the main ICIS data storage units in the Judicial Building. The cost estimates for DART include equipment that would be dedicated solely to backing up and storing digital recordings on storage devices in Des Moines -- in the same manner as ICIS data.
 - There was some discussion about the use of the term “centralized” when discussing DART due to ongoing concerns in many rural counties that a DART initiative is another strategy for centralizing or regionalizing court services.
 - The co-chairs agreed to look at ways to reword this section to alleviate such concerns.
- Tables 4 and 5: Cost Estimates for Digital Audio/Video Recording Systems
 - At the meeting in November, the committee agreed that these tables provided reasonable estimates of the costs associated with the purchase, installation, maintenance, and periodic updating of equipment for a statewide implementation of DART in all 316 courtrooms.
 - A member who was not at the meeting in November raised questions about the basis for these cost estimates. Committee staff explained that they were based on the cost estimates provided by the vendors who responded to the committee’s RFI in May, the four vendors who did presentations before the committee in June, and information obtained from the site seven visit jurisdictions. The estimates in Table 4 (the mid-level estimates) are based on the high-end estimate from the four vendors who did presentations (i.e., CourtSmart’s estimate of \$18,000 to \$20,000 per courtroom, installed). Salt Lake City also reported that they spend \$18,000 per courtroom for their audio-only system – and add \$4,000 per courtroom for a system that includes video (four cameras).
 - A member recommended that the report should be clear that the DART system should record on multiple tracks and that each microphone in the courtroom should be recorded on its own track. The group agreed.
 - A member recommended that the report note that the cost estimates do not include equipping judges’ chambers, and that – if DART is ever implemented in

Iowa -- there would probably need to be a policy that all proceedings that require a record should be conducted in the courtroom.

- A member recommended that the report include some explanation of the relationship between a DART system and the electronic document management system (EDMS) that the Iowa courts will be implementing soon around the state. Committee staff explained that DART would not have an impact on EDMS; they are parallel systems. The one connection would be that ITS staff in Des Moines would manage the regular backup of the digital recordings, just as they do for ICIS data.
- 6. Estimated Costs for Courtroom Support Staff to Manage the DART System
 - The group recommended clarifying the duties of a courtroom recording monitor/manager (CRM).
- Table 6: Costs for Three Types of Support Staff in Iowa District Courts
 - The tables show the maximum, current average, and minimum salary and benefits for court reporters, judicial assistants, and court attendant/clerical staff. It also shows the total costs to provide enough of each of these three types of staff (i.e., to provide .80 per full-time judge; .90 per full-time judge; and 1.0 per full-time judge).
 - An attendee (not a committee member) inquired how readers are to interpret the table, given that the report only describes what's in the table – not how the table should be used. Also, the courts in Minnesota and Wheaton all use court reporters to run their DART systems – and the DART Committee thinks that's the best practice. So – what's the point in showing the costs of other support staff?
 - A member explained that the courts in Utah and Alaska do not use court reporters to manage the DART equipment in the courtroom – and they are very satisfied with their recordings and transcripts. Table 6 provides estimates of the likely range of costs for different types of staff to perform the CRM function.

II. Committee's Findings on the Key Issues

In the draft report, the statement of the findings on each of the four key issues reflected the wording agreed upon by the committee at the last meeting.

- *Reliability*
 - The committee debated whether the finding on reliability should state that a CRM needed to be “certified” in addition to “qualified and trained”.
 - A vote was taken and a majority agreed to add “certified” to the requirements for a CRM.
- *Accuracy of the records obtained from digital recordings*
 - The group agreed that “certified” should also be added to the requirements for a CRM in the statement of the finding on accuracy.

- *Statewide costs for a DART system (excluding courtroom support staff)*
 - One member argued to remove the phrase “reasonably estimated” should be changed because some people might conclude that the committee thinks the costs are reasonable. Committee staff briefly reiterated the basis for the estimates and that they are “reasonable.”
 - A committee member recommended changing “reasonable” to “informed” – which was approved by the committee.
- *Statewide costs to provide courtroom support staff to manage the DART system*
 - The committee agreed to change “reasonable estimates” to “informed estimates.”

3. Final comments and next steps

- A member suggested that the co-chairs include in their cover letter with the final report the following suggestions:
 - If the judicial branch moves to implement DART, the decision should be made as soon as possible to alleviate the considerable stress and anxiety among court reporters, and
 - If court reporters are to be replaced by judicial assistant or court attendant/clerical positions, the court reporters should be given the opportunity to take that position rather than being laid off.
- A co-chair suggested that, since the committee was not given the task to make recommendations – only findings on the key issues, members could send their own letters to the Judicial Council or Supreme Court to express their personal recommendations. The group agreed with this suggestion.
- The co-chairs will revise the draft based on the discussion at this meeting and email the updated version to committee members on Dec. 16.
- **Next meeting** will be via conference call – at 12:05 p.m. on Tuesday, Dec. 22.
 - The purpose will be to review the updated draft of the final report.
 - Committee staff will email the conference call instructions to the committee the day before the conference call
 - The conference call will be accessible by the public; committee staff will post the instructions on the “Announcements” section of the DART web page on the judicial branch website.

Meeting adjourned at 2:45 p.m.

Appendix 4

List of Materials Provided to the DART Committee at Each of the Six Committee Meetings

*Note: All these materials are available on the Iowa Judicial Branch website at:
www.iowacourts.gov/Advisory_Committees/Digital_Audio_Recording_Technology/Information/*

1. Materials provided at the 1st Committee Meeting (May 21, 2009)

- Iowa Judicial Council's order creating the committee
- A list of the DART committee members (with contact information)
- Summary table on the use of DART in state and federal courts (2009); the information in this table is based on a variety of sources including a search of the internet; use of email list-serves involving court managers; and phone calls to various state courts.
- Executive summary of an evaluation of DART in 12 federal courts (1999)
- Memo summarizing current use of DART in federal courts (March 2009)
- Answers to FAQs about DART in the federal bankruptcy court in New Mexico (2004)
- Michigan's Standards for Audio Recording Systems in the Courts (2007)
- Wisconsin's Policy and Procedures Manual on Digital Audio Recording of Court Proceedings (2006)
- Arizona's Instructions for Judges, Lawyers, and Other Court Participants Regarding Electronic Recording Systems in the Courtroom (2005)
- Final Report of the Oregon Judicial Department's Workgroup on Qualifications for Transcriptionists (2007)
- California Official Court Reporters' Association: *Preserving Access to Justice Task Force Final Report* (February 2009) [This document delineates the arguments against using DART for court proceedings.]
- Iowa Code and Court Rules on Reporting/Recording Requirements for Court Proceedings (a summary of the Code sections and Court Rules on this issue; 2009)
- Proposed "Request for Information" (RFI) – to solicit information from vendors regarding digital audio/visual recording equipment and software

2. Materials provided at the 2nd Committee Meeting (June 26, 2009)

Note: The second meeting was almost entirely devoted to presentations by four vendors of DART systems. No additional materials were provide at or during this meeting

3. Materials provided at the 3rd Committee Meeting (July 31, 2009)

- Text of Presentation by the Iowa Court Reporters Association
 - Information on court reporter certification*
- Text of Presentation by the Iowa Judges Association
 - Duties of Rural Court Reporters in Iowa (see also Appendix 6 of this report) *
 - Memo from Associate Juvenile Judge Alan Albee*
 - Letter from Professor Robert Rigg, Drake University Law School*
- Text of Presentation by the Iowa Public Defenders Association
 - Letter to Chief Justice Ternus*
- Text of Presentation by the American Institute of Business (AIB)
 - AIB court reporter curriculum*
 - List of court reporter job listings and employers*
- Recommendations from the DART Evaluation Subcommittee
- Revised Tasks and Schedule for the DART Committee (10-9-09)
- Schedule for site visits to 6 courts with DART
- 2007 Evaluation of DART in Hennepin Co. District Court (Minneapolis)
- Guide on Electronic Recording in U.S. District Courts

*These are the handouts provided by presenter; the handouts are also included on the judicial branch website (see the top of the first page of this Appendix).

4. Materials provided at the 4th Committee Meeting (October 9, 2009)

Site Visit Reports (see also Appendix 7 of this report)

Federal Courts:

- Omaha and Lincoln, NE

State Courts:

- Rochester, MN
- Minneapolis, MN
- Willmar, MN
- Wheaton, IL
- Salt Lake City, UT
- Anchorage, AK

Other Reports

- Costs per Courtroom for DART in Alaska's Courts
- Summary of Survey Responses on Structured Response Questions
- Summary of Written Comments from the Surveys

5. *Materials provided at the 5th Committee Meeting (November 18, 2009)*

- 1983 Study of Audiotape Recordings & Transcripts in 11 Federal Courts
- “Examination of How the Stenographic Reporter Enhances the Delivery of Business for the Iowa Judicial System,” by Chris Crawford, President of Justice Served, for the Iowa Court Reporters Association (November 2009)
- Report by the National Court Reporters Association (NCRA) on Trends in Court Reporter Programs & Graduates (2007)
- Cost Estimates for Statewide Implementation of DART in Iowa’s District Courts
- Evaluations by DART Committee members of 5 digital recordings & transcripts from DART test courtrooms

6. *Materials provided at the 5th Committee Meeting (December 11, 2009)*

- The committee discussed the first draft of the final report. No other materials.

Appendix 5

States That Use Electronic Recording Technology for Trial Court Proceedings*

States Where All Courts Use Electronic Recording (ER) in Lieu of Court Reporters (DAR= Digital audio recording; CRs = Court reporters)

Alaska ⁴	Since Alaska became a state 50 years ago, its state courts have relied on tape recording and, in the past several years, digital recording systems for capturing the verbatim record of court proceedings. They have no CRs. (Vendor: CourtSmart)
Kentucky ⁴	Digital video recording is the official court record in all trial courts; they've been using video recording for 15 years. (Vendor: JAVS – Jefferson Audio-Visual.) CRs can be used if requested, but there are 2 or fewer CRs working in the state's 120 counties.
New Hampshire ⁴	All their courts use electronic audio or video recordings in lieu of CRs. Began moving to electronic audio recording and replacing CRs through attrition in 1994. Laid off all remaining CRs in 2003 (during budget cuts). They have no CRs; rely entirely on digital audio and/or video recording for the official court record. (Vendor: FTR)
Utah ¹	All their courts use digital video (25 courtrooms) or digital audio recordings (over 100 courtrooms) in lieu of CRs. Utah eliminated the last of their CRs in 2008. (Vendor: FTR)
Vermont ¹	All their courts use ER in lieu of CRs: digital video installed in 1 courtroom in each county; all other courtrooms have digital audio systems. (Vendor: FTR) They have no CRs. Contract with private agency to provide transcription services.

States Where Many Courts Use ER in Lieu of Court Reporters

Arizona ^{1, 4}	ER is used in many courts throughout the state. 80% of courtrooms have ER systems. All limited jurisdiction courts use ER. (Vendor: primarily FTR) They replace CRs with DAR through attrition in most places. CRs remain the preferred way to record serious felony and complex civil trials. Pima County (Tucson) retains a mix of DAR and CRs; the courts are <i>not</i> "moving back to CRs" but plan to retain a mix. Pima has had difficulty finding certified CRs and keep ads running in various professional journals to fill occasional vacancies.
California ⁴	Most limited jurisdiction courts use DAR. CA Code limits courts to using ER only in misdemeanor, limited civil (under \$25,000), and infractions cases.
Colorado ¹	All magistrates (80) and county court judges (111; limited jurisdiction) use DAR. The 165 district court judges (general jurisdiction) receive funding for a court reporter, which the judges can use to purchase DAR if they wish. Many do use DAR, but the state court administrator's office did not know how many; it's a local decision. (Vendor: FTR)
Connecticut ¹	Most trial courts use DAR. They have been using audio recording systems to replace CRs since the 1990s. They currently have tape recording equipment in about 150 courtrooms, DAR in more than 100 courtrooms, and still have 47 CRs. (Vendor: FTR)
District of Columbia ^{3, 4}	DAR equipment is installed in all 89 courtrooms. They started ER in 1998 (originally audio tape, but moving toward digital recordings). CRs continue to keep the record in Felony I and II and Civil I and II trials and motion hearings. DAR is used in all arraignments, sentencing hearings, small claims, and landlord/tenant cases and in most domestic and probate hearings. (Vendor: FTR until 2004; CourtSmart since then)

Florida ⁴	Most judicial districts use DAR for most court proceedings, though they have retained CRs, who work primarily in felony and complex civil cases; they use DAR in all case types with a low probability of appeal. (Vendors: CourtSmart, FTR)
Illinois ⁴	Supreme Court offers DAR to any circuit (district) court that requests it and plans to install DAR in all courtrooms. (Vendors: FTR, CourtSmart) But they have kept the CRs, who still create the record in many cases; they also manage the recording equipment and produce the transcripts from audio recordings.
Indiana ¹	DAR is used in many courts. It's a local option.
Maryland ⁴	All circuit courts (general jurisdiction) have DAR capability (110 courtrooms in 35 locations; vendor: Court Smart); and all limited jurisdiction courts use it for all cases. MD did not lay off court reporters. They monitor the recording equipment and produce the verbatim record upon request.
Michigan ⁴	DAR is used in many MI courts; decisions on this issue are made at the county level. Each judge has either a court reporter or court recorder (if they are using DAR). MI certifies both court reporters and court recorders. (Vendor: JAVS, others)
Minnesota ¹	Hennepin Co (Minneapolis) has DAR in almost all courtrooms, which are monitored from a single control room (Vendor: Court Smart). Other judicial districts in MN have also installed DAR in courtrooms (Other vendors: High Criteria, FTR). Many districts install DAR when a CR retires. All districts are moving in this direction.
Missouri	Almost all counties in MO have installed DAR for recording some or many types of proceedings (Vendor: FTR)
Nebraska ⁵	DAR is used for all case types in 60% of the County Courts (limited jurisdiction); and will be in 100% of the County Courts in 2 years. (Vendors: Equipment: JCG Technologies; Software: Liberty/High Criteria) CRs keep the verbatim record in general jurisdiction courts.
New Jersey ¹	NJ has over 400 courtrooms: 332 (83%) use either video (60) or audio recording systems (272) for court proceedings. They have retained 68 court reporters; they cover primarily serious criminal and complex civil cases. They currently have mix of digital and older analog tape recording systems. By 2011, all 400 courtrooms will have digital recording systems, though they will retain 68 – 73 court reporters for the case types listed above. (Vendor: Court Smart) They have their own certification program for transcriptionists.
New Mexico ¹	DAR is used in all family, domestic abuse, juvenile, mental health, and limited jurisdiction court proceedings. (Vendors: District Courts -- FTR; Metro Court – CourtSmart). CRs are used in all serious criminal and civil law cases. (Note: In the early 1980s, NM implemented electronic recording statewide -- using audio tape recorders. Problems arose due to deterioration of the tapes in the arid N.M. climate and complaints about the quality of the recordings. They switched back to CRs in serious criminal and general jurisdiction civil cases in 1989 and have maintained the mix of ER and CRs described above since then.)
New York ⁶	At least 1,200 local/limited jurisdiction courts use digital recording systems in most or all types of cases (Vendor: High Criteria); many state courts also use digital recording systems for at least some types of cases (Vendor: FTR).
North Dakota ¹	Most courtrooms use DAR. They still have about 20 CRs, who will be phased out through attrition. (Vendor: VIQ – Voice IQ.)
North	400 courtrooms have digital recording systems for use in some or many types of

Carolina ⁶	cases (Vendor: High Criteria)
Ohio ¹	Many general and limited jurisdiction courts use DAR in lieu of CRs for some or all case types. OH has a highly decentralized court system. Each court makes its own decision on this issue.
Oregon ¹	Almost all courts use DAR. There are 173 general jurisdiction judges in their Circuit (like our District) Courts, but there are only 9 CRs. (Vendors: Court Smart and FTR; decisions made by local courts.)
Washington ⁴	Many courts of all types have used electronic recording for the verbatim record and have done so for many years. It's a local option (not mandated).
Federal Courts ²	In the federal trial courts, district judges (approximately 750) by law <u>must</u> each have at least one (steno) court reporter. Federal magistrates (approximately 550) and bankruptcy judges (approximately 340) are not provided staff court reporters, though they could hire contract court reporters. Most magistrates and bankruptcy judges rely primarily on digital audio recording. (Vendors: FTR, Court Smart.)

Other states

Texas ^{1, 4, 5}	A deputy state court administrator could not identify how many TX courts use DAR, though some do use it. Texas has a highly decentralized court system (county and locally funded and operated and judges locally elected). Each local court decides whether to use ER or CRs for court proceedings. Consequently, ER was never implemented statewide, so it could not “go back” to CRs (as suggested in one of the reports from California), though one or more local courts apparently tried ER and went back to CRs.
Wisconsin ¹	ER is authorized in WI, but few courts have implemented audio recording in lieu of CRs.

*Endnotes: Information in this table is based on multiple sources:

1. Phone calls to state court administration offices;
2. Email exchanges with court managers;
3. A survey conducted on this issue by the WI state court administrator’s office in 2007;
4. A survey of state court administrators conducted on this issue by National Center for State Courts (NCSC) in 2008; and
5. A survey conducted in February 2009 by John Goerd, Dep. State Court Administrator, via a list-serve coordinated by the NCSC.
6. Information obtained from DAR vendors.

Note: There could be additional states that use ER in lieu of CRs in some of their courts, but no one from the state responded to any of the surveys identified above. However, states where ER is not used in lieu of CRs would probably be the ones least likely to respond to a survey on this issue.

Table prepared by: John Goerd, Deputy State Court Administrator, Judicial Branch Bldg, Des Moines, IA.

Appendix 6

Duties of Rural Court Reporter in Iowa

Provided by Judge David Christensen, Judicial Election District 5B

Court Service Days

- Make verbatim records of any hearings that require a record or if party requests to have record made
- Mark and keep track of all exhibits admitted during hearings. At end of hearing, take custody and inventory all exhibits received before parties leave. Put exhibits in envelopes with listing of all exhibits for filing with clerk's office
- Field questions and inquiries from clerk's office staff, attorneys, and litigants pertaining to practices and procedures specifically related to how Judge Christensen likes to handle matters
- Check in attorneys and litigants upon arrival and organize order that cases are presented to judge
- Usher people into courtroom for hearings done on the record
- Usher attorneys and litigants to judge's chambers for hearings not done on the record
- Take phone calls and messages when judge is busy
- Act as go-between from clerk's office staff to judge when he is busy
- Perform secretarial duties for judge – typing, making phone calls, faxing, writing calendar entries, filling out form orders for his signature
- Obtain necessary supplies from clerk's office for judge to be able to perform duties
- Work with attorneys and litigants to try to keep things moving in a timely fashion
- Make and distribute copies of orders and calendar entries when parties are present to save postage and clerk's office staff time of having to mail
- Make and mail copies of orders and calendar entries for cases where parties were not present
- Do trial scheduling conferences with attorneys and self-represented litigants. Frequently involves contacting attorneys who overlook this step of the case. Frequently involves having to contact rural case scheduling for trial dates as the parties have not done so in advance
- Call out names in the hallways of litigants that have not appeared
- Act as buffer between self-represented litigants and judge, explaining inappropriateness of them meeting with judge ex parte
- Check files for necessary documents and pleadings pertaining to hearing scheduled; i.e. returns of service, appearances, answers to petitions, etc.
- Work with self-represented litigants on domestic-abuse cases to ascertain if consent order can be entered without necessity of them having to go through very emotional formal hearing on permanent protective order. If so, acting as go-between to work out details of their agreement, recording the details on the permanent protective order,

having parties sign-off on agreement, giving to judge to review and sign, and distributing copies to parties and appropriate law enforcement. Can be very time-consuming

- Be present as witness in judge's chambers if he has necessity to meet with self-represented litigants
- Pro-se dissolutions: Check file to make sure all necessary documents are filed; i.e. acceptance of service, answer, financials, etc. Check for inconsistencies between documents, particularly financial affidavits and settlement agreement document (which there always are). If parties are present, work with them to iron out inconsistencies. If real property involved, help them obtain legal description needed for decree. Fill out decree for judge to review, approve, and sign. If parties are not present, write calendar entry notifying parties of inconsistencies in documents and setting matter for trial scheduling conference and requiring both parties to be personally present. Make copies and mail to both parties. When parties appear for scheduling conference, follow above procedure. If settlement agreement is not on file, do calendar entry setting trial scheduling conference requiring both parties to be present. On conference day, meet with parties and fill out trial scheduling order for judge's review and signature. Distribute copies to both parties. Pro-se dissolutions are always very time-consuming as all necessary documents are *never* completely filled out and *always* have inconsistencies.
- Judge's only support staff
- Juvenile court service days: Help keep judge's calendar and scheduling of cases as Judge Christensen does all of his own scheduling on juvenile cases. Keep a spreadsheet of all juvenile cases showing case number; child's name; parents' names; attorneys involved; DHS worker's name or JCO's name; dates of adjudication, disposition, permanency; next hearing date and type of hearing; date case closed; and related case numbers.

Bench trials

- Make sure all attorneys and litigants are present in courtroom to begin trial in a timely fashion
- Consult with attorneys at times on questions of procedures and how judge likes to handle various things
- Try to keep courtroom environment comfortable with regard to climate control and as quiet as possible
- Open court for the judge
- Perform all functions of making an accurate, verbatim record of the proceedings, including stopping proceedings when necessary if something is unintelligible, inaudible, or people speaking on top of one another
- Mark exhibits if not previously done by attorneys

- Keep track of exhibits admitted. At end of each day, inventory exhibits making sure all are accounted for. At end of trial, inventory all exhibits admitted and take possession of them. Make list of exhibits and put in envelope, box, etc. Make sure all exhibits too large to be put in some kind of container have label with case information on it
- When recesses have ended, gather attorneys and litigants back into courtroom
- Instantaneous read-back right from computer screen with Realtime reporting
- When asked by judge or attorney, search record for certain testimony, objections, etc., with no delays
- Provide daily transcription, if needed, either in final or rough draft format
- Certified Realtime Reporter, so can provide Realtime function when requested by judge, litigants, or hearing-impaired
- Provide clerical and secretarial functions for judge during noon recess, breaks, and before and after day's proceedings
- Provide expedited transcripts for litigants to be used in preparing briefs, proposed findings of facts, ruling, etc.
- Provide timely, accurate, verbatim transcript of any and all proceedings after completion of trial, whether for appeal or any other reason requested
- Type rulings, orders, etc., for the judge pertaining to the bench trial. Proofread any and all proposed rulings and the judge's final ruling. Verify accuracy of all case citations and quotations, etc. in the judge's rulings.

Jury trials

- All functions as set out above for bench trials except for the last item pertaining to the ruling aspect
- Help out court attendant with duties in conjunction with the jury. From this point forward we have been told we will not be provided with a court attendant for jury trials, so I will probably be in charge of the jury, in cooperation with clerk's office staff when available
- Get requested jury instructions from the attorneys; on disk, if possible. Prepare the jury instructions, giving consideration to the requested instructions submitted by the attorneys. Make any corrections or additions as instructed by the judge. Make copies for the attorneys. After making record on any objections the attorneys have to the instructions, make any changes deemed necessary by the judge. Makes copies of changes for the attorneys. Make copies of instructions for jurors to follow along when judge reads them
- Retain any written questions by the jurors during deliberations, mark them as an exhibit, and file them with the other exhibits at the end of trial

Appendix 7
Site Visit Reports from 7 Jurisdictions That Use DART
(In alphabetical order by city name)

Site Visit Report -- Anchorage, Alaska

Note: 1 team member wrote a report

Report #1: by Judge Charles L. Smith

Site Visit: September 4, 2009*

**NOTE: Judge Smith travelled to Anchorage at his own expense to attend the wedding of his niece. Knowing that the Alaska courts have been using electronic recording technology for capturing the verbatim record of court proceedings for many years, he arranged (prior to his trip) to visit the court in Anchorage the day before the wedding -- without cost to the state of Iowa or the judicial branch.*

On September 4, 2009, I spent the day in Anchorage, Alaska with the following people: Joe Manion, Alaska Judicial Branch I.T. Director; Alyce Roberts, Special Projects Administrator for the Alaska State Court Administrator; Superior Court Judges Mark Rindner and Phillip Pallenberg; Kathleen Amand, State Transcript Coordinator; and Judges Joel Bolger and David Mannheimer, who are two of the three members of the Alaska Court of Appeals.

JUDICIAL BRANCH STRUCTURE:

The state of Alaska's judicial branch is established on a district basis with no county courts. They have a unified system much like Iowa's. There is a five-person Supreme Court and a three-person Court of Appeals. They have sixty-six (66) judges serving in forty-one (41) courthouses. There are approximately one hundred forty (140) courtrooms. Of the sixty-six judges, forty-five are Superior Court and 21 are District Court. The Superior Court has general jurisdiction like our District Court. There are also a number of magistrates serving in places where no other judicial officer is available. All of the judicial proceedings are recorded digitally including those matters that are heard by a magistrate.

REPORTING/RECORDING HISTORY AND CURRENT STATUS:

In its fifty year history, Alaska has never had court reporters; they have always used some sort of recording device. In 1999, the state first adopted digital audio recording and used F.T.R. on a uniform state wide basis. All of the F.T.R. units were free standing with no server-based recordings. All records were stored on discs on a daily basis but were not backed up. There was no redundancy of any type. This caused some problems, including the loss of the record in some cases. Recently, the state signed a new contract with CourtSmart after an extensive study and RFP. At the present time, they have installed CourtSmart with servers in approximately 60% of the courtrooms statewide and expect full implementation by the end of this year. Even though they are using CourtSmart, they saw no benefit to and are not utilizing the central monitoring facility offered by the company.

COURTROOM STAFFING AND EQUIPMENT:

The courtrooms each have six microphones. There is a courtroom clerk in the courtroom at all times in cases in which a Superior or District Court Judge is presiding. The courtroom clerk makes log notes or annotates the record for the judge. At a minimum, the clerks make a notation of the case name and number being recorded, the name and time of recording for each witness, and description and time offered for exhibits. Some courtroom clerks make more extensive annotations or log notes if they are comfortable doing so and the judge wants that done. In most cases, the courtroom clerk is not monitoring the courtroom 100% of the time and continues to carry out other duties while monitoring the courtrooms from time to time. In a courtroom with many cases such as arraignments, pleas and bond reviews, the case number and title is all that is noted or annotated.

At the present time, most judges do not annotate. Most have “read only” software available on their computers in their chambers and on the bench. All of them have the ability to make the record via microphone in their chambers as well as in the courtroom; however, this is not done a great deal and more often the record is made in the courtroom. Nevertheless, the judges believe the microphone in chambers is necessary and useful. During jury selection, the jurors are questioned while passing around either a wired or wireless microphone.

Each courtroom has the ability to put “white noise” on the courtroom speakers during side bars which prevents the jury from hearing the discussion but allows the system to continue to record without picking up the “white noise.” All found this to be an outstanding feature.

I spoke with Judge Phillip Pallenberg using a teleconference hook-up that was integrated into the CourtSmart facility in Anchorage. He likes the annotation feature that CourtSmart has on its system and has the ability to use it in his chambers as well as on the bench; he prefers CourtSmart and demonstrates the system to other judges and lawyers. Because of the cost, most Alaska judges have a “read only” version of the CourtSmart software. In other words, the only person who is able to do annotations and log notes is the courtroom clerk. CourtSmart charges a separate license fee for each software unit on which one can annotate. Judge Pallenberg is an exception and he believes the ability of the judge to annotate is very helpful.

One negative aspect of digital audio reporting with centralized servers, like the CourtSmart system, is that a single power outage (apparently a fairly regular occurrence in some parts of Alaska) shuts down all courtrooms. They have an emergency backup power supply, but that lasts only 20 minutes before they’re finished. The Judges report very few technical problems, other than the power outages, which cannot be fixed in just a few minutes.

Attached to my email is a breakdown of the cost per courtroom. The only portion of that from CourtSmart is the \$8,800 per courtroom license fee. The Alaska I.T. department purchased, wired and installed everything else. They saw no need for cameras. The service agreement is approximately 10% of the cost per year. Play back is seldom used, but can be

accomplished easily. All recordings are stored on the server for two years and then reproduced on disc for storage off-site.

STAFFING:

Each Superior Court Judge has a secretary, a courtroom clerk and a law clerk.

EXPERIENCE:

In general, there were no complaints by judges or lawyers about the system. Of course, most of the judges and lawyers had little or no experience with court reporters. The system is used in all cases and, when needed, can accommodate a daily record. There are occasions when an attorney will bring a court reporter to a trial, most often to assist them in a daily record, and the judges have no objections. This occurs most often in a very complex civil case. One was under way while I visited, involving multiple oil exploration companies with competing claims for oil and gas. Such situations are seen as rare occurrences.

TRANSCRIPTS:

My discussion with Kathleen Amand, the State Wide Transcript Coordinator, was very interesting. She and one assistant administer the production of transcripts for the Judicial Branch. They have transcriptionists and court reporters producing transcripts. They refer to these people as vendors and have an open solicitation of vendors that can be accessed on their court system's web site. The following information was supplied by her and is most interesting:

Number of transcriptionists/vendors:	11 plus 2 more pending approval
Number of vendors in Alaska:	3
Number of vendors in lower 48 states:	8
Total expenditure for transcripts in 2008:	\$420,000

To be approved: Kathleen tests the applicants. They are asked to prepare a transcript within a certain time period using a known recording and the resulting transcript is then compared to known and correct transcript. Kathleen applies and checks other standards such as criminal history and then approves the person. They can be removed if their work is judged to be inferior.

Controls: I asked Kathleen some questions concerning quality control and procedures to deal with inaudible (which they refer to as "indiscernible." Here are her responses and a copy of their policy in that regard.

Question by CLS: Do you have any thought on the % of transcripts that require you to go back to the transcriptionist because of their notation that a part of the recording was inaudible? I got the impression that most of the transcripts are completed without any problem, but would like to know approximately how many have problems with the quality of the recording.

Answer by Kathleen: *When there's a verifiable problem with the quality of the recording, that doesn't get counted as an unacceptable transcript that would cause it to get returned to the transcriber for corrections unless I or my assistant can clearly hear what was indicated as indiscernible. By contract our transcribers have to fill out a transcriber audio evaluation for each transcript (form attached, along with others that might be of interest) and on that they would specify any problems with the audio. If there are significant indiscernible portions, I would review the audio and if verified make sure the problem is shared with our IS department and the area court administrator through distribution of the transcriber evaluation. Here's what our manual says regarding indiscernible portions:*

E. INDISCERNIBLE

THE Alaska Court System expects transcribers to tune in to individual channels on transcribing equipment to assist in clarifying INDISCERNIBLES. In determining the accuracy rate of a transcript, the court system counts as a major error an indiscernible that is discernible to the transcript coordinator (or another ACS employee) when listening to the same cassettes used by the transcriber, except in the circumstances listed below:

- 1. Bench Conferences.** Until the recording quality of bench conferences improves, transcribers are only required to transcribe what is discernible to them after listening a minimum of one minute. Transcripts will not be rejected because of INDISCERNIBLE in a bench conference unless the transcriber failed to transcribe speech that was discernible to the transcript coordinator (or another ACS employee) after listening to the conference no less than one minute.
- 2. Speech Away from a Microphone and Telephonic Speech.** Transcribers must attempt to transcribe what is said by speakers who have stepped away from a microphone and by speakers who are participating telephonically. However, if after a reasonable time, one minute minimum, the transcriber cannot discern what was said, the transcriber must type a summary phrase in parentheses (Indiscernible-away from microphone or Indiscernible-telephonic speech.) Transcripts will not be rejected because of INDISCERNIBLES that are marked in this manner unless the transcriber failed to transcribe speech that was discernible to the transcript coordinator (or another ACS employee) after listening to that portion of the audio no less than one minute.

We have returned 32 transcripts for correction since the beginning of our current contract year which began 10/1/08. That's out of a total so far of 1193 transcripts that were produced. They were predominately format errors, with a few exceptions. Most of these came from newer transcribers and their error rate is minimal now. No one likes getting a notice of unacceptable transcript.

At least 5% of each transcript is proofed for quality by Kathleen or her assistant. There are very detailed forms used by her and the transcriptionists to assist them in locating problems with the audio or to send back a transcript where the "indiscernible" part was in fact able to be heard by Kathleen or her assistant. I got the impression that indiscernible audio was rare and had not caused any problems for the appellate courts.

Kathleen indicated that the transcriptionists/vendors had reported that they preferred the old F.T.R. recordings to CourtSmart. They felt that it was easier to isolate the sounds by track on F.T.R.'s system. Kathleen felt that this might just be due to adjustment to a new system as Alaska has only used CourtSmart for the last few months. Kathleen also indicated that during the RFP she preferred JAVS's system because she felt their sound quality was the best.

Alaska pays transcriptionists:

\$3.05 per page for transcripts that are to be completed in seven days, and
\$2.80 per page for transcripts that are to be completed in thirty days.

The transcriptionists have the least trouble producing a transcript from a record produced in court rooms with judges who are proactive in managing the record in their courtroom and with court clerks who do the most annotating. Attached to my e-mail are some of the forms used by the State Wide Transcript Coordinator and the Alaska Court Rules in regard to the record. Also attached to the e-mail is a cost breakdown of equipment used in the courtrooms.

END USERS – COURT OF APPEALS

I had the pleasure of spending some time with Judges Joel Bolger and David Mannheimer, two of the three members of the Court of Appeals in Alaska. Both happen to be natives of Iowa. Judge Mannheimer is a graduate of the University of Iowa College of Law. My discussion with them was limited to their assessment of the accuracy of the transcripts. Both of these appellate judges have spent most of their careers in Alaska. They have experience with court reporters or transcripts prepared by court reporters, but they have more experience with transcripts prepared from a digital audio recording. Sometimes a transcript is prepared from a court reporter's notes because an attorney or attorneys chose to independently hire a court reporter to make the record of a trial or deposition. This rarely happens but gives them some experience with a traditional record and transcript. One of these judges practiced in California before coming to Alaska and had experience with traditional court reporting there.

They could point out no discernable difference in the quality of the transcripts prepared either by court reporters from a trial or the digital audio record of a trial. In fact, both of them actually preferred the record from a digital audio source since a dispute by attorneys as to the accuracy of a record made by a court reporter often can only be resolved by trusting that the reporter accurately took down the testimony, even though one or even both attorneys disagreed with that record. They both noted that the audio record is always available to resolve the dispute by having the Court listen to the actual recording.

Site Visit Report -- Lincoln and Omaha, NE -- Federal District Courts

Note: 3 team members wrote reports

Report #1: by Kent Wirth, District Court Administrator, 4th Judicial District

Site visits: August 18, 2009

I think the information received at both sites provided a clear indication that with the right equipment, in the right setting and with the necessary support structure it is possible to provide an accurate record of court proceedings. The judicial officers and attorneys involved in the process were certainly ardent supporters and that would certainly have an impact for a successful transition to this way of making the record.

The technology has advanced to the point where it is now possible to obtain an accurate recording of the proceedings. Multiple track systems allow transcribers to identify individual speakers. Improved microphones limit background noise and provide higher quality recordings.

The issue for many courthouses will be the lack of infrastructure to support both the sound and recording systems. Not all courthouses will have adequate power sources in the courtrooms. So much like preparing for EDMS it will be necessary to plan on preparing the courtrooms almost from scratch or from the ground up to support digital recording. In that vein it will also be difficult to cable or wire many courtrooms in such a way to keep the wiring unobtrusive. The existing courtrooms were not built in preparation for this technology. Again like EDMS this will be a hurdle that needs to be acknowledged, and analyzed but can certainly be dealt with.

Probably the most critical issue will be the personnel support dedicated to the project. Technical assistance to insure the equipment is installed correctly and functions properly. But probably more important is the staff in the courtroom necessary to monitor the equipment during the entire proceeding. This is not a task that can be done half heartedly and expect a viable product. The quality of the recordings will have a dramatic impact on the quality the final product. To insure a high quality transcript it will be necessary to have well trained personnel on hand for every hearing.

Digital recording of hearings is possible and is a technology that needs to be included in discussions and the planning of the future of the court system.

Federal District Courts in Omaha & Lincoln, NE – *Continued*

Report #2: by Terri O’Grady, Court Reporter, 4th Judicial District

1. Equipment /Courtroom Setup

- Courtroom equipment costs were estimated around \$50,000 per/courtroom with maintenance contracts around 10% of total cost
- Reporters in Iowa currently buy and maintain their own equipment and supplies
- All Courtrooms were acoustically sound/new sound panels added to make more efficient
 - In questioning the IT people they said “**acoustics, acoustics, acoustics**” If acoustical problems currently exist in courtrooms, problems with transcription will be more pronounced
 - Most courtrooms in Iowa are older and cavernous/large windows/not acoustically sound
 - IT stressed **need for excellent sound systems/equipment/up-to-date technology**. Stressed being compatible with other electronic systems
 - Feds started with 4 tracks and have now gone to 8
 - Stressed need to have designated sound tracks for each speaker. In one instance the judge and witness were on same sound track, caused many problems in transcription
 - Need for guidelines, procedures, training followed in courtrooms
 - Iowa has many, many pro se litigants, i.e., domestics, dissolutions, criminal
 - Juvenile court has any number of attorneys, litigants/per case. Will be very hard to mic everyone
 - Court Reporters are highly trained, required by the Supreme Court to have continuing education
 - Read back was not necessarily easy. Need to note the time code in order to find what you are looking for
 - All IT people said the monitors needed to be manned and best if one person monitoring one courtroom. Did not feel multiple monitoring was a good idea. Would not produce the best record
 - The quality control was the daily use of the system
 - Many courtrooms in Iowa are used once a week, case loads vary greatly from county to county, equipment would be sitting idle a lot of the time
- Controlled access to the courthouse/few people in and out of courtrooms
 - Iowa - Many people in and out of the courtrooms
 - Iowa - No controlled access in most courthouses/courtrooms

2. Staff

- All courtrooms had a courtroom deputy/ sound monitor
 - Jury trials require two deputies
- Each judge had own secretary/administrative assistant

- Had access to on-staff IT people
- Court Reporters and Transcriptionists who produced Transcripts
 - At this time in Iowa, reporters do all the jobs above, provide their own equipment, are our own IT people, buy all supplies in producing transcripts and supplies for our equipment, purchase the software judges/attorneys use for real-time

3. Users

- Courtroom Deputy
 - Trained and uses system daily/daily use is their quality control/monitoring system at all times in use
 - Many systems in Iowa would not be used on a daily basis
 - Jurors not identified in jury trials
 - Felt system was accurate
 - Does not compare transcript to recording
- Reporters/Transcriptionists
 - Reporters stated problems with paper shuffling, not speaking into microphone, more than one person on a track
 - System is accurate, but transcript is only as good as the person transcribing/confidence monitor monitoring and annotating the hearing
- Attorneys/Court Personnel
 - Appreciated the quick access to the hearings after court
 - Hearings are downloaded to the Court system and then immediate access/compatible with the electronic court system/ this is a pilot program and not being used in all courts
 - Real-time is immediate availability with access to interact with transcript
 - Many cases in Iowa (juvenile, dissolutions) would have to be redacted or could not be put on the system for availability due to privacy laws
 - Felt system was accurate
 - Does not compare transcript to tape

4. Proceedings

- Judge Gossett – Magistrate
 - Mostly preliminary hearings/Probation revocations. Has limited jurisdiction
 - These judges have never had court reporters and are switching from analog to digital which was a great improvement
 - Court Reporters used for jury trials if available; they only have 3 ½ court reporters available for 7 judges, so many times do not have a reporter available for the jury trials/ reporters transcribe audio
- Judge Kopf – Article III District Court Judge
 - Mostly uses digital recording/Uses Court Reporters for jury trials and transcription of audio
 - Had Court Reporter that provided real-time, but has since retired

- Did not make use of real-time capabilities although had it available
- Made his own notes/handwritten as he stated “old judge’s habit”
- Courtroom Deputy/monitor is court reporter trained
- Feels savings not using reporter
- Reporters in Iowa do all the judges’ typing, reporting,
- IT work that Nebraska Federal court has 4 or 5 people covering that same work

Federal District Courts in Omaha & Lincoln, NE – *Continued*

Report #3: by John Goerdts, Deputy State Court Administrator

Site visit date: Aug. 18, 2009

Site visit team members: Judge Charles Smith, John French, Darrin Raymond, John Goerdts, Kent Wirth (Dist. Ct. Admin., 4th District); Terri O’Grady, Ct Reporter from Council Bluffs

1. Court Background Information

- a. Number of judges
 - i. # of general jurisdiction judges – *2 Article III judges*
 - ii. # of limited jurisdiction judges – *3 magistrate judges; 2 senior judges*
 - iii. Total # of judges – *7 total judges*
- b. Number of courtrooms
- c. Number of court reporters employed by court
 - i. Number of certified steno court reporters (not real-time)
 - ii. Number of certified real-time court reporters – *2 full-time plus 2 half-time*
- d. Number of electronic recording monitors who are not certified court reporters: *The courtroom deputy (courtroom clerk) monitors the DART and enters log notes.*
- e. Source of funding for DART (local, county, state): *Federal government*

2. Judicial support staff for each judge (# and types):

>> *Article III judges: 1 court reporter; 2 law clerks; 1 secretary; 1 courtroom deputy (clerk)*
 >> *Magistrate judges: 0 court reporters; 1 law clerk; 1 secretary; 1 courtroom deputy (clerk)*

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital): *started analog (tape) recording in Magistrate court in the early 1990s; started digital recordings 5 years ago*
- b. Year they began using digital recording: *2004*
- c. Reason(s) why they implemented digital recording: *Better than tapes*
- d. Which DART system (e.g., FTR) – *Voice IQ*
- e. Reasons they selected this system rather than one of the others: *Bid process; VIQ was the best overall value (cost was much less than CourtSmart; preferred VIQ for technical reasons over FTR)*
- f. Have they always used this vendor? (If “no” – explain): *Yes*

4. Description of the DART system

- a. How many courtrooms have a DART system?
 - i. # with audio only – *Magistrates and Bankruptcy Courts use DART (audio only)*
 - ii. # with video – *None with video*
 - iii. If only some have video, explain why some do and some do not: *NA*
- b. What DART-related equipment is in each courtroom?
 - i. # microphones (and location in courtroom) – *4 microphones per courtroom*
 - ii. PA system? – *Exceptional PA system; needed because the courtroom is very large with very high ceilings (voices could not be heard clearly without the PA system); tech staff claim they spent \$50,000 on the PA system alone*
 - iii. Conference phone integrated with system?
 - iv. Remote interpreter equipment integrated with system?
- c. Back-up and long-term archiving of digital recordings
 - i. Describe how the digital recordings are backed-up each day: *Automatically backed up to a server on the network. Courtroom clerk also uploads the audio recordings to the PACER system at the end of each day – where they can be accessed by anyone by clicking on an icon associated with the audio file located next to the date of the proceeding*
 - ii. Describe how they are archived for long-term storage (DVDs v. network/): *See above*
- d. Cost per courtroom for their DART system – see additional materials provided by the judge on this issue

5. Daily management of the digital recording system In the courtrooms

- a. Staff in each courtroom vs. central management – *Deputy clerk in each courtroom monitors the system and enters log notes*
- b. Explain staffing assignments (*see above*)
- c. Explain daily procedures for those who manage the system: *Dep. Clerk turns system on when judge enters the courtroom; turns it off when judge leaves courtroom. Enters log notes during proceedings. Uses a new VIQ utility at end of morning session and at end of afternoon session to send all the audio files to the server, where they are automatically uploaded to the PACER system – where anyone can access the audio file by locating the case (case number) and date of the proceeding. There is a link associated with the courtroom event (hearing) that takes you to the audio file, which can be opened with Windows Media Player. For a hearing concluded at 4:30 PM, the audio file will be available on the PACER system by 5:00 PM.*

- 6. Courtroom procedures for attorneys and litigants to ensure complete and clear recordings**
- a. Explain procedures: *Attorneys are reminded to stay at their tables and speak into a microphone*
 - b. Problems or issues: *Attorneys sometimes talk at the same time or speak as they walk away from the microphones. Either the judge or deputy clerk will remind them to speak one at a time or to speak only when in front of a microphone*
- 7. Challenges presented by the use of DART:**
- a. Jury selection (*not discussed*)
 - b. Requests for playback of witness testimony or attorney questions: *The courtroom clerk demonstrated how to do this for the site visit team. It took about 30 to 40 seconds to locate the audio file, open it in Windows Media Player, move the starting point to the approximate time of a particular statement by an attorney, and click "Play"*
 - c. Distribution/use of the audio/video records (any restrictions/limits?): *The audio recordings for court proceedings on a given day are available to the public on the PACER system by about 5:00 PM that day*
- 8. Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)**
- a. Observations of judges: *The judges we talked to see no limitations; DART could be used for any type of proceeding, though the Article III judges use court reporters because they like the benefits of real-time reporting*
 - b. Observations of attorneys: *The attorneys we talked with see no limitations; DART could be used for any type of proceeding*
- 9. Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)**
- a. Observations of judges: *See 8.a. above*
 - b. Observations of attorneys: *See 8.b. above*
- 10. Reliability of the DART system** (% of time that it operates with technical problems or failures)
- Based on feedback from judges, courtroom clerks, and attorney, the consensus is:
- a. Hardware: *Excellent*
 - b. Software: *Excellent*
 - c. Human error: *Very rare*
- 11. Accuracy of the digital records: Completeness and clarity of the digital recordings: Issues and concerns**
- a. Observations of judges – *Very good; never had a problem; never had an appeal related to the inaccuracy or incompleteness/inaudible in an audio recording.*

- b. Observations of court manager/tech staff: *same*
- c. Observations of DART monitors/courtroom clerk: *same*
- d. Observations of attorneys: *same*

12. Accuracy of the written transcripts

- a. Who produces them? *Court reporters or transcriptionists on a list of approved transcriptions. Assigned on a rotating basis*
- b. Qualifications for transcriptionists? – *No specific certifications for a transcriptionist*
- c. Process for requesting & obtaining a transcript – *They have a list of experienced transcriptionists; they call only persons on that list*
- d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. Observations of judges: *Excellent – never had a problem*
 - ii. Observations of attorneys: *Excellent – never had a problem*

13. Advantages of courtroom DART systems

- a. Observations of judges: *Less expensive; reliable; don't have to worry about scheduling a court reporter*
- b. Observations of court manager/tech staff
- c. Observations of court reporters/DART monitors: *easy to manage and annotate; easy to upload the audio recordings to the PACER system; easy to access them and listen to them on PACER*
- d. Observations of attorneys: Quick access to the record on PACER without the expense of paying for a transcript; very accurate and complete

14. Disadvantages of & problems with courtroom DART systems

- a. Observations of judges: *One time the equipment failed and they didn't know it. Fortunately, no transcript was required. This has also happened with court reporter equipment*
- b. Observations of court manager/tech staff: *Need high quality PA and sound system in their courtrooms, which can be expensive*
- c. Observations of court reporters/DART monitors: *Possibility of mechanical failure or human error, but they are rare*
- d. Observations of attorneys: *Some attorneys might want a certified transcript of witness testimony the next day to impeach a witness, but it takes three times longer to produce a written transcript from an audio recording than from a court reporter's record*

15. Satisfaction with their DART system: Would they recommend it? (Explain)

- a. Observations of judges: *Very satisfied; they would recommend VIQ*
- b. Observations of court manager/tech staff: *Very satisfied; they would recommend VIQ*
- c. Observations of DART monitors: *Very satisfied; they would recommend VIQ*

- d. Observations of court reporters: *They are less sanguine about the benefits of DART and more hesitant to recommend it; real-time cannot be provided by DART*
- e. Observations of attorneys: *Very satisfied*

16. Recommendations/cautions for the Iowa courts regarding DART

- a. Observations of judges: *Need high quality equipment, competent staff in the courtroom, and competent tech staff to handle problems*
- b. Observations of court manager/tech staff: *A high quality PA system is a key to a high quality DART system. There were some initial problems that the company that did the installation did not handle well; court tech staff solved the problem by going directly to Voice IQ*
- c. Observations of DART monitors:
- d. Observations of court reporters: *Real-time reporting is a great benefit to trial judges; DART cannot provide this benefit.*
- e. Observations of attorneys:

17. Other observations

The two judges and three attorneys (a U.S. attorney, a federal public defender, and a private defense attorney) with whom we spoke were overwhelming positive about the reliability of the DART equipment, the completeness and accuracy of the digital recordings, and the accuracy of the transcripts produced from the recordings.

However, there are some important considerations that should temper the positive reviews to some extent. The federal courts are much better-funded and have much smaller caseloads than Iowa's state courts. The federal courthouses in Omaha and Lincoln are relatively new, unlike most county courthouses in Iowa. They have excellent PA systems; the PA system in Lincoln cost \$50,000! The federal courtrooms were quiet, with just the prosecutors and the defendant with his attorney – plus a judge and courtroom clerk. The quiet courtroom settings were not like most county courtrooms on court service days. The federal courts also had two full-time tech staff to support the two courthouses, which housed a total of about eight full-time judges – a support staff-to-judge ratio that will not be duplicated in Iowa.

The tech staff emphasized that an excellent PA system is required as a backbone for the DART system in a courtroom. They said they spent \$50,000 on the one in Lincoln. Darrin Raymond noted during the discussion, however, that Plymouth County installed a high quality Bose surround-sound PA system in one of the courtrooms at a cost of \$15,000.

Site Visit Report -- Rochester, MN

Note: 1 team member wrote a report

Report #1: by Scott Hand, Court Administrator, 2nd Judicial District

Site visit date: September 2, 2009

Court Name & Location: Rochester, MN (Olmsted County)

Site visit team members: Judge Bill Pattinson; Judge Lucy Gamon; Scott Ruhnke, Senior System Administrator; Scott Hand, District Court Administrator; and Kelly Moore, court reporter

1. Court Background Information

- a. Number of judges
 - i. # of general jurisdiction judges: 6
(All judges are general jurisdiction and are elected.)
 - ii. # of limited jurisdiction judges: *none*
 - iii. Total # of judges: 6
- b. Number of courtrooms: 7
- c. Number of court reporters employed by court: 6 (*one for each judge*)
 - i. Number of certified steno court reporters: 3
 - ii. Number of certified electronic court reporters: 3
- d. Number of electronic recording monitors who are not certified court reporters: *None. (May be certified steno or certified electronic)*
- e. Source of funding for DART (local, county, state): *They were able to use state "spend-down" money (end of fiscal year money)*

2. Judicial support staff for each judge (# and types):

>>Law Clerk, Support Clerk (orders & data entry), Court Reporter (Steno or ER)

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital):
- b. Year they began using digital recording: *September of 2006*
- c. Reason(s) why they implemented digital recording: *Shortage of court reporters due to loss of court reporting school; Court reporters can earn more doing closed captioning; Also, their old Sony tape system was no longer capable of being supported*
- d. Which DART system (e.g., FTR): *For the Record (FTR) – server based*
- e. Reasons they selected this system rather than one of the others: *Price and Features*
- f. Have they always used this vendor? (If "no" – explain): *Yes, since giving up the Sony tape system in 2005. (It is server based and easy for the clerk to keep backed up.)*

4. Description of the DART system

- a. How many courtrooms have a DART system? 7
 - i. # with audio only: 7
 - ii. # with video: *None. Video is not allowed by Minnesota statute, strict interpretation of cameras in the courtroom*
 - iii. If only some have video, explain why some do and some do not: *n/a*
- b. What DART-related equipment is in each courtroom?
 - i. PC-based vs. proprietary recorder system? *Both*
 - ii. Describe the PC: Current ICIS-purchased PC's meet the specifications.
 1. Processor: *Includes CD burner*
 2. Hard drive (#G-bytes)
 - iii. # microphones (and location in courtroom): *5 - 8*
 - iv. Type of A/V mixer (max. # of channels): *4*
 - v. Describe PA system: *New, state of the art*
 - vi. Conference phone integrated with system? *No*
 - vii. Remote interpreter equipment integrated with system? *Just starting to test this functionality, but it is supported in their system.*
Note: there is a red LED digital clock that runs when the system is recording. This lets everyone know that they are on the record.
- c. Back-up and long-term archiving of digital recordings
 - i. Describe how the digital recordings are backed-up each day: PC to server replications. Records are kept 18 months on the server. The court reporter also makes a CD every 3 days.
 - ii. Describe how they are archived for long-term storage (DVDs v. network): *DVD and network. DVD's stored off site for Disaster Recovery*
- d. Cost per courtroom for their DART system (best estimates)
 - i. PC (with A/V card)
 - ii. Digital recording management software
 - iii. Microphones
 - iv. AV mixer
 - v. Cables
 - vi. Cameras (no cameras with this install)
 - vii. Installation cost
 - viii. Annual service agreement for equipment
 - ix. Annual service agreement for software: *None*
 - x. # of courtroom staff to operate/monitor system
 - xi. [Additional central tech staff to manage DART for all courtrooms?]: *Utilize court reporter*
 - xii. TOTAL Cost per courtroom: *Do not have specific breakdown, roughly \$14,500 per courtroom, plus new PA systems, plus court reporter cost to run system. Total cost of \$100,000 for 7 courtrooms + cost for new sound systems.*

5. **Daily management of the digital recording system In the courtrooms**
 - a. Staff in each courtroom: *Court reporter*
 - b. Central management staff? *Minimal IT*
 - c. Explain staffing assignments (*see above*)
 - d. Explain daily procedures for those who manage the system: *Staff will “pop” the microphones to be sure they are on. Red digital clock in front of courtroom indicates system is functioning*
6. **Courtroom procedures for attorneys and litigants to ensure complete and clear recordings**
 - a. Explain procedures: *Participants told to speak loudly, clearly and to speak into a microphone*
 - b. Problems or issues for attorneys/litigants: *Have not experienced any problems using digital recording equipment. The inconvenience while in court to ensure you are near a microphone is light.*
7. **Challenges presented by the use of DART:**
 - a. Jury selection: *Use extra microphones*
 - b. Requests for playback of witness testimony or attorney questions: *No challenges, immediate playback by court reporter utilizing log notes and a hyperlink*
 - c. Distribution/use of the audio/video records (any restrictions/limits?)
 - i. E.g.: MN – digital records are not public records; not available to public? *Digital audio record is distributed openly for charge on CD media, \$10 charge per CD. It’s not the official court record.*
8. **Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)**
 - a. Observations of judges: *Positive, but a court reporter is almost always, if not always, in the courtroom*
 - b. Observations of attorneys
 - c. Observations of clerk: *FTR can be started remotely, but you lose “confidence monitoring feature”*
Digital recording is used in all proceeding, steno in addition on occasion. Rochester always has a court reporter in the court room
9. **Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)**
 - a. Observations of judges: *They do not record proceedings without a court reporter*
 - b. Observations of attorneys
10. **Reliability of the DART system (% of time that it operates with technical problems or failures)**
 - a. Hardware: *Extremely reliable. They have never lost a record. All records are available from the “work station,” an in-house network. In 3 years they have used 1 terabyte of space*
 - b. Software: *Extremely reliable*
 - c. Human error:

11. Accuracy of the digital records: Completeness and clarity of the digital recordings:

Issues and concerns

- a. Observations of judges: *No complaints ever*
- b. Observations of court manager/tech staff: *The quality is tremendous*
- c. Observations of court reporters/DART monitors: *She has not had any problems creating transcripts, can isolate tracks, and can put interpreters on one track*
- d. Observations of attorneys:
No concerns expressed by any group

12. Written transcripts

- a. Who produces them? *Certified in-house court reporters*
- b. Qualifications for transcriptionists? *Must be a certified stenographic court reporter or a certified electronic court reporter*
- c. Process for requesting & obtaining a transcript: *Put request in writing and present to court reporter who recorded or reported the hearing. Original plus one copy of a criminal proceeding is \$3.50 per page. Original plus one copy of a civil proceeding is \$4.50 per page.*
- d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. Observations of judges: *Quality of the audio record is excellent. No real issues or concerns because a certified court reporter is monitoring the court proceedings and is subsequently preparing the transcript*
 - ii. Observations of attorneys:

13. Advantages of courtroom DART systems

- a. Observations of judges: *A judge can enter his or her own log notes to mark the record for later listening. There is a free download to a player – can sit anywhere to listen. Ease of use. No concerns about carpal tunnel with court reporter.*
- b. Observations of court manager/tech staff: *FTR is user friendly. Any questions can be emailed*
- c. Observations of court reporters/DART monitors: *Less taxing on the body, can listen to proceedings to prepare transcript over and over if want to, a different method of reporting the proceedings, if on medical leave, can usually come back to work quicker. The audio is available within seconds, and oftentimes eliminates the need for a transcript. If a court reporter retires or changes employment, there is no issue of interpreting other court reporters shorthand notes/abbreviations.*
- d. Observations of attorneys: *The ability to quickly locate specific portions of the digital record and play it in the original format is outstanding*

14. Disadvantages of & problems with courtroom DART systems

- a. Observations of judges:
- b. Observations of court manager/tech staff: *There were 2 days when the network was down, but no records were lost, as they still went to the C drive. Das.com out of Minneapolis is a certified re-seller and does tech support.*
- c. Observations of court reporters/DART monitors: *There are some problems with remote interpreters (echo). It takes longer to prepare the transcript*
- d. Observations of attorneys: *Need to ensure that you are near a microphone*

15. Satisfaction with their DART system: Would they recommend it? (Explain)

- a. Observations of judges: *Appellate judges have never complained. District court judges were used to audio tape recording and don't notice a difference. This is the way to go – with technology advances – it is harder and harder to find steno reporters.*
 - b. Observations of court manager/tech staff: *He would have preferred "Court Smart," but it is 35% more expensive. Acoustics are not a problem, even in "bad" courtrooms*
 - c. Observations of court reporters/DART monitors: *They liked that it was less taxing on the body and that it provided a good record in order to prepare the transcript. They have really had no problems with utilizing the DART system, emphasizing that it is crucial that a certified court reporter monitor and run the equipment and produce the transcripts. Also said that FTR had good customer service and was very satisfied with the company.*
 - d. Observations of attorneys: *They were used to audio taping. They don't notice a difference. Courtroom clock is helpful to show that system is running and can use it to request a specific portion of the transcript.*
- 16. Recommendations/cautions for the Iowa courts regarding DART**
- a. Observations of judges: *Rate the accuracy and completeness of the record as excellent as well as the clarity and completeness of the digital recording*
 - b. Observations of court manager/tech staff: *Court Smart has an in-house service, which he prefers. A good mixer is essential to adjust sound levels*
 - c. Observations of court reporters/DART monitors: *Have a certified court reporter run the equipment. Have no complaints about the equipment or the quality of the record or transcript*
 - d. Observations of attorneys: *"Benefits greatly outweigh the disadvantages"*

Site Visit Report -- Salt Lake City, UT

Note: 1 team member wrote a report

Report #1: by Mary Tabor, Assistant Attorney General

Site visit date: September 21, 2009

Court Name & Location: Matheson Courthouse

1. Court Background Information

Utah has 71 full-time district court judges and 28 full-time juvenile court judges located in 29 county courthouses around the state. As of July 1, 2009, the Utah judicial branch laid off its remaining 18 court reporters.

The electronic recording systems are monitored by clerk's office employees, who are not certified court reporters. The state court system has funded the DART program in Utah. The initial cost of the equipment was partially offset by the court system's appropriation of the revenue from transcripts which was previously retained by the official court reporters.

2. Judicial support staff for each judge

The district court judges have two clerks, and share one bailiff between two judges and one law clerk among four judges (for a total of 2 3/4s staff members).

3. History of electronic recording

Utah has used FTR systems in its courtrooms for the past seven years. Before that, many of the courtrooms had VHS recording. (Four courtrooms in Logan, Utah still have JAVS.)

The Utah courts chose the FTR software based on a competitive bidding process. The hardware used by their unified court system also has become standardized. Court administration is able to bundle the courtroom specifications and bid them out at a savings for the state. The IT staff does small upgrades and trouble shooting on its own and bids out the bigger jobs.

4. Description of DART system

All of the courtrooms in Utah use electronic recording. Currently, FTR provides video recording in about 40 locations in Utah, with the majority of courtrooms using audio recording only – due to a glitch with FTRs software. Court administration is contemplating restoring video recording, but faces budget limitations to updating the cameras and storage capacity. (We spoke with two district court judges who missed having the video recording available.).

Each courtroom is equipped with at least six microphones and one computer monitor with headphones for the clerk to check if the system is working. Microphones also are available

in chambers if the judge desires to record a conference outside the presence of the jury. Handheld wireless microphones are used for jury selection. A PA system is also available for playbacks in the courtroom, though playbacks are rarely requested. (One clerk told us that it would take about 30 seconds to find the segment of the trial requested to be replayed.)

IT specialist Jymn Edwards estimated a cost of \$18,000 to equip each courtroom with the hardware – and he estimated that the life of the equipment was six to seven years. The IT director also indicated that it would cost approximately \$4,000 per courtroom (\$900 per camera plus a monitor) to provide video with four screens showing on a monitor from a camera in four fixed locations.

5. Daily management of the recording system

The daily management of the DART system falls to a court clerk who is assigned to each judge or courtroom. The clerk will check the sound levels at the start of each court session, but will not wear the headphones through the entire proceeding. (They can hear whether the microphones are working even when they are not wearing the headphones.) The clerk can multi-task while monitoring the DART. He or she will keep minutes of each hearing as part of their internal court management system; those minutes will note times which can be traced back to the digital recording, but are not integrated into the recording. The Utah courts do not use the annotation/indexing software available from FTR. The Utah courts also do not display the recording time in the courtroom, though FTR has such a device available. The court administrator ruled out the possibility of a centralized monitoring system. One full-time IT person supports the technology in all the courtrooms across the state – with a goal of next-day, on-site response to break-downs in the system.

The clerks can burn digital recordings onto a CD for the attorneys after a hearing is over in the courtroom before they leave for the day. (Sometimes attorneys review the day's testimony overnight before the next day of a trial.) The court charged \$10 for a CD copy. Lawyers also may obtain access to the recorded files through the court's website. FTR has viewer software that can be downloaded to play the files. The recordings are archived to two separate hard drives and are backed up for two years on off-site servers. The computers used in the courtrooms have space for about one year's worth of recordings.

In case of equipment malfunctions or loss of power to a courtroom, each courthouse has a battery-operated, back-up portable recording system available so that hearings may continue. The IT department also prides itself on a well-trained help desk.

Future developments. The Utah courts are exploring the use of remote-site interpreters through their DART system. In addition, court administration has a major upgrade pending to integrate their DART system with their EDMS.

6. Courtroom procedures for attorneys and litigants to ensure complete and clear recordings

The Utah court administrators have developed short checklists for the attorney tables and the clerk's workspace which summarize the steps necessary for optimum use of the DART system. They will make copies of these available to our committee.

The monitoring clerks try to point out to their judges when a witness or lawyer needs to speak up or move within closer range of a microphone. The judges noted that out-of-range speakers are sometimes a problem with the recordings. Certain courtrooms also had "dead spots" where the sound could not be picked up. Utah's court management requires counsel to use a podium in the courtroom so the microphone picks up their questions and argument.

7. Challenges presented by use of DART

The attorneys working within the Utah courts found inaudibles to be the biggest problem with the recordings and the transcripts created from them. However, they agreed that the missing words generally could be determined from the context. An appellate attorney noted that fairly frequently when the transcriptionist notes an "inaudible" – it is actually possible to listen to the recording and decipher what is being said. In such cases, they may footnote the discrepancy if it is material to the issue on appeal.

Neither the lawyers nor the judges we spoke to found that recording voir dire was particularly problematic. The courthouses keep handheld wireless microphones available for this purpose. Jurors are identified by both name and number on the audio recordings; jurors are not placed on camera where video is used.

The clerk staff and judges believed that playback was possible, but rarely requested. The attorneys seem less sure about its availability in the DART system.

8/ 9. Types of cases most and least amenable to DART

The Utah judges expressed their belief that criminal and civil trials and juvenile hearings were all amenable to digital recording. Official court reporters *may* still be used in termination of parental rights and death penalty cases, though Utah court administration believes that as litigants become more comfortable with the DART system, the court reporters will be used less even in those high-stakes cases.

One of the judges related a situation where he held a settlement conference with a large number of different plaintiffs and their lawyers and he took special pains to be sure that they were all within range of a microphone when accepting the agreement. This kind of multi-litigant hearing presents special challenges for the DART system.

In certain complex civil litigation, the parties will hire their own court reporters to keep notes during the trial. This was true of the personal injury case being tried during our visit to the Matheson courthouse. In such cases, new Utah court rules provide that the court reporter's transcript *and* the digital audio recordings are *both* considered the official record

of the proceedings. Although one party opts to retain a court reporter, both parties have equal access to that record, eliminating a have/have-not situation. This arrangement of having two official records has not yet resulted in any serious issues for the Utah courts.

10. Reliability of the DART system

The Utah courts had experienced minimal hardware difficulties. They were plagued by a software problem in several courtrooms when using both the FTR video and audio – which was somewhat mysteriously cured by moving to audio only.

Human error in operating the system – for example, forgetting to turn the recorder back on following a recess – was the most noted drawback to the reliability of the system. The Attorney General’s appellate division had experienced a panicked call from a trial prosecutor who faced a defense mistrial motion after a portion of a trial went inadvertently unrecorded. The issue did not reach the Utah appellate courts because the defendant was acquitted.

Both the court staff and attorneys acknowledged that the human breakdowns in the DART system could be ameliorated with more training for the participants.

11. Accuracy of the digital recordings

The written surveys from the judges and attorneys noted persistent problems with inaudible portions of the recordings, but both groups expressed less concern about the accuracy of the digital recordings when we met with them in person. The judges stressed the importance of keeping speakers close to the microphones – otherwise the recordings could miss much of what is said.

The court managers and technical staff related that the accuracy of the recordings have not been systematically evaluated. They also noted that it was “very dependent” on the judicial officer’s control of the courtroom, e.g., making sure that participants speak up and do not talk over each other.

12. Accuracy of the written transcripts

The written transcripts are produced by “official court transcribers.” The appellate clerk’s office keeps a roster of qualified transcribers and centrally assigns all of the transcription preparation to those on the list. Parties ordering transcripts can request a specific transcriber or can report bad experiences with certain transcribers. The Utah clerk and court administration developed an on-line transcript ordering and tracking system that has dramatically streamlined their process. All of the digital recording files and completed PDFs of transcripts are delivered electronically – creating a significant cost savings for the court and the parties. Their statistics show that the average time for transcript preparation has gone from 138 days in 2007 to just 15 days in 2009.

The judges said they found that the transcripts were “close to perfect” and the overall record being made with the DART system was good. They were impressed with the quick turnaround time for transcripts under the new system. Some of the attorneys opined that

the transcripts were not as accurate as under the court reporter system. The transcripts were not as accurate for one of two reasons: the presence of inaudibles or the lack of certified court reporters (as some of the transcribers were not as well trained in the legal and medical jargon used in trials).

13. Advantages of courtroom DART systems

The Utah court administrators credited their switch to the DART system for a significant savings (over \$1 million) in court reporter costs. However, they also described a fairly gradual transition, starting several years ago when they decreed that court reporter notes and transcripts become the property of the court system rather than the individual court reporter. In exchange for this concession, the court administration provided court reporters an equitable salary increase to offset the transcript revenues; assumed the cost of the court reporters' equipment and its maintenance; and also offered training opportunities at state cost. The court system then used the money from litigants ordering transcripts to fund the hardware for the recording systems.

In addition to the cost savings, the DART system opens up new possibilities for attorneys and judges. For instance, attorneys can request a portion of a trial recording to be burned on a CD and they can use it to prepare for the next day's proceedings. Several of the attorneys said they were skeptical of the system at first, but have been surprised at its efficiency. One of the family law attorneys found that he receives rulings faster now because the judicial officers can use the recordings to draft their findings of fact and conclusions of law.

An appellate attorney said her office occasionally uses the recordings to look back at the tone and demeanor of either the witnesses or the presiding judge in a matter on appeal – an ability which can shape how they might argue an issue.

The judges pointed out that the DART system has advantages for public access to the judicial process.

14. Disadvantages & problems with courtroom DART systems

Both the judges and attorneys told us they missed the human element of having court reporters take notes at their trials. The human element also encompassed the court reporters' ability to manage inaudible speakers, as well as speakers who sometimes talk as if they had rocks in their mouths, those who are very emotional and those who are generally not loud and clear. Another disadvantage of not having court reporters – who have more qualifications than some of the transcribers and who were present at the proceedings – was the risk of a less clean and accurate written record.

The biggest downside to using the DART system was the risk of not capturing large portions of a trial or hearing and having to recreate them or cope with not having the record available for appeal. A couple of the lawyers had anecdotes about minor difficulties, but shared no specific horror stories under the current FTR system.

The accuracy of the transcript made from the digital audio recording compared to the accuracy of the transcripts produced by court reporters seemed to remain a subject of debate among the Utah attorneys who spoke to us.

15. Satisfaction with their DART system

The court administrators seemed very happy with their system. They recognized that their decision to eliminate virtually all of their official court reporters was controversial and met with anger among some members of the bench and bar, as well as the court reporters themselves. However, the administrators thought the DART system was finding acceptance as the participants start to see its advantages.

The attorneys' reaction to the system seemed to be cautiously optimistic. Some who were initially skeptical were pleasantly surprised at how well it is working. Other seemed resigned to the switch and were still trying to work through the kinks.

One of the judges summarized his overall view of their DART system by saying: "the parties are entitled to a record, but not a perfect record."

16. Recommendations/cautions for Iowa courts regarding DART

One big difference emerged between the Utah experience and what Iowa is facing: the current dependence of Iowa judges on their court reporters for more than just taking notes of court proceedings. While the Utah courts' decision to eliminate virtually all of their court reporters was driven by budget issues, the judges there already had the benefit of more support staff in the courtroom and courthouse. Because of the greater staffing, the switch to DART did not leave the trial judges without assistance.

Another significant difference is that Utah has done much more experimenting with recording of court proceedings over the past two decades than Iowa has. The Utah courts have had some form of recording since the early 1990s. As such, for many purposes their transition to all DART as of July 1, 2009 was seamless to many participants in the system.

Site Visit Report -- Willmar, MN

Note: 1 team member wrote a report

Report #1: by Judge David C. Larson (DART Committee Member),

Site visit date: September 23, 2009

Court name and location: Kandiyohi County Courthouse, Willmar, Minnesota.

Site visit team members: Plymouth County Attorney Darrin Raymond (DART Committee Member), Third Judicial District Court Administrator Leesa McNeil, Sheryl Culver (President, Iowa Court Reporters Association), Karen Teig (Past President, Iowa Court Reporters Association), and Third Judicial District Court Reporter Mark Sturgeon.

1. Court Background Information

- a. Number of Judges: *11*
- b. Number of courtrooms: *22*
- c. Number of court reporters in the district: *9*
- d. Number of electronic recording monitors who are not certified court reporters: *0, although Clerk of Court staff will fill in on an emergency basis*

2. Judicial Support Staff for Each Judge

- a. Court reporters: *Each Judge has their own court reporter, with the exception of one Judge who will soon be retiring and one Judge who shares a court reporter*
- b. Law Clerks: *There are 6 law clerks for 11 Judges*
- c. Bailiffs: *A bailiff is provided for each courtroom proceeding as needed*

3. History of Electronic Recording in this Court

- a. Year they began using digital recording: *2005*
- b. Reason why they implemented digital recording: *The 8th Judicial District replaced Sony 4-track recorders that were being discontinued*
- c. Which DART system: *High Criteria/Liberty*
- d. Reasons they selected this system rather than one of the others: *Cost*

4. Description of the DART System

- a. Courtrooms with a DART system: *All 22 courtrooms. Audio only, no video*
- b. Type of DART equipment in each Courtroom:
 - i. PC-based system
 - ii. Microphones: *8 – 12, depending upon the size of the courtroom. One on the bench, two on each counsel table, one on the witness stand, one or two for the jury box, one conference “puck” microphone on the bench, and two wireless microphones*
 - iii. Type of mixer: *12-channel*
 - iv. Describe PA system: *Integrated with the recording system*

- v. Conference phone: *A telephone was not integrated into the system in the two courtrooms we visited, but a telephone could be integrated into the system through the PA*
- c. Back-up and long-term archiving of digital recordings
 - i. Daily back-up: *The proceedings are simultaneously recorded to a local hard drive in the courtroom and a network storage device*
 - ii. Long-term storage: *Court staff periodically archives the record on a CD, usually monthly*
- d. Cost per courtroom for their DART system
 - i. PC: *\$1,200.00*
 - ii. Microphones: *\$250.00 - \$300.00 each*
 - iii. AV mixer: *\$950.00*
 - iv. Installation cost: *\$1,020.00, including licensing fee, headset and foot feet*
 - v. Annual service agreement for equipment: *\$338.00*
 - vi. Annual service agreement for software: *\$405.00*
 - vii. Courtroom staff to operate/monitor system: *1*
 - viii. Additional central tech staff to manage DART for all courtrooms: *1 IT person for the district*

5. Daily Management of the Digital Recording System in the Courtrooms

- a. Staff in each courtroom: *1*
- b. Central management staff: *None*
- c. Daily procedure for managing the system: *A court reporter manages the system each day. On rare occasions where a court reporter is not available, a Clerk of Court can fill in*

6. Courtroom Procedure for Attorneys and Litigants to Ensure Complete and Clear Recordings

- a. Explain procedures: *Attorneys and litigants are instructed to speak clearly into the microphone and not to talk over one another*
- b. Problems or issues for attorneys/litigants: *It took a little while for the attorneys to get used to speaking into the microphones*

7. Challenges Presented by the Use of DART

- a. Jury selection: *No problems or challenges noted by the Judges, court reporters, or attorneys*
- b. Requests for playback of witness testimony or attorney questions: *The Judges in the 8th District generally do not allow playback, but if it is needed, the court reporter can play back the portion of the record requested provided it is adequately bookmarked*
- c. Distribution of audio record: *In Minnesota, the audio record can only be obtained upon application to the court and a showing of good cause*

8. Types of Cases or Proceedings that are Most Amenable to the Use of DART

- a. Observations of Judges: *DART is used for all cases, although for longer proceedings, stenographic court reporters will often use their steno machine as the primary record, with DART as a back-up*
- b. Observations of attorneys: *DART is acceptable for all proceedings*

9. Types of Cases or Proceedings that are Least Amenable to the Use of DART

- a. Observations of Judges: *DART may be used in all cases unless real-time is necessary for a hearing-impaired Judge or participant*
- b. Observations of attorneys: *Same as for the observations of Judges*

10. Reliability of the DART System

- a. Hardware: *There were no reports of technical problems or failures that affected a record. Two instances of hardware problems were reported, but the district IT person was able to replace the hardware without affecting an ongoing proceeding. Additionally, the district keeps two back-up DART computers to use as substitutes if a system has a failure during a court proceeding.*
- b. Software: *No system failures were reported*
- c. Human error: *One instance of the operator forgetting to turn the system on was reported where a Clerk of Court staff was operating the system instead of a court reporter*

11. Accuracy of the Digital Records

- a. Observations of Judges: *The Judges we spoke with believed that the digital records are excellent*
- b. Observations of court reporters/DART monitors: *The only issues reported were when a person mumbles, talks over another person, or is too far from the microphone. It was pointed out that trained staff catches these issues in the courtroom and addresses them. No problems were reported when the system was run by a certified court reporter.*
- c. Observations of attorneys: *The attorneys we spoke with felt the accuracy of the digital record was excellent*

12. Written Transcripts

- a. Transcript preparation: *Certified court reporters prepare all of the transcripts from the digital recording*
- b. Qualifications for transcriptionists: *In Minnesota, the transcriptionists are certified by the Minnesota Supreme Court as either steno court reporters or electronic court reporters*
- c. Process for requesting and obtaining a transcript: *The court reporter who monitored the proceeding is contacted and a transcript is ordered*
- d. Completeness and accuracy of written transcripts:
 - i. Observations of Judges: *Excellent*
 - ii. Observations of attorneys: *Excellent*

13. Advantages of Courtroom DART Systems

- a. Observations of Judges: *If needed, portions of the record can be played back later. Additionally, law clerks can listen to the actual proceeding when working on a case.*
- b. Observations of court manager/tech staff: *In cases where a court reporter is not available, a Clerk of Court staff can be brought in to monitor the system without delaying the hearing*
- c. Observations of court reporters/DART monitors: *When preparing transcripts, portions of the record can be replayed as needed. Additionally, if overwhelmed with transcripts, another certified court reporter can help with typing transcripts from the DART record*

14. Disadvantages of and Problems with Courtroom DART Systems

- a. Observations of Judges: *A real-time record is not available for a hearing-impaired Judge or hearing-impaired participant in the proceeding*
- b. Observations of court manager/tech staff: *No disadvantages or problems noted*
- c. Observations of court reporters/DART monitors: *No disadvantages or problems noted*
- d. Observations of attorneys: *No disadvantages or problems noted*

15. Satisfaction with their DART System

- a. Observations of Judges: *Very satisfied*
- b. Observations of court manager/tech staff: *Very satisfied*
- c. Observations of court reporters/DART monitors: *Very satisfied*
- d. Observations of attorneys: *Very satisfied*

16. Recommendations/Cautions for the Iowa courts regarding DART

- a. Observations of Judges: *All Judges we spoke with recommended DART*
- b. Observations of court manager/tech staff: *The court manager and tech person we spoke with recommended DART*
- c. Observations of court reporters/DART monitors: *The court reporters we spoke with recommended DART, but cautioned that it must be monitored by trained personnel and that bookmarks are a vital part of the record. The court reporters further noted that the record is only as good as the training and skills of the person capturing the record.*
- e. Observations of attorneys: *The attorneys we spoke with recommended DART*

Additional Observations

Court personnel in Willmar stressed that in order to capture an accurate record, the DART system should be monitored in the courtroom by a certified court reporter. Minnesota has two certifications for court reporters: official court reporter – steno, and official court reporter – electronic. Both OCR – stenos and OCR – electronics are used to monitor the DART system, but the OCR – stenos can also use a steno machine to capture the record. In that regard, the OCR – stenos indicated that they typically will use their steno machine for longer proceedings with the recording equipment running as a back-up. The main reason they use their steno machines is in case a transcript is ordered, they use the steno machine software to create the rough draft. If the proceeding is only recorded and a transcript is

requested, the OCR – S will first play back the recording, write the proceeding to his or her steno machine, and then transcribe the proceeding.

OCR – Es type the transcript directly from the recording. All of the court reporters indicated that bookmarks in the record are crucial to note who is talking and to note such things as nonverbal responses or demonstrative evidence. Additionally, bookmarks are used as a quick reference to go back to any part of the record following the proceeding.

As used in Minnesota’s 8th Judicial District, the DART system is not a substitute for a court reporter. In essence, the DART system is being substituted for the steno machine as a different medium on which to capture the record.

Site Visit Report -- Wheaton, IL

Note: 6 team members wrote a report

Report #1: by notes taken by Judge Bobbi Alpers

Site visit date: September 10, 2009

Court name and location: Wheaton, IL. DuPage County Justice Center

Site visit team members: E. Dean, J. Olson, S. Ruhnke, M. Lucey, A. Potterfield, B. Alpers

1. Court Background Information

- a. Number of judges
 - i. # of general jurisdiction judges - 16
 - ii. # of limited jurisdiction judges - 30 (*approximate*)
 - iii. Total # of judges - 46
- b. Number of courtrooms - 40
- c. Number of court reporters employed by court - 26
 - i. Number of certified steno court reporters (not real-time) - 21
 - ii. Number of certified real-time court reporters - 5
- d. Number of electronic recording monitors who are not certified court reporters - 0
- e. Source of funding for DART (local, county, state) - (*unsure: County?*)

2. Judicial support staff for each judge (# and types):

In courtroom: - *Clerk and sheriff's deputy*

Outside courtroom: - *secretary for 2-3 judges and court reporter monitoring 4 courtrooms*

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital):
- b. Year they began using digital recording: - i
- c. Reason(s) why they implemented digital recording: - *new court facility and asked to do pilot project*
- d. Which DART system (e.g., FTR) - *Court Smart*
- e. Reasons they selected this system rather than one of the others: - *hard wired and not on network*
- f. Have they always used this vendor? (If "no" – explain): - *yes*

4. Description of the DART system

- a. How many courtrooms have a DART system? - 28
 - i. # with audio only - 28
 - ii. # with video
 - iii. If only some have video, explain why some do and some do not:
- b. What DART-related equipment is in each courtroom?
 - i. PC-based vs. proprietary recorder system?

- ii. Describe the PC
 - 1. Processor
 - 2. Hard drive (#G-bytes)
- iii. # microphones (and location in courtroom) - *6-12; bench, well, tables, standing mic for jury selection, witness chair*
- iv. Type of A/V mixer (max. # of channels)
- v. Describe PA system
- vi. Conference phone integrated with system?
- vii. Remote interpreter equipment integrated with system?
- c. Back-up and long-term archiving of digital recordings
 - i. Describe how the digital recordings are backed-up each day - *simultaneously daily on DVDs*
 - ii. Describe how they are archived for long-term storage (DVDs v. network) DVDs on-site and at one off-site location
- d. Cost per courtroom for their DART system (best estimates)
 - i. PC (with A/V card)
 - ii. Digital recording management software
 - iii. Microphones - *Mics, mixer, PA: \$18,000-\$29,000*
 - iv. AV mixer
 - v. Cables
 - vi. Cameras
 - vii. Installation cost
 - viii. Annual service agreement for equipment - *\$90,000/year for all*
 - ix. Annual service agreement for software
 - x. # of courtroom staff to operate/monitor system - *1 court reporter monitors 4 courtrooms from a separate area of the courthouse*
 - xi. [Additional central tech staff to manage DART for all courtrooms?] - *Administrator & Assistant Administrator for whole program*
 - xii. TOTAL Cost per courtroom - *For purchase and installation of latest system (day of visit) \$28,000*

5. Daily management of the digital recording system In the courtrooms

- a. Staff in each courtroom - *clerk present to aid in the notes*
- b. Central management staff? - *Administrator & Asst. Admin. schedule people and maintain all equipment*
- c. Explain staffing assignments (*see above*)
- d. Explain daily procedures for those who manage the system: - *The Administrator and Assistant take care of equipment & scheduling of court reporters; help with any installation of new equipment; maintains PCs if possible; make sure any problems are resolved in courtrooms and in monitoring room; are available by phone if any problems arise*

6. **Courtroom procedures for attorneys and litigants to ensure complete and clear recordings**
 - a. Explain procedures: - *Mics are marked "This is the microphone. Speak into it." Judge explains at beginning of session about use of mic and identifying self as the speaker and prompts attorneys/witnesses to identify selves*
 - b. Problems or issues for attorneys/litigants:- *Identification of speakers so record can correctly identify who was speaking*
7. **Challenges presented by the use of DART:**
 - a. Jury selection - *Mic on stand must be moved around to get responses for record; chambers aren't wired so all jurors must be interviewed in the courtroom*
 - b. Requests for playback of witness testimony or attorney questions - *Clerk plays back and all can listen to question, answer, etc.*
 - c. Distribution/use of the audio/video records (any restrictions/limits?)
 - i. E.g.: MN – digital records are not public records; not available to public? *The DVDs are public records. However, non-parties/attorneys cannot show up at the monitoring center and ask to have a record played for them or purchase a DVD*
8. **Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)**
 - a. Observations of judges - *Judges like for all cases (Judges were assigned to Chancery) Judges for other divisions of the court did not speak*
 - b. Observations of attorneys - *Attorneys (OWI, family law) like DART; like the ease of play back of the question, etc. Attorneys for other matters: opinion unknown*
9. **Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)**
 - a. Observations of judges - *N/A (see comment above)*
 - b. Observations of attorneys - *Unknown*
10. **Reliability of the DART system (% of time that it operates with technical problems or failures)**
 - a. Hardware:
 - b. Software:
 - c. Human error: -*Described as 90% reliable*
11. **Accuracy of the digital records: Completeness and clarity of the digital recordings: Issues and concerns**
 - a. Observations of judges: - *Believe they are complete and clear; do request DVD of a closing argument to listen before ruling on a case*
 - b. Observations of court manager/tech staff: - *problems with unidentified speakers*
 - c. Observations of court reporters/DART monitors: - *problems with unidentified speakers*
 - d. Observations of attorneys: *problems with unidentified speakers*
12. **Written transcripts**
 - a. Who produces them? - *Court reporters who monitor courtrooms*
 - b. Qualifications for transcriptionists? - *Court reporter with certification if possible (now 100%)*

- c. Process for requesting & obtaining a transcript - *Call and request reporter who monitored does the transcript as requested*
- d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. Observations of judges: - *none; they don't see these typically*
 - ii. Observations of attorneys: problems that come from an unidentified speaker being incorrectly identified;- *lawyers said this is easily corrected from the context*

13. Advantages of courtroom DART systems

- a. Observations of judges: - *can have questions/answers played back quickly; can have DVD of closing arguments or portions of evidence to use in ruling; use 1 reporter for 4 courtrooms*
- b. Observations of court manager/tech staff: - *can back up record simultaneously;*
- c. Observations of court reporters/DART monitors
- d. Observations of attorneys: - *Can get a play-back easily*

14. Disadvantages of & problems with courtroom DART systems

- a. Observations of judges: - *No chambers conference with record because chambers not wired*
- b. Observations of court manager/tech staff: - *No provision for equipment "upgrades" was purchased and Admin. supervisor is concerned that system will begin to fail or require significant investment to prevent/cure this*
- c. Observations of court reporters/DART monitors: - *Cannot always readily identify speakers because you are not in the room when the speaking occurs*
- d. Observations of attorneys: - *Need a 2 year learning curve to really get comfortable with this system*

15. Satisfaction with their DART system: Would they recommend it? (Explain)

- a. Observations of judges: - *yes*
- b. Observations of court manager/tech staff: - *Yes but use court reporters to operate it*
- c. Observations of court reporters/DART monitors: - *It works but is not as accurate as an in-court reporter*
- d. Observations of attorneys: - *yes*

16. Recommendations/cautions for the Iowa courts regarding DART

- a. Observations of judges - *Off-site transcriptionists would be a concern: need the vocabulary & familiarity with the applicable law.*
- b. Observations of court manager/tech staff - *Get a contract for upgrades to keep the equipment current; need a point person to "sell" this to lawyers, judges; use reporters to monitor and do transcripts*
- c. Observations of court reporters/DART monitors - *Speaker identification is an ongoing problem when typing the transcript*
- d. Observations of attorneys - *Need the learning curve time of approximately 2 years for lawyers to adjust*

Federal District Courts in Wheaton, IL -- *Continued*

Report #2: by Esther J. Dean

Site visit date: September 10, 2009

Court name and location: Wheaton, IL. DuPage County Justice Center

Site visit team members: E. Dean, J. Olson, S. Ruhnke, M. Lucey, A. Potterfield, B. Alpers

I have chosen to do a written narrative on the site visit to the DuPage County Justice Center at Wheaton, Illinois. On September 10, 2009, Jerry Olson, Scott Ruhnke, Martha Lucey, Amanda Potterfield, Bobbi Alpers and I made that trip.

DuPage County has an approximate population of one million people. Wheaton is a well-to-do community of approximately 55,000 people. As a side note, the DuPage County Bar Association has approximately 2200 members.

The Justice Center is a beautiful complex consisting of four buildings located around a well manicured courtyard. The Courthouse building was constructed in 1994. It has forty-three (43) courtrooms and twenty-six (26) of them have the CourtSmart digital recording system. The system was being installed in an additional courtroom the date of our visit. There are forty-six judges (46) located in the Courthouse.

Our hostess and tour guide was Geri Barnes who is the Administrator of Court Reporting Services. She is also a court reporter. Geri is very knowledgeable about the CourtSmart system and its inner workings. She said she was present for the installation of the system as that was the only way she could understand the system. She coordinates the entire system with the assistance of her support staff.

The DuPage County system was installed ten years ago. It was not exactly clear to me why they implemented digital recording. Several possible reasons cited were: 1) a pilot program; 2) a hiring freeze; 3) a shortage of court reporters; and 4) a possible unionization of court reporters. Money did not seem to be a big factor.

Geri stressed the fact that no employees lost their jobs as a result of the implementation of the system. When told that the Iowa recommendation would eliminate court reporters, Geri said she would "recommend against that". That was before she knew that Iowa court reporters also act as a receptionist, secretary, court attendant and gate keeper for their judge. Twenty-six (26) court reporters are still used at Wheaton in addition to other support staff necessary to run the system in an efficient manner.

While twenty-seven (27) of their courtrooms have CourtSmart, at least twelve (12) do not. CourtSmart is not used for felony cases and most juvenile cases. They still use court reporters for those cases. Attorneys do not have to use the digital recording system as they can provide their own court reporter for any proceeding. However, CourtSmart is the “official” record of any proceeding.

When asked about the cost of the system and the annual budget for the system, Geri said she did not have a budget amount. She said the cost of the installation of CourtSmart in the courtroom is \$26,000.00. Their system is a basic one with no “bells or whistles”. They have a \$90,000.00 annual maintenance agreement. Geri’s salary, the court reporter’s salaries, the support staff salaries and other costs which would be included in a budget are unknown. As this was a newer facility (compared to most of the Iowa courthouses), there seemed to be enough space for the large control room and for the support staff without adding to it.

Our team also met with three judges, two attorneys and others who expressed their opinions about the CourtSmart system. Everyone liked it and there were no concerns about accuracy or reliability in those cases where it is used. If there were any folks who had negative feedback or concerns, we did not speak with them.

Geri said at first there was a great deal of resistance and negativity by attorneys and others about the system. It took about two years to work out the “growing pains” and gain the support of staff, attorneys and those who used the system.

I asked about Illinois currently hiring court reporters and Geri said that would mostly be Cook County. DuPage County is not hiring court reporters now.

Query? Assuming that digital recording systems are accurate and reliable and an acceptable alternative to court reporters, how can Iowa afford such a change when we have a budget crises? For instance:

1. \$26,000.00 per court room at 150 (?) courtrooms. Does not include control room and associated costs;
 2. Annual maintenance agreement with unknown costs (\$3462.00 annually per courtroom in Wheaton all in same location);
 3. Support staff to efficiently coordinate and run system – costs unknown;
 4. Potential for lack of space in older buildings to house control room and additional staff;
 5. Potential for problems with wiring and acoustics in older buildings; and
 6. Additional staff to replace those duties now being assumed by court reporters.
- If anyone has questions, I would be glad to speak with you.

Esther

Federal District Courts in Wheaton, IL – Continued

Report #3: by Gerald Olson, Court Reporter

Site visit date: September 10, 2009

Court Name & Location: DuPage County Circuit Court, Wheaton, IL

Site visit team members: Bobbi Alpers, Attorney Esther Dean, Attorney Martha Lucey, ICIS Senior Manager Scott Ruhnke, and Court Reporter Gerald Olson

1. Court Background Information

- a. Number of judges
 - i. # of general jurisdiction judges - 16
 - ii. # of limited jurisdiction judges - 30
 - iii. Total # of judges - 46
- b. Number of courtrooms - *I think 43*
- c. Number of court reporters employed by court
 - i. Number of certified steno court reporters (not real-time) - 26
 - ii. Number of certified real-time court reporters - 0
- d. Number of electronic recording monitors who are not certified court reporters - 0
- e. Source of funding for DART (local, county, state) - *State*

2. Judicial support staff for each judge (# and types): - *One secretary for 2-3 judges; two law clerks for 46 judges; in courtroom, each judge has clerk who runs DAR; court reporter some cases*

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital): - 1999
- b. Year they began using digital recording:
- c. **Reason(s)** why they implemented digital recording: - *Money and reporters quitting*
- d. Which DART system (e.g., FTR) - *Court Smart*
- e. Reasons they selected this system rather than one of the others: - *Site visits and study*
- f. Have they always used this vendor? (If “no” – explain): - *Yes*

4. Description of the DART system

- a. How many courtrooms have a DART system?
 - i. # with audio only - 27
 - ii. # with video - 0
 - iii. If only some have video, explain why some do and some do not:
- b. **What DART-related equipment is in each courtroom?**
 - i. PC-based vs. proprietary recorder system?
 - ii. Describe the PC
 1. Processor
 2. Hard drive (#G-bytes)

- iii. # microphones (and location in courtroom) - 6
 - iv. Type of A/V mixer (max. # of channels)
 - v. Describe PA system
 - vi. Conference phone integrated with system?
 - vii. Remote interpreter equipment integrated with system?
- c. **Back-up and long-term archiving of digital recordings**
- i. Describe how the digital recordings are backed-up each day - *back up to CD daily*
 - ii. Describe how they are archived for long-term storage (DVDs v. network) - *Quarterly CDs taken to off-site storage. Safety? Don't know*
- d. **Cost per courtroom for their DART system (overall best estimates)**
- i. PC (with A/V card)
 - ii. Digital recording management software
 - iii. Microphones
 - iv. AV mixer
 - v. Cables
 - vi. Cameras
 - vii. Installation cost - *\$26,000/ct room*
 - viii. Annual service agreement for equipment - *\$90,000 for all*
 - ix. Annual service agreement for software ---
 - x. # of courtroom staff to operate/monitor system - 1
 - xi. [Additional central tech staff to manage DART for all courtrooms?] - 1 court reporter monitors 4 court rooms
 - xii. **TOTAL Cost per courtroom** ---
5. **Daily management of the digital recording system In the courtrooms**
- a. Staff in each courtroom - *Clerk, bailiff or reporters*
 - b. Central management staff? - *1 court reporter per 4 courtrooms*
 - c. Explain staffing assignments (*see above*) - *Rotation*
 - d. Explain daily procedures for those who manage the system: - System records continuously – janitor, etc.
6. **Courtroom procedures for attorneys and litigants to ensure complete and clear recordings**
- a. Explain procedures: - *Some rooms have instructions*
 - b. Problems or issues for attorneys/litigants: - *Court reporters would know, never asked them*
7. **Challenges presented by the use of DART:**
- a. Jury selection - *Microphone for jury*
 - b. Requests for playback of witness testimony or attorney questions - *Very difficult to do*
 - c. Distribution/use of the audio/video records (any restrictions/limits?)
 - i. E.g.: MN – digital records are not public records; not available to public?

8. **Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)**
 - a. Observations of judges ---
 - b. Observations of attorneys – *Hand-picked with no opinion on DART. Only court reporters at DuPage could tell you. Never present.*
9. **Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)**
 - a. Observations of judges - *Felony cases*
 - b. Observations of attorneys - *Multiple lawyers a no-no.*
10. **Reliability of the DART system (% of time that it operates with technical problems or failures)**
 - a. Hardware: - ?
 - b. Software: - ?
 - c. Human error: - ?
11. **Accuracy of the digital records: Completeness and clarity of the digital recordings: Issues and concerns**
 - a. Observations of judges: - *Court Smart official record*
 - b. Observations of court manager/tech staff: ---
 - c. Observations of court reporters/DART monitors: - *Speaker I.D. failure*
 - d. Observations of attorneys: - *90% accuracy. Two and one half day custody trial, 500 pages—50 pages not understood!*
12. **Written transcripts**
 - a. Who produces them? - *All court reporters*
 - b. *Qualifications for transcriptionists?* - *CSR's*
 - c. Process for requesting & obtaining a transcript - *Form given to Geri Barnes*
 - d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. Observations of judges: --
 - ii. Observations of attorneys: *Keep court reporters*
13. **Advantages of courtroom DART systems**
 - a. Observations of judges: - *Less expensive; reliable; don't have to worry about scheduling a court reporter. Judges like time with CD.*
 - b. Observations of court manager/tech staff
 - c. Observations of court reporters/DART monitors
 - d. Observations of attorneys: - *Not their problem. Just talk away.*
14. **Disadvantages of & problems with courtroom DART systems**
 - a. Observations of judges: - *Can't do private records.*
 - b. Observations of court manager/tech staff: --
 - c. Observations of court reporters/DART monitors: - *Voice?*
 - d. Observations of attorneys: - *Can't do private hearings. For example, child in a custody hearing, normally done in chambers.*
15. **Satisfaction with their DART system: Would they recommend it? (Explain)**
 - a. Observations of judges: - *Like access to CD.*
 - b. Observations of court manager/tech staff: --
 - c. Observations of court reporters/DART monitors: - *Makes so-so record*

- d. Observations of attorneys: - *90% accurate – wow!*
- 16. Recommendations/cautions for the Iowa courts regarding DART**
- a. Observations of judges: --
 - b. Observations of court manager/tech staff: - *Court reporters and whoever else is in charge.*
 - c. Observations of court reporters/DART monitors: - *Not for felony, juvenile or multi-voice.*
 - d. Observations of attorneys: - *Keep court reporters. Ideally, group should have heard from court reporters. From further information received elsewhere, they are not picked to give an opinion.*

Federal District Courts in Wheaton, IL -- Continued

Report #4: by Scott Ruhnke

Site visit date: September 10, 2009

Court Name & Location: DuPage County Circuit Court, Wheaton, IL

1. Court Background Information

- a. Number of judges
 - i. # of general jurisdiction judges *30*
 - ii. # of limited jurisdiction judges *16*
 - iii. Total # of judges
- b. Number of courtrooms *43 (28 covered by Court Smart)*
- c. Number of court reporters employed by court *26 (All Steno)*
 - i. Number of certified steno court reporters (not real-time)
 - ii. Number of certified real-time court reporters
- d. Number of electronic recording monitors who are not certified court reporters *0*
- e. Source of funding for DART (local, county, state) *State*

2. Judicial support staff for each judge (# and types):

- Deputy*
- Court Reporter (some case types)*
- Clerk*

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital): *1999*
- b. Year they began using digital recording: *1999*
- c. **Reason(s)** why they implemented digital recording: *Fiscal / Budgeting*
- d. Which DART system (e.g., FTR) *Court Smart*
- e. Reasons they selected this system rather than one of the others: *Central Monitoring Functionality, Backup, and Functionality*
- f. Have they always used this vendor? (If “no” – explain): *yes*

4. Description of the DART system

- a. How many courtrooms have a DART system?
 - i. # with audio only *28*
 - ii. # with video *28 (not recorded)*
 - iii. If only some have video, explain why some do and some do not:
- b. **What DART-related equipment is in each courtroom?**
 - i. PC-based vs. proprietary recorder system? *Proprietary*
 - ii. Describe the PC *Standard ICIS Configured PC*
 1. Processor
 2. Hard drive (#G-bytes)
 - iii. # microphones (and location in courtroom) *Varies per courtroom 6 - 12*
 - iv. Type of A/V mixer (max. # of channels) *4*
 - v. Describe PA system *Modern / High Quality*
 - vi. Conference phone integrated with system?
 - vii. Remote interpreter equipment integrated with system?
- c. **Back-up and long-term archiving of digital recordings**
 - i. Describe how the digital recordings are backed-up each day *Automatic and Separate from main recording*
 - ii. Describe how they are archived for long-term storage (DVDs v. network) *DVD's off and on-site*
- d. **Cost per courtroom for their DART system (best estimates)**
 - i. PC (with A/V card)
 - ii. Digital recording management software
 - iii. Microphones
 - iv. AV mixer
 - v. Cables
 - vi. Cameras
 - vii. Installation cost
 - viii. Annual service agreement for equipment
 - ix. Annual service agreement for software
 - x. # of courtroom staff to operate/monitor system
 - xi. [Additional central tech staff to manage DART for all courtrooms?]
 - xii. TOTAL Cost per courtroom *\$26,000 including maintenance*

5. Daily management of the digital recording system In the courtrooms

- a. Staff in each courtroom *3-4*
- b. Central management staff? *Yes*
- c. Explain staffing assignments (*see above*)
- d. Explain daily procedures for those who manage the system:

6. Courtroom procedures for attorneys and litigants to ensure complete and clear recordings

- a. Explain procedures: *Judges play a key role in outlining courtroom procedure for use of digital recording. Use signs and other reminders*
- b. Problems or issues for attorneys/litigants: *A few start up issues, however no issues after a few months of using the system*

7. **Challenges presented by the use of DART:**
 - a. Jury selection *Yes, used for civil trials*
 - b. Requests for playback of witness testimony or attorney questions *Yes, in courtroom playback is used*
 - c. Distribution/use of the audio/video records (any restrictions/limits?) *Video is not recorded; distribution of audio is limited but public*
 - i. E.g.: MN – digital records are not public records; not available to public?
8. **Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)**
 - a. Observations of judges *very positive, part of everyday life, don't even think about the system anymore*
 - b. Observations of attorneys *same as judges*
9. **Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)**
 - a. Observations of judges
 - b. Observations of attorneys *Not used for serious criminal matters by rule*
10. **Reliability of the DART system (% of time that it operates with technical problems or failures)**
 - a. Hardware:
 - b. Software:
 - c. Human error: *Very Accurate*
11. **Accuracy of the digital records: Completeness and clarity of the digital recordings: Issues and concerns**
 - a. Observations of judges:
 - b. Observations of court manager/tech staff:
 - c. Observations of court reporters/DART monitors:
 - d. Observations of attorneys: *Very Accurate*
12. **Written transcripts**
 - a. Who produces them? *Court Reporters*
 - b. *Qualifications for transcriptionists?*
 - c. Process for requesting & obtaining a transcript *Requests are pooled*
 - d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. Observations of judges: *No Difference steno versus recorded*
 - ii. Observations of attorneys: *No Difference steno versus recorded*
13. **Advantages of courtroom DART systems**
 - a. Observations of judges: *Less expensive; reliable; don't have to worry about scheduling a court reporter*
 - b. Observations of court manager/tech staff
 - c. Observations of court reporters/DART monitors
 - d. Observations of attorneys:
14. **Disadvantages of & problems with courtroom DART systems *None Noted***
 - a. Observations of judges:
 - b. Observations of court manager/tech staff:
 - c. Observations of court reporters/DART monitors:

- d. Observations of attorneys:
- 15. **Satisfaction with their DART system: Would they recommend it? (Explain) *Very / Yes***
 - a. Observations of judges:
 - b. Observations of court manager/tech staff:
 - c. Observations of court reporters/DART monitors:
 - d. Observations of attorneys: *Very satisfied with record on appeal*
- 16. **Recommendations/cautions for the Iowa courts regarding DART**
 - a. Observations of judges
 - b. Observations of court manager/tech staff
 - c. Observations of court reporters/DART monitors
 - d. Observations of attorneys

Federal District Courts in Wheaton, IL -- Continued

Report #5: by Prepared by Martha Lucey

Site visit date: September 10, 2009

Court Name & Location: DuPage County, Wheaton, IL

Site visit team members: Judge Amanda Potterfield, Judge Bobbie Alpers, Esther Dean, Martha Lucey, Jerry Olson & Scott Ruhnke

1. Court Background Information

- a. Number of judges
 - i. *16 Circuit - general jurisdiction judges*
 - ii. *30 associate - limited jurisdiction judges*
 - iii. *46 = Total # of judges*
- b. Number of courtrooms = 43 (???)
- c. Number of court reporters employed by court
 - i. Number of certified steno court reporters (not real-time) = 26
 - ii. Number of certified real-time court reporters = 0
- d. Number of electronic recording monitors who are not certified court reporters = 0
- e. Source of funding for DART (local, county, state) = *State funded*

2. Judicial support staff for each judge (# and types): *1 secretary per 2-3 judges; 2 law clerks per 46 judges. While in the court room, each judge has a clerk who runs the ER system and manages court files and docket, deputy/bailiff, and a court reporter for certain cases.*

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital): *CourtSmart installed in 1999*
- b. Year they began using digital recording: *1999*
- c. **Reason(s)** why they implemented digital recording: *Money. Court reporters expressed a desire to unionize and sought support from the Supreme Court. There was a hiring freeze. Prior to 1999, the supervision of the court reporters*

was transferred to the Secretary of State. In 2005, in response to legislation which would allow for unionization, the Supreme Court relinquished authority over the court reporters to the Chief Judges in three regions of the State (Cook; the circuit covering DuPage, Lake, McHenry, & Will Counties; and all remaining downstate circuits). The reporters are still not unionized.

- d. Which DART system: *CourtSmart*
- e. *Reasons they selected this system rather than one of the others. A committee was formed for the decision. They visited two sites.*
- f. Have they always used this vendor? *Yes*

4. Description of the DART system

- a. How many courtrooms have a DART system?
 - i. # with audio only = *27 + one was being installed the evening of 9/10*
 - ii. # with video = *0*
 - iii. If only some have video, explain why some do and some do not:
- b. **What DART-related equipment is in each courtroom?**
 - i. PC-based vs. proprietary recorder system?
 - ii. Describe the PC
 - 1. Processor
 - 2. Hard drive (#G-bytes)
 - iii. # microphones (and location in courtroom)
 - iv. Type of A/V mixer (max. # of channels)
 - v. Describe PA system
 - vi. Conference phone integrated with system?
 - vii. Remote interpreter equipment integrated with system?
- c. **Back-up and long-term archiving of digital recordings**
 - i. Describe how the digital recordings are backed-up each day: *Everything is burned to a DVD every day.*
 - ii. Describe how they are archived for long-term storage (DVDs v. network): *quarterly the DVDs are taken off site to storage.*
- d. **Cost per courtroom for their DART system (best estimates)**
 - i. PC (with A/V card): *?*
 - ii. Digital recording management software: *?*
 - iii. Microphones: *5 button; 1 stand alone*
 - iv. AV mixer: *?*
 - v. Cables: *?*
 - vi. Cameras : *?*
 - vii. Installation cost: *average \$26, 000/ ct room*
 - viii. Annual service agreement for equipment: *\$90, 000*
 - ix. Annual service agreement for software: *? The \$90, 000 may include this???*
 - x. # of courtroom staff to operate/monitor system: *1*
 - xi. [Additional central tech staff to manage DART for all courtrooms?]: *1 ct reporter monitors 4 court rooms at a time - ???*
 - xii. TOTAL Cost per courtroom: *???*

5. **Daily management of the digital recording system In the courtrooms**
 - a. Staff in each courtroom: *clerk, deputy/bailiff and sometimes court reporter*
 - b. Central management staff?: *1 court reporter per 4 court rooms*
 - c. Explain staffing assignments: *court reporters are rotated according to the schedule everyone agreed upon. The court reporter rotates between ER monitoring, reporting live and preparation of transcripts.*
 - d. Explain daily procedures for those who manage the system: *?? System automatically comes on at 8 a.m. and goes off at 11:00 p.m. The system records continuously regardless of whether there is a proceeding.*
6. **Courtroom procedures for attorneys and litigants to ensure complete and clear recordings**
 - a. Explain procedures: *Some court rooms had signs pointing out the microphones & instructing the participants to say and spell his/her name.*
 - b. Problems or issues for attorneys/litigants:
7. **Challenges presented by the use of DART:**
 - a. Jury selection: *No one expressed any particular problems with jury selection. We observed one court room where the stand alone microphone was placed in front of the middle of the jury box. We were informed that in that particular court room, the deputy moved the microphone between jurors. The judge would only start with the number of potential jurors that fit in the box.*
 - b. Requests for playback of witness testimony or attorney questions: *All of the clerks have training and instructions how to use play back. However, some clerks will tell attorneys that they do not know how to do it & the judge does not make the clerk complete the play back. Geri Barnes was not pleased by this – but the clerks are outside her chain of command.*
 - c. Distribution/use of the audio/video records (any restrictions/limits?)
 - i. E.g.: MN – digital records are not public records; not available to public?: *The recording of the proceedings are not available to anyone other than the presiding judge. Attorneys are not given access to the recordings. The public cannot access the recording. Interesting story – Geri Barnes said a judge wanted to hear what people were saying behind his back. He went to Geri and she told him that he could not listen in from the control room and he could not have a DVD.*
8. **Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)**
 - a. Observations of judges: *??*
 - b. Observations of attorneys: *the attorneys who spoke did not express an opinion where ER should not be used.*
9. **Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)**
 - a. Observations of judges: *felony criminal cases are exempt by Court rule.*
 - b. Observations of Administration & Court reporters: *Geri Barnes believes that juvenile court should be the last type that ever should use ER. This is because there are too many participants and the sensitive nature of the hearings. Illinois past a*

new law regarding termination of pregnancies which has added to the sensitive nature of some juvenile proceedings. A court reporter with 8 years of court reporting experience (1 year with the State using ER), expressed the opinion that ER should never be used for serious criminal cases and it was really hard to transcribe cases where there were multiple attorneys who did not continue to identify themselves.

10. Reliability of the DART system (% of time that it operates with technical problems or failures)

- a. Hardware:
- b. Software:
- c. Human error:

11. Accuracy of the digital records: Completeness and clarity of the digital recordings: Issues and concerns

- a. Observations of judges: *not an issue anymore. CourtSmart is the official record in the court rooms using it.*
- b. Observations of court manager/tech staff: ?
- c. Observations of court reporters/DART monitors: *it can be very difficult at times if everyone does not comply with identifying themselves and speaking one at a time.*
- d. Observations of attorneys: *90% - not an issue anymore.*

12. Written transcripts

- a. Who produces them?: *The court reporters produce the transcripts. The court reporters use steno equipment and report from the DVD. Then they use the computer aided software to produce the transcript. The transcripts are done during normal business hours and the court reporter is paid separately for the transcripts. A hearing may be transcribed by multiple reporters depending on the length of the proceeding as each reporter is rotated daily. Illinois allows 49 days for the completion of transcript for indigent defendants who are incarcerated. The reporter may be granted one 30 day extension. DuPage County does not generally request extensions. Transcripts are completed very timely.*
- b. Qualifications for transcriptionists?: *all transcripts are completed by certified court reporters*
- c. Process for requesting & obtaining a transcript – the attorneys fill out a form and give it to Geri Barnes' office.
- d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. Observations of judges: *???* *Unsure the judges use the transcripts.*
 - ii. Observations of attorneys: *** Important to consider that human error occurs no matter what system is used. The attorneys did not appear to have any issue with the transcripts. One attorney was asked whether that opinion would change if the transcripts were not produced by a certified court reporter. He was honest when saying he did not know because he had not had that experience. However, he did say Iowa should not eliminate the court reporters if using DART.*

13. Advantages of courtroom DART systems

- a. Observations of judges: *Less expensive; reliable; don't have to worry about scheduling a court reporter Judges like having access to the DVD of proceedings.*
- b. Observations of court manager/tech staff
- c. Observations of court reporters/DART monitors -
- d. Observations of attorneys: *The attorneys did not really seem to have any opinions against ER. An observer must question whether the attorneys' court room experience has not changed because ER does not really change anything in an attorney's world.*

14. Disadvantages of & problems with courtroom DART systems

- a. Observations of judges: *Need court reporter to conduct individual voir dire in cases with sensitive issues.*
- b. Observations of court manager/tech staff: ?
- c. Observations of court reporters/DART monitors: *Sometimes difficulty trying to distinguish between attorney's voices if they do not properly identify themselves. The court reporter preparing the transcript does not have the benefit of a video. Cautioned against expanding ER to felonies.*
- d. Observations of attorneys: *The attorneys appear to have continuing their practices as normal. Pointed out that normally cannot conduct any proceedings in chambers unless a court reporter is available.*

15. Satisfaction with their DART system: Would they recommend it? (Explain)

- a. Observations of judges: *The judges like having access to the DVD to review the record to help draft rulings.*
- b. Observations of court manager/tech staff: ?
- c. Observations of court reporters/DART monitors: *It is acceptable for what it is. One described it as if you want a mediocre record - then it works.*
- d. Observations of attorneys: *No concerns regarding transcripts. Only complaint was the clerks claiming they did not know how to do playback.*

16. Recommendations/cautions for the Iowa courts regarding DART

- a. Observations of judges
- b. Observations of court manager/tech staff: *A committee member asked Geri Barnes if Iowa were to decide to use ER who should be involved in the start up process to make sure whatever system established was the best it could be. Geri initially stated that everyone should not be afraid of change, etc. Eventually, Geri suggested IT, Court Administration and Court Reporters.*
- c. Observations of court reporters/DART monitors: *do not use it for serious felony, juvenile or multi attorney cases.*
- d. Observations of attorneys: *DO NOT eliminate court reporters as they are a big part of the success of ER.*

**** General observations.

- 1. DuPage County has a relatively new court house. The court took possession of the building in 1994 but had to vacate it in 1996 when it was discovered extensive mold which caused numerous illness and eventually 2 deaths.

2. DuPage County has a very active county bar association – 2200 members.
3. Although the judges have support staff- attorneys write court orders.
4. The cases are bar coded. The clerk scans the bar codes for each case which assists with ER.
5. The court system will implement electronic filing which will eliminate the use of paper court files. Clerks will still be needed to run the CourtSmart system.
6. The \$90, 000 maintenance contract does not include “refresh” money for new equipment or software.
7. The entire judicial budget is unknown.
8. The process for transcribing a proceeding originally reported by a certified court reporter was not discussed. Unknown whether the original court reporter is the only one who produces the transcripts or if it is also split between the rotating reporters.
9. Most participants felt the transition period was approximately 2 months. There was an initial problem with transcripts. It has been a long time since the court has received a serious complaint.
10. One judge has her chambers wired.

Conclusion: All participants appeared to believe ER is a valid alternative to court reporters in the court room. There is still the unanswered question of why Illinois has a Court Rule requiring a certified court reporter for felony cases if the system works and is accurate.

Federal District Courts in Wheaton, IL -- *Continued*

Report #6: by Judge Amanda Potterfield

Site visit date: September 10, 2009

Court Name & Location: DuPage County, Wheaton, IL

Site visit team members: Scott, Esther, Bobbi, Martha. Jerry and I

1. Court Background Information

- a. Number of judges
 - i. # of general jurisdiction judges
 - ii. # of limited jurisdiction judges
 - iii. Total # of judges
- b. Number of courtrooms
- c. Number of court reporters employed by court – *26 down from 36*
 - i. Number of certified steno court reporters (not real-time)
 - ii. Number of certified real-time court reporters
- d. Number of electronic recording monitors who are not certified court reporters - 0
- e. Source of funding for DART (local, county, state)first county, then bought by state

2. Judicial support staff for each judge (# and types):

Every judge has a bailiff and a clerk in the courtroom, and access to a secretarial pool. Each has his/her own chambers near the secretarial pool. A court reporter is in every felony and juvenile courtroom in addition to the other two support staff. A court reporter is monitoring and indexing the proceedings in a separate room.

3. History of electronic recording in this court

- a. Year they began using electronic (tape or digital): *10 years ago*
- b. Year they began using digital recording: *10 years ago*
- c. **Reason(s)** why they implemented digital recording: *shortage of certified court reporters*
- d. Which DART system (e.g., FTR - *Court Smart*)
- e. Reasons they selected this system rather than one of the others: *Only system that truly has simultaneous backup.*
- f. Have they always used this vendor? (If “no” – explain): *Yes.*

4. Description of the DART system

- a. How many courtrooms have a DART system?
 - i. # with audio only
 - ii. # with video - *none, but they wish all had video*
 - iii. If only some have video, explain why some do and some do not:
- b. What DART-related equipment is in each courtroom?
 - i. PC-based vs. proprietary recorder system?
 - ii. Describe the PC
 1. Processor
 2. Hard drive (#G-bytes)
 - iii. # microphones (and location in courtroom) – 6-8: *judge, bench conference, lawyer 1, lawyer 2, jury box, witness, podium*
 - iv. Type of A/V mixer (max. # of channels)
 - v. Describe PA system
 - vi. Conference phone integrated with system?
 - vii. Remote interpreter equipment integrated with system?
- c. Back-up and long-term archiving of digital recordings
 - i. Describe how the digital recordings are backed-up each day – *simultaneous backup*
 - ii. Describe how they are archived for long-term storage
 - iii. (DVDs v. network)
- d. Cost per courtroom for their DART system (best estimates) – *26,000 for latest additional courtroom after purchase of usps, monitors and backup equipment. This is a new courthouse – already wired for pa systems and the like. \$90,000 per year maintenance agreement. Now their pc’s need replacement and they are having trouble coming up with the money.*
 - i. PC (with A/V card)
 - ii. Digital recording management software
 - iii. Microphones
 - iv. AV mixer

- v. Cables
- vi. Cameras
- vii. Installation cost
- viii. Annual service agreement for equipment
- ix. Annual service agreement for software
- x. # of courtroom staff to operate/monitor system - 2
- xi. [Additional central tech staff to manage DART for all courtrooms?] – *court reporter*
- xii. TOTAL Cost per courtroom

5. Daily management of the digital recording system In the courtrooms

- a. Staff in each courtroom - 2
- b. Central management staff? - *1 court reporter plus court reporter supervisor for courthouse*
- c. Explain staffing assignments (*see above*) - *bailiff is a correctional officer, but also moves microphones around the courtroom during jury trials; clerk is present to handle files and to help with DART, but there is dissatisfaction since they apparently are unable to play back a question or answer upon request*
- d. Explain daily procedures for those who manage the system: - *Court reporters rotate assignments in courthouse, from reporting felony and juvenile to monitoring and indexing DART courtrooms to preparing transcripts by “writing” from tapes at three hours for every hour of proceedings.*

6. Courtroom procedures for attorneys and litigants to ensure complete and clear recordings

- a. Explain procedures: required to state name but often don't. Monitoring court reporters describe problems hearing, discerning the speaker.
- b. Problems or issues for attorneys/litigants: *Attorneys complain about not getting any read backs, but otherwise are content with transcripts*

7. Challenges presented by the use of DART:

- a. *Jury selection – microphone at jury box is inadequate. Support staff in courtroom pass microphone around to jurors. Jurors are identified by number and are questioned in small panels to allow for recording of questions and answers.*
- b. Requests for playback of witness testimony or attorney questions – *Civil attorney told us the clerks do not know how to do this, nor do judges (this was confirmed by judges). If a problem, they ask for daily copy from reporters.*
- c. Distribution/use of the audio/video records (any restrictions/limits?)
 - i. E.g.: MN – digital records are not public records; not available to public?
 - ii. Not public records. *Court reporters sanitize recording before giving it to anyone, including judge, so not so much down time, extraneous conversation and the like.*

8. Types of cases or proceedings that are most amenable to the use of DART (without a court reporter)

- a. Observations of judges – *all agree felony and juvenile too important for DART. The two who talked to us had never used real-time and did not have a basis for discussing the loss of the simultaneous transcript for purpose of ruling on*

objections. Judges not concerned with playbacks – fact that jury hears an objectionable question twice -

- b. *Observations of attorneys – After first couple of years – very difficult at first, they are content with the record except for the inability of staff to provide playback.*

9. Types of cases or proceedings that are least amenable to the use of DART (without a court reporter)

- a. *Observations of judges*
- b. *Observations of attorneys*

10. Reliability of the DART system (% of time that it operates with technical problems or failures)

- a. *Hardware: some difficulty when power goes out or have to take the system down, but ordinarily reliable.*
- b. *Software: The recordings are hard to hear through the earphones in the separate room and even more garbled when a playback is attempted in the courtroom.*
- c. *Human error: We heard about a recent problem where the wrong courtroom was activated and a judge in a contentious dissolution proceeding was angry. Court reporter told us the backup had picked up the testimony, but never made sense how.*

**11. Accuracy of the digital records: Completeness and clarity of the digital recordings:
Issues and concerns**

- a. *Observations of judges: They are not concerned with clarity of the records.*
- b. *Observations of court manager/tech staff: They think it is great.*
- c. *Observations of court reporters/DART monitors: They told us it was a mediocre record, and difficult to create, requiring 3 hours to compile 1 hour of proceedings. But the reporters are paid to do it – it is just one of their rotations, so they work for their salary and then receive personally their \$3.15 per page.*
- d. *Observations of attorneys: the two attorneys who were brought to speak to us are content with the records they get.*

12. Written transcripts

- a. *Who produces them? One of 26 certified court reporters.*
- b. *Qualifications for transcriptionists? **Certification by NCRA.***
- c. *Process for requesting & obtaining a transcript Process is through the supervising court reporter employee who assigns a court reporter to prepare the transcript.*
- d. Completeness and accuracy of written transcripts: Issues and concerns
 - i. *Observations of judges: This is not their concern as trial judges.*
 - ii. *Observations of attorneys: They think it is good enough, and are glad to have the backup recording for the times when they believe the transcription is wrong.*

13. Advantages of courtroom DART systems

- a. *Observations of judges: Less expensive; reliable; don't have to worry about scheduling a court reporter They don't seem to worry about expense and they all had their own reporters so no problem with scheduling.*
- b. *Observations of court manager/tech staff They "embraced" the change, but say it was a difficult first two years.*

- c. Observations of court reporters/DART monitors – *they are not happy with trying to discern the speaker and the words, but are paid to do it.*
 - d. Observations of attorneys: *They like it fine, except for no playback.*
- 14. Disadvantages of & problems with courtroom DART systems – see above**
- a. Observations of judges:
 - b. Observations of court manager/tech staff:
 - c. Observations of court reporters/DART monitors:
 - d. Observations of attorneys:
- 15. Satisfaction with their DART system: Would they recommend it? (Explain) – see above**
- a. Observations of judges:
 - b. Observations of court manager/tech staff:
 - c. Observations of court reporters/DART monitors:
 - d. Observations of attorneys:
- 16. Recommendations/cautions for the Iowa courts regarding DART**
- a. Observations of judges – *They were amazed that Iowa judges have no support staff except for reporters and aghast that Iowa judges travel to rural courthouses without courtroom support staff.*
 - b. Observations of court manager/tech staff – *They are invested in DART, but said the first couple of years were difficult.*
 - c. Observations of court reporters/DART monitors – *see above*
 - d. Observations of attorneys – *see above*

Appendix 8

Evaluations of Digital Recordings and Transcripts from Court Hearings in 5 Iowa Counties

(November 2009)

Background on this evaluation: The DART Committee invited four widely known DART vendors to install one of their systems in one courtroom in Iowa's district courts. The committee selected five courtrooms in different parts of the state to ensure that the test would be done in various settings (urban and rural) involving various case types. The locations and vendors included the following:

<u>Location</u>	<u>Vendor</u>
• Black Hawk County, a felony trial courtroom Systems	Jefferson Audio/Video
• Dickinson County, a district associate judge's courtroom:	High Criteria, Inc.
• District 8, associate juvenile judge who travels to 5 counties – portable	For the Record (FTR) –
• Polk County, district associate judge's courtroom	For the Record, Inc. (FTR)
• Story County, district judge's courtroom (civil & criminal)	Voice IQ Solutions (VIQ)

The installations occurred in mid-to-late September. Each vendor trained one or two court support staff on how to run the system and enter log notes (annotations) during the course of a hearing (e.g., case number and title, names of persons who speak during the hearing).

After each courtroom had been using the DART systems for at least a month, the DART Committee co-chairs instructed the judge in each test courtroom to select a recently conducted hearing of 15 to 30 minutes and to send the digital recordings to state court administration (SCA) staff. The digital recordings were copied onto CDs and sent to each committee member, who was asked to listen to each of the recordings to determine clarity and completeness. SCA staff also asked the court reporter in each of the test courtrooms to produce a written transcript of the selected hearing. SCA staff further arranged to have the digital recordings transcribed by an independent transcription company in Phoenix, AZ, which employs transcriptionists certified by the American Association of Electronic Recorders and Transcribers (AAERT). Copies of all ten transcripts (two for each of the five selected hearings) were emailed to all DART Committee members. Each member was specifically assigned to evaluate the two transcripts from one of the five hearings – by reading each transcript while listening to the digital recording of that hearing. Members who had time to do so evaluated the transcripts from multiple hearings. Software from each vendor allowed listeners to: (1) isolate individual tracks on the recordings by listening to just the track associated with the microphone on which the speaker was speaking; and (2) slow down the speed of the replay in case a speaker was speaking too fast. Using headphones also significantly enhanced the clarity of the recordings. Members wrote their evaluations on a standard evaluation form. This document is a compilation of the evaluation forms received from committee members.

**Evaluation of
Digital Recordings of Court Hearings in 5 Iowa Counties**
(November 2009)

Black Hawk County

Probation Revocation Hearing

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Black Hawk

Evaluator's name: TABOR Date: _____

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 Devries vs. Devries's 2 You are vs. You're 3 4 5 6	1 1:44 2 2:06 3 4 5 6
Transcript from the Digital Recording	1 final lee (sic) vs. fine only 2 (counsel + client confer) 3 vs. "Is that your understanding?" 4 THE A: Yeah" 5 6	1 1:29 2 3:18 3 4 5 6

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 none really 2 3 4 5 6	1 2 3 4 5 6

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

Court reporter's transcript was more thorough and better reflected hard to hear portions.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: **Blackhawk**

Evaluator's name: **Judge Bill Pattinson**

Date: November 15, 2009

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 Omitted the word "order" (see page 4, line 16) 2 Wrote "You have <u>the</u> right to appeal." Judge stated "You have <u>no</u> right to appeal" (see line 1, page 5)	1 3:25 2 3:45
Transcript from the Digital Recording	1 Wrote "... agreeing <u>with</u> his probation..." Speaker said "... agreeing <u>that</u> his probation..." see line 23, page 3. 2 Wrote "... for the <u>final</u> lee (sic)..." Speaker said "... for the <u>fine</u> only..." see line 25, page 3.	1 1:28 2 1:30

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet) None	Note the time on recording where problem occurred
--	---

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

I gave this particular recording a "good/acceptable" rating solely because the assistant County Attorney was a bit difficult to hear in some spots if I didn't isolate her microphone channel. She was harder to hear than the other participants because she had positioned herself a goodly distance (at least 5 or 6 feet) from the system's microphone, and she exacerbated that problem by standing to make her comments. Whomever was operating the DART system should have caught that problem.

Otherwise, the Judge's speech was clear as a bell as was defense counsel's. The defendant's voice was also a bit faint as he was slouched back in his seat and was several feet from the microphone.

While I do not necessarily consider this to be a error, the AVTranz transcriptionist omitted a couple of short comments made between defense counsel and the defendant and not to the court. Instead that transcriptionist referred to that portion only as "(Counsel and client confer)." See page 5, line 16. The official court reporter did include that tête-à-tête but not get it all.

Finally, the JAVS video system that flips the camera from speaker to speaker seemed like it would make transcription a lot easier than having just the voices to identify the various players.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: **Black Hawk**

Evaluator's name: **Potterfield**

Date: 11-17-09

A. Transcript Evaluation: (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 "Is that your understanding" vs. Does that sound right? This was mumbled between defense counsel and defendant – able to hear only by isolating mike 2 "the" right to appeal vs. "no" right to appeal – this was clear – an error from doing this many times	1 1:55 2 1:55
Transcript from the Digital Recording	1 Daniel "d" vs. Daniel Dean 2 "with" his probation vs. "that" his probation 3 "final lee" vs. "fine only" – this one is serious 4 (counsel and client confer) vs. what was said	1 1:52 2 1:53 3 1:53 4 1:55

B. Problems with the Digital Recording (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 I was able to pick up defense counsel's inaudible by isolating the mike – never could pick up prosecutor's "It's in the order" although both court reporter and transcriptionist were able to hear "That's in the" and transcriptionist was able to hear "order" apparently. 2 play back function is jerky and hard to get precisely 3 the video was great to have and a big help.	1 1:55 2 3 4 5 6

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: **Black Hawk County**

Evaluator's name: **John Goerd**

Date: Nov. 15, 2009

A. <u>Transcript Evaluation:</u>	Transcript errors compared to the digital recording (describe)	Time on recording where error occurred
Court Reporter's Transcript	1 – p. 3, line 22: "agreeing <u>that</u> his probation.." [correct: ""agreeing <u>with</u> his probation.."] 2 – p. 4, line 12: "Is that your understanding?" [correct: " <u>Does that sound right?</u> "] Note: The digital transcriber reported this as: "(Counsel and client confer)". 3 – p. 5, line 1: "You have <u>a</u> right to appeal." [correct: "You have <u>no</u> right to appeal."] << substantive error	1 – 1:18 2 – 3:17 3 – 3:44
Transcript from the Digital Recording	1 – p. 3, line 25: " <u>final lee</u> (sic)" [correct: " <u>fine only</u> "] 2 – p. 5, line 16: The digital transcriber reported "(Counsel and client confer)". The recording says: " <u>Does that sound right?</u> "	1 – 1:30 2 – 3:17

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
--	---

C. I rate the overall clarity and completeness of the digital recording (*check one*):

XX Excellent (3) ___ Good/Acceptable (2) ___ Poor/Unacceptable (1) ___ Terrible (0)

D. **Comments** (write on an additional page, if necessary):

This is a very short probation revocation hearing. The recording is very clear. The video allowed one to see that the defendant's attorney leaned over to talk to his client at 3:17 on the recording, which the digital transcriber recorded as "(Counsel and client confer)".

Using headphones/ear-buds significantly improves the audio quality on all the recordings from all vendors.

**Evaluation of
Digital Recordings of Court Hearings in 5 Iowa Counties**
(November 2009)

Dickinson County
Civil Motion Hearing

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Dickinson County

Evaluator's name: Judge Bobbi M. Alpers

Date: November 16, 2009

A. Transcript Evaluation: (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 Wrote name as spelled and not the one as pronounced when there was a difference (Page 3, Line 12) Element of style vs. accuracy? 2 Wrote "insured" and it is the "insurer" (page 3, Line 16) 3 Left out "the court" (Page 4, Line 2)	1 3:03:48 2 3:04:18 3 3:05:02
Transcript from the Digital Recording	1 Left out (sic) when the LLC was incorrectly identified as <u>lowa</u> Dental and not Broadway Dental (Page 3, LINE 23) while court reporter caught this and marked it at the same place	1 3:04:50

B. Problems with the Digital Recording (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 I did not find much range in the volume; it may have been my problem. 2 The sound on the "All Channels" was very similar to the sound on the individual channels for the judge/attorneys/ etc. so I did not receive much help from use of the individual channels feature.	1 Throughout 2 Throughout

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

The differences between the two transcripts I reviewed are minor. When there was noise interference in the courtroom, that noise affected the court reporter's ability to be accurate so the reporter stopped the proceeding to get the language down. Under the same circumstances the transcriptionist was presumably able to use the individual channels later to clarify and then get the language down. Although produced differently, each transcript was short and accurate.

This is a very brief hearing with no witnesses so the production of the transcript for either the reporter or the transcriptionist may not be representative of transcript issues in longer evidentiary hearings when witnesses, jurors and court personnel are the ones speaking rather than attorneys. Finally, I thought the sound level of the lawyer who called in was very similar to the sound level of the lawyer who was present in the courtroom.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Dickinson County

Evaluator's name: Beth Baldwin

Date: 11/16/09

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 p. 3, line 3 missing "there" 2 p. 3, line 12 attorney said the first time, "Estate of Ravencroft" but transcript says Ravenstein. 3 p. 3, line 14, "right" was singular as I heard the recording. 4 p. 4, line 2 missing, "the court" 5 p. 4, line 20 missing "you know" 6 p. 4, line 22 missing a sentence but the court reporter did acknowledge she was having trouble hearing over the speaker phone and asked to stop, and the judge joined in. Still, we missed the sentence from the attorney and never got back to it.	1 -6:47 2 -5:56 3 -5:40 4 - 4:43 5 - 3:20 6 -3:08
Transcript from the Digital Recording	1 p. 2, line 4 No initial "E" stated in defendant's name on recording. 2 p. 3, line 20 same problem	1 ? 2 ?

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 If we did this fully, I would want the speaker phone to be hooked into a specific microphone channel not going through the entire PA system. It would be hard for a court reporter or a transcriber to hear what was said. This is particularly problematic for a court reporter who can't go back and listen to the tape but has one shot to get it right. Otherwise, the recording was fine/great.	1

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

I do think that at -3:52 and right before that at -3:50 the attorney called the defendant "Brian" instead of "Ryan." Neither transcript caught this and I could have been hearing things, but I listened to it 5 times and I would have said "Brian" (sic) both times if I had prepared the transcript. (Maybe my ears are just old).

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Dickinson

Evaluator's name: Taber Date: _____

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 <u>It's been the long-standing law</u> 2 <u>McCann vs. Cann</u> of Iowa 3 <u>Ravenscroft v. Ravensstein</u> 4 <u>extra quotes</u> 5 <u>missing "giving use to incident in question"</u> 6	1 5:42 2 5:49 3 6:29 4 6:47 5 9:11 6
Transcript from the Digital Recording	1 <u>in long-standing vs. long-standing</u> 2 <u>misses "that's" (repeated)</u> 3 4 5 6	1 5:42 2 11:25 3 4 5 6

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 <u>none</u> 2 <u>-picked up speaker phone well</u> 3 4 5 6	1 2 3 4 5 6

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

Court reporter added (sic) p 3 line 25 - not in transcription otherwise transcription just, if not more, accurate.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Dickinson County

Evaluator's name: John Goerd

Date: Nov. 15, 2005

NOTE: One attorney appeared via telephone conference call, which was broadcast in the courtroom via the PA speakers. Therefore, the recording captures his voice from the PA system, not from directly speaking into a microphone. This challenging situation is the reason this hearing was chosen for evaluation by the committee.

A. <u>Transcript Evaluation:</u>	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 – p. 3, line 3: “..that no claim arises..” [correct: “..that <u>there...</u> no claim arises..”] 2 – p. 3, line 7: “ <u>McCann..</u> ” [correct: “Cann..”] 3 -- p. 3, line 12: “Estate vs. <u>Ravenstein</u> ” [correct: “Estate vs. <u>Ravenscroft</u> ”] 4 -- p. 3, line 14: “..no rights” [correct: “..no right”] 5 -- p. 3, line 17: “until a judgment against the insured is returned unsatisfied” [correct: “until a judgment against the insurer is returned unsatisfied”] << substantive error! [SEE COMMENT] 6 – p. 4, line 2: “I would ask that..” [correct: “Iowa would ask the court that..”] 6 – p. 3, line 25: “Iowa <u>(sic)</u> Dental...” [The “(sic)” is apparently here because the attorney misspoke: Broadway Dental LLC is the owner of the condo, not IA Dental. The digital transcriber did not note this.] 7 – p. 4, line 22: “.. were negligent individually. I think...” [correct: “..were negligent individually, <u>giving rise to the incident in question. So while...</u> ”] << At about this point the court reporter interrupts the attorney –who appeared via telephone conference call -- due to difficulty hearing the attorney (which the CR acknowledges parenthetically immediately after “So while...” .	1 – 5:25 2 – 5:45 3 – 6:20 4 – 6:28 5 – 6:43 6 – 7:20 7 – 9:04
Transcript from the Digital Recording	1 – p. 2, line 3: “Ryan <u>E.</u> Bygness” [correct: “Ryan Bygness”] 2 -- p. 3, line 20: “Ryan <u>E.</u> Bygness” [correct: “Ryan Bygness”]	1 – 4:12 2 – 7:00

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	
--	--

C. I rate the overall clarity and completeness of the digital recording (check one):
 Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

NOTE on CR error #5: Being able to significantly slow down the speed of the replay on the digital recording was critical to hearing what that attorney said at 6:43 on the recording pertaining (insurer – not insured). Given the attorney who appeared via conference call was heard only through the PA system – and because he spoke rather fast – this would have been a difficult hearing for a court reporter to capture accurately.

**Evaluation of
Digital Recordings of Court Hearings in 5 Iowa Counties**
(November 2009)

Jefferson County
Juvenile Hearing

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Jefferson County

Evaluator's name: Beth Baldwin

Date: 11/16/09

A. Transcript Evaluation: (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 p. 3, line 4, missed "the" before "...counsel Steve Small." 2 p. 3, line 24 should say, "First Resource" that's what was said, but says "Fist Resources" in transcript. 3 See Comments	1 12:02:03 2 12:02.37 3
Transcript from the Digital Recording	1 See Comments	1

B. Problems with the Digital Recording (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1. The audio recording was just not fresh and clear like the other test recordings. I would not consider this recording acceptable for purposes of making a court record day in and day out. You could make a transcript from the recording but I would not want this to be an official record without significant improvement on the portable unit's performance. I could not recommend use of the portable unit based upon this example. It would need great improvement.	1 2 3 4

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) **XXX** Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

Both the court reporter and the transcriptionist did a lot of cleaning up for the speakers in these transcripts. There were a multitude of uhms and ahs, stutters and repetition of words. I do not know the professional standard or rules for cleaning up various speakers' language. I would say that both the court reporter and the transcriptionist did basically the same thing in their clean up efforts, so there is no appreciable difference between the two on this issue.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Jefferson County

Evaluator's name: John Goerd

Date: Nov. 15, 2009

A. <u>Transcript Eval:</u>	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 – p. 3, line 24: "First Resources" [correct: "First Resource"] 2 – p. 8, line 6: "What services did Dustin participate in with you?" [correct: What services did Dustin participate in with you and the department?] 3 – p. 9, line 5: "..around <u>that</u> time.." [correct: "..around <u>the</u> time.."] 4 – p. 9, line 10: "No. Dustin's father..." [correct: "No. <u>Q: To your knowledge? A: Dustin's father...</u> "] 5 – p. 10, line 2: " <u>counseling</u> " [correct: " <u>cancelling</u> "] 6 – p. 10, line 23: "provisions" [correct: "provision"]	1 –12:02:25 2 – 12:07:24 3 – 12:08:05 4 –12:08:48 5 – 12:09:37 6 –12:10:16
Transcript from the Digital Recording	1 – P. 4, line 13: "...do you have <u>something for</u> the record?" [correct: "...do you have <u>some further</u> record?"] 2 – p. 10, line 23: "..ask the court <u>to</u> consider.." [correct: "..ask the court consider.."] 3 – p. 11, line 7: "..what further record <u>did</u> you.." [correct: "..what further record <u>do</u> you.."]	1 –12:02:10 2 –12:10:33 3 – 12:10:46

B. <u>Problems with the Digital Recording</u> (describe): None (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred

C. I rate the overall clarity and completeness of the digital recording (check one):

XX Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

I used headphones/earbuds, which were very helpful; they made a significant difference. I also isolated tracks to shut off the track nearest the baby, who made noises, and adjusted the volume of the track on which the speaker was recorded – as necessary – to improve the ability to understand the speaker.

Both the court reporter's and digital recording transcriber's transcripts excluded a multitude of "um" and "ah" sounds. In fact, this appeared to be the case in all the transcripts from the five counties – with the exception of the court reporter's transcript from Story County (in which almost all the se sounds are included).

**Evaluation of
Digital Recordings of Court Hearings in 5 Iowa Counties**
(November 2009)

Polk County
Sentencing Hearing

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Polk

Evaluator's name: Scott Hand

Date: 11-15-2009

A. <u>Transcript Evaluation:</u>	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
<p>Court Reporter's Transcript</p> <p>-> ct rpt stopped & corrected #6</p>	1 word 'this' should be 'that'	1 11:13:39
	2 words 'all right' added	2 11:14:57
	3 missing 'yes'	3 11:14:59
	4 'through' replaced with 'throughout'	4 11:15:52
	5 missing word 'both'	5 11:16:23
	6 should say 'and the next memory'	6 11:16:32
	7 missing word 'tried'	7 11:18:23
	8 wrong word 'when' should be 'where'	8 11:18:28
	9 missing 'because'	9 11:28:55
	10 missing 'very'	10 11:29:44
	11 missing 'that'	11 11:31:46
	12 wrong word, 'concurrently' in xscript, word 'concurrent' in audio	12 11:31:55
	13 missing 'your honor'	13 11:32:04
	14 missing 'of values'	14 11:33:25
	15 wrong word, 'whatever' should be 'every'	15 11:34:26
	16 'don't' should be 'didn't'	16 11:35:57
	17 'on' should be 'in'	17 11:37:15
	18 'review' should be 'view'	18 11:38:24
	19 'that' should be 'the'	19 11:38:37
	20 missing word 'so'	20 11:40:02
	21 "can't" should be "can"	21 11:40:54
	22 missing word "today"	22 11:41:57
	23 missing word 'distractions'	23 11:43:26
	24 added word "other"	24 11:43:30

Transcript from the Digital Recording	1 missing word 'the'	1 11:29:36
	2 'concurrently' used in xcript, 'concurrent' in audio	2 11:31:55

B. Problems with the Digital Recording (describe): None (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
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C. I rate the overall clarity and completeness of the digital recording (check one):
 Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

Polk County – Scott Hand's evaluation

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Polk

Evaluator's name: David C. Larson Date: 11-16-09

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
<p>Court Reporter's Transcript</p> <p><i>Continued on page 2</i></p>	<p>1 "defendant" should have been "victim"</p> <p>2 "-- or both 18--1995" should have been "or both 8/3/1995"</p> <p>3 "Identify" should have been "Identify"</p> <p>4 "when I called 911" should have been "when I tried to call 911"</p> <p>5 "when Gary punched me" should have been "where Gary punched me"</p> <p>6 "partaking in public" should have been "partaking in public"</p> <p>7. "four hour" omitted out start of line 20 pg. 14</p>	<p>1 pg. 2 line 21</p> <p>2 pg. 3 line 15</p> <p>3 pg. 3 line 16</p> <p>4 pg. 6 lines 12-13</p> <p>5 pg. 6 line 14</p> <p>6 pg. 8 line 13</p> <p>7. Pg. 14 line 20</p>
<p>Transcript from the Digital Recording</p>	<p>1 "knees" should have been "knee"</p> <p>2 "file a supplemental order" should have been "follow a supplemental order"</p> <p>3 "helplessness" should have been "hopelessness"</p> <p>4 "because" should have been "it's..."</p> <p>5 "p.m." should have been "a.m."</p> <p>6</p>	<p>1 pg. 6 line 25</p> <p>2 pg. 13 line 15</p> <p>3 pg. 16 line 19</p> <p>4 pg. 18 line 23</p> <p>5 pg. 24 line 3</p> <p>6</p>

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 No problems noted	1
2	2
3	3
4	4
5	5
6	6

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary): *I left out several minor transcription errors on the Court Reporter's transcript such as: This/That; one/were; have/had; my/the; I'm/am; singular vs. plural issues; repeats (stuttering) not included and statements by the Court Reporter such as "repeat for" slow down*
Over all, the transcript from the digital recorder was more accurate on a word for word basis.

DART Committee

Page 2 of 3

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Polk
 Evaluator's name: David C. Larson Date: 11-16-09

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript Continued on page 3	8 "THE DEFENDANT: I wasn't either" omitted on line 1 pg. 15 after the words "proceed" 9 "fault" should have been "fall" 10 "the cause" should have been "because" 11 "in whatever way" should have been "in every way" 12 "I'll have to do that" should have been "I have to do that" 13 "reversal" should have been "revers" 14. "can't" should have been "can"	8 pg. 15 line 1 9 pg. 15 line 22 10 pg. 15 line 23 11 pg. 16 line 1 12 pg. 16 line 24 13 pg. 18 line 9 14. pg. 20 line 6
Transcript from the Digital Recording	1 2 3 4 5 6	1 2 3 4 5 6

B. <u>Problems with the Digital Recording (describe):</u> (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1	1
2	2
3	3
4	4
5	5
6	6

C. I rate the overall clarity and completeness of the digital recording (check one):
 Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

DART Committee

Page 3 of 3

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Polk
 Evaluator's name: David C. Larson Date: 11-16-09

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	15. "Meaning" should be "leading" 26 "I'm not going to appeal" omitted 37 "No other--" should have been "No other distractions" 4 5 6	15 pg. 20 line 19 2 pg. 21 line 10 3 pg. 22 line 10 4 5 6
Transcript from the Digital Recording	1 2 3 4 5 6	1 2 3 4 5 6

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1	1
2	2
3	3
4	4
5	5
6	6

C. I rate the overall clarity and completeness of the digital recording (check one):
 Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Polk County

Evaluator's name: Martha Lucey

Date: October 20, 2009 (sentencing hearing)

A. <u>Transcript Eval</u>	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	<ol style="list-style-type: none"> 1. p. 3 L21 - "this" should be "that" 2. p. 4 L11 ? "All right." Did not hear that 3. p. 5 L5 - "throughout" should be "through" 4. p. 6 L12 ? "when I tried to call 911" instead of "when I called 911" 5. p. 12 L14 omitted "totals" between "those" & "will" 6. p. 13 L2 omitted "very" between "was" & "smart" 7. p. 14 L5-16 - ?? some verbal stumbling cleaned up? 8. p. 14 L24-25 - omitted "Qualley: I'm sorry, I'm sorry." 9. p. 15 L17 "in jail" should be "of values" 10. p. 16 L1 "whatever" should be "every" 11. p. 16 L24 ?? "if" (added?) 12. p. 18 L9 'review' should be "view" 13. p. 20 L18 "had" should be "have" 14. p. 20 L24 omitted "today" after "end" 15. p. 21 L2 ?? "exist" instead of "exists" 	<ol style="list-style-type: none"> 1. 11:13:38 2. 11:14:55 3. 11:15:53 4. 11:18:24 5. 11:29:07 6. 11:29:44 7. 11:31:18-:40 8. 11:32:16 9. 11:33:25 10. 11:34:25 11. 11:36:27 12. 11:38:24 13. 11:41:42 14. 11:41:57 15. 11:42:09
Transcript from the Digital Recording	<ol style="list-style-type: none"> 1. p. 3 L9 ??? did not hear court say that 2. p. 13 L14 "fold" should be "totals" 3. p. 13 L15 ?? "file" think he actually said "follow" 4. p. 16 L19 "helplessness" should be "hopelessness" 5. p. 18 L10-11 - not necessary to include 6. p. 23 L 7 - I could not hear this statement - but did not isolate the tracks. 	<ol style="list-style-type: none"> 1. 11:11:06 2. 11:29:07 3. 11:29:09 4. 11:33:16 5. 11:36:37 6. 11:43:02

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
<ol style="list-style-type: none"> 1. At times, it is difficult to hear the lawyers if they are away from microphones. 2. Mostly, the judge was clear and easily understood. Did not hear some of the statements the transcriber had attributed to the judge. 3. The defendant, Jones, was hard to understand at times. 4. The camera needs to be re-positioned to include the judge or have multiple cameras. 	<ol style="list-style-type: none"> 1 2 3 4

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary): See next page

Polk County Recording (Martha Lucey's comments)

1. I did not think it was important to distinguish between "yeah" and "yep". On occasions, the court reporter and the transcriber had different words.
2. I am not sure whether the official record does or should include all of the statements made by the people who are not supposed to be speaking. Some of the statements made by Jones and the victim are not ordinarily included in the transcripts.
3. I was told the microphones were so sensitive that when attorneys were at the back of the court room and a proceeding was occurring at the bench, the attorneys who were not a part of the on-the-record proceeding were picked up. After viewing and hearing the recording, I am not sure that anyone would be easily recorded if not right at counsel table.
4. I did not isolate the tracks. I did, however, listen to the recording 4 times.
5. The transcriber's transcript is pretty complete. The only concern is whether the transcriber understands Iowa Rules of Court.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Polk County

Evaluator's name: John Goerd

Date: 11-15-09

A. <u>Transcript Eval:</u>	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 – p. 2, line 20: "...and the defendant..." [correct: "...and <u>that</u> the defendant..."]	1 – 11:11:30
	2 – p. 2, line 23: "Other than <u>the</u> specific..." [correct: " <u>So</u> other than <u>that</u> specific..."]	2 – 11:11:44
	3 – p. 3, line 13: "There are two offenses..." [correct: " <u>On sec...</u> there are two offenses..."]	3 – 11:12:47
	4 – p. 3, line 15: "...or both 18 – 1995.." [correct: "...or both <u>8/3/1995...</u> "]	4 – 11:12:56
	5 – p. 3, line 21: "Other than <u>this...</u> " [correct: "Other than <u>that..</u> "]	5 – 11:13:26
	6 – p. 4, line 1: "... shows as those..." [correct: "... <u>those</u> shows as those..."]	6 – 11:13:47
	7 – p. 4, line 7: "... there's also a fighting in public..." [correct: "... there's also a <u>pub... or a</u> fighting in public..."]	7 – 11:14:14
	8 – p. 5, line 5: "... <u>throughout</u> the years.." [correct: "through the years.."]	8 – 11:15:46
	9 – p. 5, line 15: " <u>My</u> next memory..." [correct: " <u>And the</u> next.."]	9 – 11:16:27
	10 – p. 5, line 17: <u>Omitted the court reporter's interruption: "Ma'am, I'm sorry. You're going to have to slow it... I'm sorry but you're going to have to slow down."</u> Then Ms. Steen: "Where do you want me to go back to?..."	10 – 11:16:30
	11 – p. 6, line 13: "...when I <u>called</u> 911..." [correct: "...when I <u>tried to call</u> 911..."]	11 – 11:18:21
	12 – p. 6, line 14: "... <u>when</u> Gary punched me.." [correct: "... <u>where</u> Gary punched me..."]	12 – 11:18:26
	13 – p. 7, line 11: " <u>my</u> pillow" [correct: " <u>the</u> pillow"]	13 – 11:19:48
	14 – p. 7, line 25: "nightmares" [correct: "night <u>wares... mares</u> "]	14 – 11:20:41
	15 – p. 12, line 14: "...those <u>will</u> become available..." [correct: "... those <u>fol</u> ds (?) become available.."]	15 – 11:29:02
	16 – p. 13, line 2: "he was smart" [correct: "he was <u>very</u> smart"]	16 – 11:29:42
	17 – p. 13, line 13: "This is a case.." [correct: " <u>Well,</u> this is a case"]	17 – 11:30:20
	18 – p. 13, line 23: "...that he's not responsible.." [correct: "...that, <u>you know,</u> he's not responsible..."]	18 – 11:30:56
	19 – p. 14, line 2: "When he's been incarcerated.." [correct: " <u>In prison,</u> when he's been incarcerated..."]	19 – 11:31:05
	20 – p. 14, line 3: "attended several classes, been in jail..." [correct: "attended several classes, <u>he's</u> been in jail..."]	20 – 11:31:28
	21 – p. 14, line 8: "request <u>to</u> the court" [correct: "request the court"]	21 – 11:31:25
	22 – p. 14, line 9: "the following things..." [correct: "the following <u>issue...</u> one of the following things"]	22 – 11:31:28
	23 – p. 14, line 13: "mistake" [correct: "mistakes"]	23 -- 11:31:39

	<p>24 – p. 14, line 13: “Or if the ...” [correct: “Or <u>that</u> if the...”]</p> <p>25 – p. 14, line 15: “concurrently” [correct: “concurrent”]</p> <p>26 – p. 14, line 15: “That further... the defense..” [correct: “That further... <u>with that</u> the defense...”]</p> <p>27 – p. 14, line 20: “Before ...” [correct: “<u>Your Honor</u>, before...”]</p> <p>28 -- p. 14, line 23: “That’s why...” [correct: “<u>As you...</u> that’s why”]</p> <p>29 -- p. 14, line 23: <u>completely omitted</u>: “Mr Qualley: ‘I’m sorry, I’m sorry...”</p> <p>30 – p. 15, line 3: “After the domestic...” [correct: “After, <u>after</u> the domestic...”]</p> <p>31 -- p. 15, line 5: “..emotions <u>have</u> surfaced” [correct: “.. emotions surfaced”]</p> <p>32 – p. 15, line 12: “Fear is – I’m fearful..” [correct: “Fear is.. <u>fear...</u> I’m fearful...”]</p> <p>33 – p. 15, line 17: “a real sense <u>in jail.</u>” [correct: “a real sense <u>of values.</u>”]</p> <p>34 -- p. 15, line 18: “begun” [correct: “<u>began</u>”]</p> <p>35 -- p. 15, line 23: <u>the speaker pauses and is weeping at this point; clearly audible</u> [correct?: “(pause... weeping) ”]</p> <p>36 – p. 15, line 24: <u>omitted</u>: “Court Reporter: ‘I’m sorry. What was the last thing you said?’”</p> <p>37 – p. 16, line 1: “in <u>whatever</u> way” [correct: “in <u>every</u> way”]</p> <p>38 – p. 16, line 15: “<u>some</u> peace of mind and serenity” [correct: “peace of mind and <u>some</u> serenity”]</p> <p>39 – p. 16, line 16: “<u>don’t</u>” [correct: “<u>didn’t</u>”]</p> <p>40 – p. 17, line 4: “<u>reviewed</u>” [correct: “review”]</p> <p>41 – p. 17, line 13: “And it’s not based <u>on</u> alcohol...” [correct: “And <u>that</u> it’s not based <u>in</u> alcohol...”]</p> <p>42 – p. 17, line 19: After the judge says: “your criminal history goes back for 30 years...” <u>the DEFENDANT says “I know.” This is omitted</u></p> <p>43 – p. 18, line 9: “my <u>review</u>” [correct: “my <u>view</u>”]</p> <p>44 – p. 18, line 12: “<u>that</u> therapy” [correct: “<u>the</u> therapy”]</p> <p>45 – p. 18, line 18: “<u>the</u> court” [correct: “<u>this</u> court”]</p> <p>46 – p. 19, line 7: “Sir, I need to” [correct: “Sir, <u>you’re...</u> I need to”]</p> <p>47 – p. 19, line 8: “... the statutory – from the mandatory..” [correct: “...the statutory <u>mandatory...</u> from the mandatory...”]</p> <p>48 – p. 19, line 16 “...between now...” [correct: “<u>so</u> between...”]</p> <p>49 – p. 20, line 1: “If I’m made aware on my own motion...” [correct: “If I’m made aware <u>the...</u> on my own motion...”]</p> <p>50 – p. 20, line 12: “penalties” [correct: “penalty”]</p> <p>51 – p. 20, line 18: “<u>had</u> been” [correct: “<u>have</u> been”]</p> <p>52 – p. 20, line 24: “needs to end..” [correct: “needs to end <u>today</u>”]</p> <p>53 – p. 21, line 2: “exists” [correct: “exist”]</p> <p>54 – p. 21, line 12: “important if...” [correct: “important <u>that</u> if...”]</p>	<p>24 -- 11:31:39</p> <p>25 – 11:31:49</p> <p>26 – 11:31:49</p> <p>27 – 11:32:02</p> <p>28 -- 11:32:10</p> <p>29 -- 11:32:15</p> <p>30 – 11:32:35</p> <p>31 – 11:32:41</p> <p>32 – 11:33:08</p> <p>33 – 11:33:20</p> <p>34 – 11:33:22</p> <p>35 – 11:33:45</p> <p>36 – 11:34:09</p> <p>37 – 11:34:24</p> <p>38 -- 11:35:46</p> <p>39 – 11:35:55</p> <p>40 – 11:36:40</p> <p>41 – 11:37:09</p> <p>42 – 11:37:29</p> <p>43 – 11:38:19</p> <p>44 – 11:38:36</p> <p>45 – 11:38:55</p> <p>46 – 11:39:30</p> <p>47 – 11:39:36</p> <p>48 – 11:39:58</p> <p>49 – 11:40:33</p> <p>50 -- 11:41:13</p> <p>51 -- 11:41:39</p> <p>52 -- 11:41:55</p> <p>53 -- 11:42:07</p> <p>54 -- 11:41:32</p>
Transcript from the Digital Recording	<p>1 – p. 3, line 18: “<u>and</u> I think...” [correct: “...I think...”]</p> <p>2 – p. 4, line 7: “...are indicate...” [correct: “...are <u>an</u> indicate...”]</p> <p>3 – <u>The Court Report included a few words here in the transcript between counsel and defendant; the digital recording transcriber notes: “(Counsel and client confer) Is this an omission?”</u></p> <p>4 – p. 14, line 5: “...to court” [correct: “...<u>with a</u> court”]</p> <p>5 – p. 15, line 7: “<u>that</u> the court...” [correct: “the court...”]</p>	<p>1 – 11:11:22</p> <p>2 – 11:12:15</p> <p>3 – 11:12:24</p> <p>4 – 11:29:52</p> <p>5 – 11:31:25</p>

6 – p. 15, line 14: “concurrent <u>ly</u> ” [correct: “concurrent”]	6 – 11:31:49
7 – p. 16, line 14: “I wish” [correct: “I <u>would</u> wish”]	7 – 11:32:55
8 – p. 17, line 3: “ <u>B</u> ecause...” [correct: “ <u>T</u> he cause...”]	8 – 11:34:04
9 – p. 17, line 4: “disastrous <u>s</u> tate” [correct: “disastrous <u>f</u> ate”]	9 – 11:34:08
10 – p. 18, line 23: “ <u>b</u> ecause a lot...” [correct: “ <u>i</u> t’s a lot...”]	10 – 11:37:16

B. <u>Problems with the Digital Recording</u> (describe): Background noise, but being able to isolate tracks and listen multiple times helped.	Note the time on recording where problem occurred
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C. I rate the overall clarity and completeness of the digital recording (*check one*):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. **Comments** (write on an additional page, if necessary):

The vast majority of the errors by the court reporter and the AV Tranz transcriber are minor. They would not change the essential meaning of most sentences. Depending on the context or the type of testimony, however, the court reporter’s errors **#11, 33, and 43** could be substantive.

There was quite a bit of background noise (e.g., phone ringing). I did isolate tracks on occasion. This helped reduce background noise. **I also wore headphones/earbuds – which helped a lot.**

The digital recording, which provides the ability to listen to selected segments multiple times – as needed, is a big advantage for the AV transcriber vs. the court reporter, who gets just one opportunity to get it right.

**Evaluation of
Digital Recordings of Court Hearings in 5 Iowa Counties**
(November 2009)

Story County

Dissolution of Marriage Hearing

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Story County

Evaluator's name: Beth Baldwin

Date: 11/16/09

A. Transcript Evaluation: (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 p. 6, line 13 should be , "And what is the residence" not "where's the residence 2 p. 9, line 2 should be, "And does that also include..." not "And does the allowance..." 3 p. 14, line 8 should be "the summer before when" not "be when" 4 p. 27, line 12 should say "\$21,600...\$21,620" not just "\$21,620."	1 5:20 2 7:58 3 13:05 4 27:50
Transcript from the Digital Recording	1 p. 6, line 17 missing, "And..." at the beginning of the line. 2 p. 14, line 3 says DMAT , should be DMACC 3 p. 15, line 10 missing "has" should say "Dee has asked..." 4 p. 14, line 12 should say summer before when 5 p. 20, line 16, not "what" but "which"	1 5:06 2 12:31 3 14:05 4 13:05 5 20:47

B. Problems with the Digital Recording (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 None that I noticed. I thought it was very clear. The lawyer and client were very easy to understand.	

C. I rate the overall clarity and completeness of the digital recording (check one):

 XXX Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary): The Transcriptionist says the case is in Story County, the Court Reporter's Transcript says Boone County. Transcriptionist is wrong, but I can see why the mistake was made as she/he did not do the whole case and is just doing a portion for a test. Neither transcript was perfect, but neither had any major, case changing mistakes. Both would be an acceptable transcript for a divorce/dissolution case.

DART Committee
Evaluation of the Digital Recording and the Transcripts from a DART Test
Courtroom

County where the recording was made:

Story County
 Evaluator's name: Esther J. Dean

Date: 11-13-09

A. Transcript Evaluation: (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 2 3 4 5 6 * None noted	1 2 3 4 5 6
Transcript from the Digital Recording	1 DMACC was taken as DMAT 2 3 4 5 6 * Page 14, line number 3 of transcript	1 ? 2 3 4 5 6

B. Problems with the Digital Recording (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1	1
2	2
3	3
4	4

When completed - return to John Goerdl at FAX#: (515) 242-0014 - OR - EMAIL:
 john.goerdl@iowacourts.gov

5	5
6	6
* None noted	

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

A. Transcript Evaluation

1. Court Reporter's Transcript

I did not note any errors.
 I did note that the court reporter was very diligent about taking down the "um" & "uh" by witnesses.
 The court reporter also, verbatim, when a person said "ya" as opposed to you or left the ending off a word, as "gonna" versus "going". The independent transcriptionist "cleaned it up."

2. Transcript from Recording *See above*

B. Digital Recording

The recording was very clear & audible.

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: **Story County**

Evaluator's name: **Lucy J. Gamon**

Date: November 14, 2009

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 "name" should be "names" 2 "the allowance" should be "that also" 3 "the" should be "our" 4 "account" should be "accounts" 5 "a" should be "the" 6 "\$21,600" is omitted from the answer	1 3:55 2 7:53 3 9:11 4 25:23 5 26:30 6 27:46
Transcript from the Digital Recording	1 "DMAT" should be "DMACC" 2 "Petitioner Notes" should be "Petitioner's" 3 the word "has" is omitted 4 the word "premarital" actually stated twice by attorney	1 12:29 2 12:45 3 14:02 4 27:20

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 No problems noted.	

C. I rate the overall clarity and completeness of the digital recording (check one):

X Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

Comments on next page

D. Comments - by Judge Lucy Gamon

1. The digital recording is crystal clear. I really enjoyed learning how to use the VIQ player. Being able to slow down the recording was helpful at a few points. I would rate both the transcripts as excellent. They are functionally perfect—the minor errors noted are really not substantive in any way.
2. Interestingly, the court reporter included statements by the "DART Operator" in the beginning portion of her transcript and the independent transcriptionist did not. I could not hear those statements on the recording, so I presume the recorder does not pick up people who are not reasonably close to a microphone. I don't consider this a defect, just an observation.
3. The independent transcriptionist did not include the use of "um" and "uh" in her transcript and the court reporter did include the usage of these terms. I don't consider this a defect in the transcript prepared by the independent transcriptionist. My Webster's doesn't include these terms as words, although my Scrabble dictionary says they are!

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: Story

Evaluator's name: TABOR

Date: _____

A. <u>Transcript Evaluation:</u> (If more than 6 errors, add an additional sheet)	Transcript errors compared to the digital recording (describe)	Note the time on recording where error occurred
Court Reporter's Transcript	1 Boone Co on cover 2 where do the residence stand what is the residence. 3 Arts in Science stand 4 ya, ja stand Arts and Science 5 you stand you 6 wanna - want to account(s) (singular she plural) 7 leaves out \$21,600	1 2 9:04 3 9:05 4 9:09 5 9:14 6 9:25 7 9:27
Transcript from the Digital Recording	1 OMAAT stand OMACC 2 Add word "Notes" 3 "Because" / stand "so" 4 5 6	1 9:12 2 9:12 3 9:25 4 5 6

B. <u>Problems with the Digital Recording</u> (describe): (If more than 6 problems, add an additional sheet)	Note the time on recording where problem occurred
1 none, clear audio 2 3 4 5 6	1 2 3 4 5 6

C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

Court reporter includes many hesitation words "um" + colloquial pronunciation, transcriptionist does not eg, don't make it

DART Committee

Evaluation of the Digital Recording and the Transcripts from a DART Test Courtroom

County where the recording was made: **STORY CO.**

Evaluator's name: **John Goerd**

Date: **Nov. 15, 2009**

NOTE: The independent transcription company was told that this was a "Story County" case, because that is where the hearing occurred. Therefore, the transcriber included at the top of the transcript "In the Iowa District Court for Story County." However, the case had actually been filed in BOONE County, but was heard in Story County. The court reporter correctly captioned the transcript as "In the Iowa District Court for Boone County".

A. <u>Transcript Evaluation:</u>	Transcript errors compared to the digital recording (describe)	Note the time on recording
Court Reporter's Transcript	1 – p. 9, line 12: "And does Craig get a <u>cost</u> ... cost of living.." [correct: "And does Craig get a <u>cross</u> ... cost of living"] 2 – p. 18, line 5: "... <u>as</u> stated" [correct: "... <u>it's</u> stated..."] 3 – p. 25, line 7: "... <u>savings account</u> ?" [correct word: "accounts"] 4 – p. 27, line 12: " <u>\$2,620</u> " [correct: "\$2,000... (pause).. \$2,620"]	1 – 8:19 2 – 17:08 3 – 25:23 4 – 27:45
Transcript from the Digital Recording	1 – p. 7, line 12: "Bachelor of Arts <u>and</u> Science" [correct: " <u>in</u> science"] 2 – p. 8, line 7: "... what are your <u>current</u> earnings...?" [correct: "current <u>job</u> ... <u>current</u> earnings...?"] 3 – p. 14, line 3: " <u>DMAT</u> class..." [correct: "DMACC class..."] 4 – p. 14, line 12: "...during the summer when Joshua..." [correct: "during the summer <u>be</u> when Joshua..."] 5 – p. 20, line 16: "So <u>what</u> ..." [correct: "So <u>which</u> ..."] 6 – p. 20, line 20: "Family <u>coverage</u> ..." [correct: "Family <u>cov</u> ... coverage..."] 7 – p. 26, line 24: "...premarital money" [correct: "...premarital ... premarital money"]	1 – 5:47 2 – 6:42 3 – 12:25 4 – 13:01 5 – 20:35 6 – 20:44 7 – 27:21

B. <u>Problems with the Digital Recording</u> (describe): -- None (If more than 6 problems, add an additional sheet)	
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C. I rate the overall clarity and completeness of the digital recording (check one):

Excellent (3) Good/Acceptable (2) Poor/Unacceptable (1) Terrible (0)

D. Comments (write on an additional page, if necessary):

First, I would rate all the errors/omissions by both transcriptionists to be **minor**. They would have no impact on the essential meaning of any sentence.

Second, the court reporter accurately included many "uh" and "um" sounds and also accurately reported slang or lazy pronunciations (e.g., "gonna" rather than "going to") throughout the testimony. These were always omitted or "cleaned up" by the digital recording transcriptionist from AV Tranz – though the sounds were clearly heard on the recording. This appears to be a policy decision, rather than a systematic problem with the transcript from AV Tranz.

Finally, I found the recording to be exceptionally clear. This might be due in part to the excellent acoustics, everyone stayed near their microphones (as instructed by the judge), and everyone was very courteous – speaking one person at a time.

Appendix 9 Current Technology Used by Court Reporters*

NOTE: This appendix was submitted by the Iowa Court Reporters Association. It was not reviewed or approved by the DART Committee and, therefore, does not necessarily reflect the views of the committee.

Court reporters have been employing advanced court technology since the introduction of computer-aided transcript technology more than 25 years ago. Court reporters providing various means of redundancy, litigation support and real-time services are growing and evolving. The following technology is available to users of the court system by Iowa Certified Shorthand Reporters:

Writers (Court reporting steno machines):

- Steno machines are **computers** in themselves allowing many functions to be done using the writer.
- Newer model writers are now **paperless** or have paperless capability.
- New writers have **3 forms of backup** within the machine itself – RAM backup and two SD card backups. In addition, when the reporter is writing real-time, a fourth backup of the proceeding is written to a computer.
- Newer model writers also have **audiosync** capability which means that the proceedings can be directly recorded to one of the SD cards in the steno machine and can be transferred onto a CD or other media.
- Since the audiosync program is in the writer, it can easily be **used in the judge's chambers** without the necessity of having the reporter's computer hooked up in chambers.
- **Translation display is on the screen** of the writer for easy and quick readback.
- Newer model writers now have the capability to provide **wireless litigation support** to judges and attorneys. If a computer is equipped with Wi-Fi or Bluetooth technology for wireless services, the reporter can write encrypted real-time directly to a number of computers without the use of cables.

Real-time and Software:

- Real-time is the act of writing on a computerized shorthand writer that is connected to a computer and having the English words appear instantly on the computer screen for viewing and printing; thus helping the judicial system **comply with ADA requirements** when utilizing a reporter. This service has been provided to judges, attorneys, jurors, witnesses, litigants, and also to aid interpreters.
- Using real-time, reporters are also able to **communicate with their judges** while the proceedings are occurring.

- Court reporter software programs also have the **audiosync capability** to record onto the computer. This additional backup technology is an audio recording of court proceedings that is activated as the reporter is writing. The reporter has the ability to instantly control the recording; i.e., if there is a confidential conversation occurring or discussion held that is not on the record, the reporter has the ability to instantly pause the audiosync recording. The recording starts again automatically when the reporter begins writing.
- The audio feature can easily be used in the judge's chamber by moving the reporter's computer to chambers if the reporter does not have the capability within their writer.
- The audiosync recordings can be **copied to CDs** or other media.
- Audiosync can be **used instantly**. The reporter can do a word search for a requested portion of the proceeding and immediately play the audio recording.
- Computer-aided transcription (CAT) has **keyword search** capability. The reporter can do an instant word search and go to each portion of the transcript where that word was used. This function is also helpful when using audiosync or for readback.
- **Timestamps** are available on the side of real-time, as well as paper transcripts. This enables a person to go to a certain time of the proceedings or note the time of courtroom events.
- Real-time can now be provided to judges and others by **wireless** means with the use of Wi-Fi and Bluetooth technology.
- **Issue identification** searches are available to a judge using real-time can request the program to identify each area in the proceedings where a certain topic was discussed and it will be marked for their use. Issues to be proven in a case can easily be marked by the judge, and the testimony surrounding those issues condensed into a report for later use.
- **Cue codes** can be utilized by judges and attorneys in their copy of the transcript on their computer for personal notes.

Transcripts:

- Through the use of computer-aided transcription software and real-time, **transcripts can be prepared quickly**. Rough drafts can be provided instantaneously.
- Transcripts can be provided with **timestamps** in the margin if requested.
- Transcripts can be provided with **keyword indexes**. A keyword index is an index of every word used in the transcript and the page number where it appears.
- An **instant index** of testimony and exhibits can be produced by CAT software.

- Transcripts can be and are provided in **PDF** (Portable Document format) and **ASCII disk** format (American Standard Code for Information Interchange – ASCII – coding scheme used by computers).
- Court reporters can **e-file and e-mail** transcripts.
- Transcripts can be printed in **condensed** format, i.e., two or four pages on one page.

*This list is not inclusive of all technology available. Technology continues to be developed.

Appendix 10
Detailed DART Costs per Courtroom in Alaska*

Alaska State Courts: Costs for a Digital Recording System in One Courtroom*

Equipment Name	Model	Price Ea.	Qty	Total Price
Lectrosonics DM1612 Digital Matrix Mixer	DM 1612	\$3,500.00	1	\$3,500.00
Lectrosonics PA8 Power Amplifier	PA8	\$1,800.00	1	\$1,800.00
Lectrosonics DMTH4 Digital Telephone Hybrid	DMTH4	\$2,000.00	1	\$2,000.00
Lectrosonics RCWPB8 Wired Telephonics Remote	RCWPB8	\$160.00	1	\$160.00
Middle Atlantic DPPM8-12 19" Pivoting Front Panel Cabinet	DPPM8-12	\$110.00	1	\$110.00
Middle Atlantic Cabinet Cover PPM-LID12	PPM-LID12	\$20.00	1	\$20.00
Middle Atlantic Blank Panel PBL-1 Single Space	PBL-1	\$11.00	1	\$11.00
Middle Atlantic Blank Panel PBL-2 Double Space	PBL-2	\$15.00	1	\$15.00
WireMold Perma Power Rack Mount Power Strip with 8 outlets and a 15' (4.6m) power cord	R5BZ20-15	\$70.00	1	\$70.00
Beyerdynamic M69TG Microphone	M69TG	\$300.00	7	\$2,100.00
OnStage Microphone Stand with Adjustable Shaft	DS7200	\$16.00	7	\$112.00
Hercules Stands Quick-N-EZ Microphone Clip	MH100B	\$7.00	7	\$49.00
TOA Speakers (6 per courtroom)	F2852C	\$150.00	6	\$900.00
Phonic Ear StarSound PE600E Infrared Hearing Assistance Systems	PE600E	\$1,044.00	1	\$1,044.00
Phonic Ear StarSound Stereo Headset Receiver 602R	602R	\$86.00	2	\$172.00
Dell PC (PC, Monitor, Keyboard, Mouse, UPS) for clerk	GX960SFF	\$1,700	1	\$1,700
Cabling, various including 9pr		\$300	1	\$300
Blue Recording Light		\$500	1	\$500
CourtSmart Software (includes one full client license for courtroom clerk)		\$8,800	1	\$8,800
Total Costs		\$20,589.00		\$23,363.00

*Information provided to Chief Judge Charles Smith, co-chair of the DART Committee, during his visit to the court in Anchorage (September 2009)

Appendix 11
Two court support Staff Job Descriptions:
Judicial Assistant and Court Attendant/Clerical

Judicial Assistant
(AFSCME)

Pay Grade: 20

CLASS CODE: 13069

DEFINITION:

Under general supervision performs a variety of customer service and structured clerical, secretarial and paralegal tasks supporting the efficient operation of a court; assists in maintaining the court's calendar; performs scheduling, case management and related functions; when court is not in session, performs related work as directed by the District Court Administrator or designee.

NOTE: Per statute, the District Court Administrator provides general supervision; during court proceedings the judicial officer also provides immediate supervision.

ESSENTIAL JOB FUNCTIONS/EXAMPLES OF WORK PERFORMED (A position may not include all of the duties listed, nor do the examples cover all of the duties which may be performed.)

Assisting in the Courtroom:

Prepares the courtroom for trial including monitoring lighting, ventilation, heat, providing fresh water, pencils, and pads; acts as court crier to open and close sessions; maintains proper decorum in the courtroom at all times; advises judge when court participants have arrived and directs them to the appropriate location; ushers attorneys and clients into courtroom at scheduled time; secures witnesses and/or ushers them into the courtroom; assists with the organization, transportation and security of exhibits as needed; obtains books, materials, technology equipment, etc. as needed; prepares recording equipment; assists participants with ADA accommodations, equipment or resources; contacts security deputies as needed.

Assisting Jurors:

Makes meal arrangements for jurors; escorts jury members to meals during court proceedings; during jury trials, obtains exhibits for jurors; during jury trials answers routine noncase-related questions for jurors; refers jurors' case-related questions to the presiding judge; sets up jury room and stays with jurors during deliberation; plans and maintains adequate office supplies for jurors; monitors jurors' activities during breaks; assists the Clerk of Court with jury management.

Assisting the Judicial Officer:

Transcribes judicial officer's orders and rulings; prepares orders setting date and time of trials and hearings for judicial officer's signature; presents routine orders left by attorneys for judicial officer's signature; examines and checks rulings and orders, files, and related materials for completeness and accuracy; sends copies of orders, rulings, and trial motions to attorneys, litigants and others indicated in the order; maintains judicial officer's schedule

of appointments, hearings and trials; answers judicial officer's telephone, relays messages; opens, organizes and distributes the mail; maintains correspondence files, forms, reports, cases, and other materials; prepares memoranda, correspondence and routine rulings and orders for judicial officer's signature; obtains pertinent material and information from the files and other sources and puts into proper form for the review and use of judicial officer; maintains judicial officer's index and library of jury instructions, rulings and orders, code books, and legal resources; plans and maintains adequate office supplies for the judicial officer; arranges for court interpreters.

Assisting Court Users:

Provides non-technical information to attorneys, court personnel and the public regarding court matters; refers attorneys, court personnel and the public to proper sources of information; may advise, guide, assist or train employees in related work; maintains various volumes in the library; advises callers on matters pertaining to the court and related personnel; contacts judges, attorneys, and other case participants; performs other related work as required.; assists the Clerk of Court office as directed

Assisting with Document Maintenance:

Performs keyboarding or data entry duties; performs paralegal duties; prepares warrants. maintains correspondence files, forms, reports, cases, and other materials.

Assisting with Case Scheduling:

Schedules and confirms hearings and routine trials; finds open dates and schedules trials and hearings; prepares computer generated forms; prepares order setting date and time for trials, pre-trial conferences and hearings; assigns up to four courtrooms in a single courthouse; may schedule pre-trial and settlement conferences; may conduct trial setting conferences.

Assisting with Administration:

Assists in implementation of case-flow management policies and procedures prescribed by the District Court Administrator; collects, compiles and submits necessary management and statistical information; monitors cases for compliance with time standards per Supreme Court orders; assists in development and implementation of organizational and administrative policies and procedures.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of correct English, punctuation and spelling; ability to express ideas clearly and concisely, both orally and in writing

Knowledge of court procedures

Knowledge of procedures, legal documents, legal terminology, laws, and legal factors pertaining to the court; knowledge of court organization, functions, and responsibilities

Skill in proofreading materials for grammatical, punctuation, and spelling errors

Skill in the use and care of a personal computer, monitor, word processing system (including ICIS), dictating and/or recording equipment, typewriter, calculator, copier, and fax, or other necessary business equipment at acceptable levels of speed and accuracy

Ability to follow complex oral and written instructions

Ability to maintain accurate records

Ability to interact with and maintain positive working relationships with the public, judges, attorneys, and other court personnel in a variety of circumstances

Ability to work independently and as a member of a team

Ability to travel to multiple work locations

Ability to maintain order in the courtroom at all times and to interact with upset and uncooperative people

Ability to adapt to changes in policies and procedures caused by constantly changing mandates, directives, and amendments to laws.

Ability to work and communicate with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner; committed to quality service

Ability to establish and maintain effective customer service oriented working relationships with coworkers and the general public.

Ability to make logical and accurate customer service oriented decisions based on interpretations of program policies, rules and regulations and the information provided by clients.

Ability to treat co-workers, court users/participants, and members of the public courteously and without bias regardless of race, sex, age, color, national origin, religion, disability, or socio-economic status.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited high school (or GED) and graduation from a paralegal or legal secretary training program and two years experience as a Court Attendant/Clerical.

Experience as a Court Attendant/Clerical may be substituted for the required education on the basis that one year of experience may be substituted for the required education up to a maximum of two years. (Note: This is a promotion track position. Employees with two years of experience as a Court Attendant/Clerical may not be automatically reclassified.)

WORKING CONDITIONS

Normal inside office environment. Regular use of data processing systems, dictating and/or recording equipment, personal computer, calculator, copier, and fax and other business machines.

NOTE: This job description is not to be construed as an exhaustive statement of duties, responsibilities, or requirements; employees may be required to perform other job-related duties as requested by management.

Court Attendant / Clerical Assistant **(AFSCME)**

Pay Grade: 17

Class Code: 13067

Definition

Under general supervision performs a variety of customer service and structured clerical/secretarial tasks supporting the efficient operation of a court; assists in maintaining the court's calendar and assists with case scheduling functions; when court is not in session, performs related work as directed by the District Court Administrator or designee.

NOTE: Per statute, the District Court Administrator provides general supervision; during court proceedings the judicial officer also provides immediate supervision.

Examples of Work Performed

(Any one position may not include all of the duties listed, nor do the examples cover all of the duties which may be performed.)

Assisting in the Courtroom:

Prepares the courtroom for trial including monitoring lighting, ventilation, heat, providing fresh water, pencils, and pads; acts as court crier to open and close sessions; maintains proper decorum in the courtroom at all times; advises judge when court participants have arrived and directs them to the appropriate location; ushers attorneys and clients into courtroom at scheduled time; secures witnesses and/or ushers them into the courtroom; assists with the organization, transportation and security of exhibits as needed; obtains books, materials, technology equipment, etc. as needed; prepares recording equipment; assists participants with ADA accommodations, equipment or resources; contacts security deputies as needed.

Assisting the Jury:

Makes meal arrangements for jurors; escorts jury members to meals during court proceedings; during jury trials, obtains exhibits for jurors; during jury trials answers routine noncase-related questions for jurors; refers jurors' case-related questions to the presiding judge; sets up jury room and stays with jurors during deliberation; plans and maintains adequate office supplies for jurors; monitors jurors' activities during breaks; assists the Clerk of Court with jury management.

Assisting the Judicial Officer:

Transcribes judicial officer's orders and rulings; prepares orders setting date and time of trials and hearings for judicial officer's signature; presents routine orders left by attorneys for judicial officer's signature; examines and checks rulings and orders, files, and related

materials for completeness and accuracy; sends copies of orders, rulings, and trial motions to attorneys, litigants and others indicated in the order; maintains the schedule of appointments, hearings and trials for one or more judicial officers; answers judicial officer's telephone, relays messages; opens, organizes and distributes the mail; maintains correspondence files, forms, reports, cases, and other materials; prepares memoranda, correspondence and routine rulings and orders for judicial officer's signature; obtains pertinent material and information from the files and other sources and puts into proper form for the review and use of judicial officer; maintains judicial officer's index and library of jury instructions, rulings and orders, code books, and legal resources; plans and maintains adequate office supplies for the judicial officer.

Assisting Court Users:

Provides non-technical information to attorneys, court personnel and the public regarding court matters; refers attorneys, court personnel and the public to proper sources of information; may advise, guide, assist or train other employees in related work; maintains various volumes in the library; advises callers on matters pertaining to the court and related personnel; contacts judges, attorneys, and other case participants; performs other related work as required; assists the Clerk of Court office as directed.

Assisting with Document Maintenance:

Performs keyboarding or data entry duties; prepares warrants; maintains correspondence files, forms, reports, cases, and other materials; schedules, reschedules and confirms hearings and routine trials.

Assisting with Administration:

Assigns up to four courtrooms; finds open dates and schedules trials and hearings; prepares computer generated forms; prepares order setting date and time for trials; prepares order setting date and time for pre-trial conferences; prepares order setting date and time for hearings; assigns courtrooms in a single courthouse; may schedule pre-trial conferences, trial setting conferences or settlement conferences; collects, compiles and submits necessary management and statistical information; assists in development and implementation of organizational and administrative policies and procedures.

Knowledge, Abilities, Skills and Personal Characteristics

Knowledge of court procedures.

Knowledge of correct English, punctuation and spelling; ability to express ideas clearly and concisely, orally and in writing.

Ability to maintain records.

Ability to maintain order in the courtroom at all times and to interact with upset and uncooperative people

Ability to interact with and maintain positive working relationships with the public, judges, attorneys, and other court personnel.

Ability to follow oral and written instructions.

Ability to travel to multiple work locations.

Ability to work and communicate with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Ability to establish and maintain effective customer service oriented working relationships with coworkers and the general public.

Ability to make logical and accurate customer service oriented decisions based on interpretations of program policies, rules and regulations and the information provided by clients.

Ability to interact with and maintain positive working relationships with the public, judges, attorneys, and other court personnel.

Ability to treat co-workers, court users/participants, and members of the public courteously and without bias regardless of race, sex, age, color, national origin, religion, disability, or socio-economic status.

Skill in the use and care of a personal computer, calculator, fax, copier and other necessary business equipment at acceptable levels of speed and accuracy.

Education, Experience and Special Requirements

Graduation from an accredited high school (GED) with at least one year relevant secretarial/clerical experience in court clerical, legal or related area, including experience using a personal computer; accurate typing ability, 40 wpm.

OR

At the option of the appointing authority the successful completion of post high school coursework as a legal secretary or paralegal at an accredited vocational/technical business college, area community college or other two-year or four-year educational institution may be substituted for the required experience on the basis that successful completion of thirty semester hours or academic equivalent equals one year of experience.

ADOPTED: November 1, 2006

NOTE: This job description is not to be construed as an exhaustive statement of duties, responsibilities, or requirements; employees may be required to perform other job-related duties as requested by management.