

Providing Electronic Access to Justice in the
First Judicial District of Pennsylvania
Philadelphia Court of Common Pleas
Trial Division – Civil

National Center for State Courts
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ABSTRACT

This project examines the history and success of electronic filing in the federal and state courts; the recommended standards for electronic filing processes; and the key benefits and advantages of electronic filing to the public, judges, attorneys and court managers. While the primary focus is on the First Judicial District of Pennsylvania, Philadelphia Court of Common Pleas, Trial Division – Civil, the results are applicable to any state court interested in successfully designing and implementing electronic filing.

Five primary questions were addressed:

- Will electronic filing and service improve access to justice and the quality of justice?
- What should the court, Bar and public expect?
- What are the key benefits and significant advantages of electronic filing?
- What can the state courts learn from the federal courts about electronic filing?
- What prerequisites need to be met before a court can successfully implement electronic filing?

Following an extensive literature review, work began with the examination of electronic filing within the United States District Court for the Eastern District of Pennsylvania and proceeded to the on-going development and implementation of electronic filing within the First Judicial District of Pennsylvania.

Review of the literature suggests that electronic filing systems are successful because they better enable the public to send and receive documents, pay filing fees, notify other parties, receive court notices, and retrieve court information. Use of electronic filing in the federal courts is extensive and provides a strong foundation to be

followed in the state courts. As early as mid-March 2005, electronic filing systems, which were integrated with a case management system, were in use in 69 of the 94 federal district courts, and in 82 of 90 bankruptcy courts. Implementation had begun in almost all of the remaining U.S. district and bankruptcy courts. And, while not the primary focus of this research, as of late 2003 at least 14 states: Alabama, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, New Jersey, New York, North Carolina, North Dakota (pilot program), Ohio, Texas and Washington had also begun implementing electronic filing statewide.

The methods of research used in this study were five field visits to examine the implementation of electronic filing in the United States District Court for the Eastern District of Pennsylvania; survey questionnaires; structured and unstructured interviews with Philadelphia Court of Common Pleas stakeholders; and an early in house test of electronic filing.

Survey questionnaires were distributed to 350 attorneys; 212 completed and returned the survey, representing a 61% response rate. Survey questionnaires were distributed to 60 legal secretaries; 32 completed and returned the survey, representing a 53% response rate. Ninety three percent of lawyers and ninety one percent of the legal secretaries surveyed reported that they are ready for electronic filing and looking forward to the anticipated benefits of electronic filing and service. Clearly, security, privacy, access and service and notice components are critical.

The site visits confirmed the literature review: the federal courts' electronic filing system works and that it is desirable to have state court electronic filing systems that build upon the federal methodology and experience.

Conclusions and recommendations focus on the benefits and advantages to the court and the civil bar; as well as the prerequisites that need to be met before implementing electronic filing. Three critical prerequisites are:

- state or local rules that provide that the official record of the court can be electronic and permit e-filing;
- the court has a stable case management system with which to interface an e-filing system; and,
- the court is able and willing to exercise leadership to promote e-filing and to build a consensus among sometimes tradition-minded stakeholders.

Assuming these prerequisites are present, expected benefits include: greater efficiency from the instantaneous, simultaneous access to filed court documents for all participants in civil cases; fewer delays caused by lost or misplaced paper files; reduced cost from the elimination of handling and storing of paper case files in courts, lawyers' offices, and official archives; increased security of court records arising from more reliable electronic backup copies of records, increased ability to detect any alteration to an electronic document and easier enforcement of limitations on access to documents; universal availability and ease of sharing of electronic documents; and, enhanced public safety arising from electronic service of and instantaneous access to court orders (including domestic violence orders of protection) and warrants. The bottom line is that electronic filing and service can dramatically improve state court operations.

INTRODUCTION

"There are over 17,000 courts in the United States presiding over 90 million cases annually, generating over 1.5 billion documents each year. Those documents are filed at an estimated delivery cost of \$11 billion with the annual cost of storage exceeding \$2.5 billion. With the overwhelming majority of these filings being processed on paper with manual filing systems, the burden and cost upon the courts is becoming increasingly untenable. Our courts are literally drowning in paper. The promise of electronic filing has been discussed for a number of years. But the fact remains...our courts are accepting, processing, filing, and retrieving documents today utilizing the same outdated, expensive, manual processes of a generation ago."¹

Electronic filing is the process of transmitting documents and other court information to the court through an electronic medium, rather than on paper. Electronic filing lets people get more of their work done with their personal computers, to send and receive documents, pay filing fees, notify other parties, receive court notices, and retrieve court information.² Electronic filing works by replacing the traditional method of filing, serving and storing court documents with a more efficient electronic process. Instead of duplicating, packaging and manually delivering copies of documents to the court, parties to an action can send them electronically over the Internet.

The American Bar Association (ABA) has reported that electronic filing is the fastest growing innovation for managing documents in the American Judicial System.³ Because of the many benefits accruing to the courts, bar and public from the use of

¹ <http://www.efilingforcourts.com> at page 1. About E-filing for Courts.

² National Center for State Courts, *A Guidebook for Electronic Court Filing*, Chapter 1, page 1.

³ American Bar Association, *Standards Relating to Court Organization*, Standard 1.65, Court Use of Electronic Filing Processes, page 2.

electronic records, the ABA recommends that courts implement electronic filing processes. The First Judicial District of Pennsylvania is doing just that.

First Judicial District of Pennsylvania

The First Judicial District of Pennsylvania (FJD) is comprised of three courts: 1) the Court of Common Pleas; 2) the Philadelphia Municipal Court; and 3) the Philadelphia Traffic Court. The largest court, the general jurisdiction Common Pleas Court, is divided into three Divisions: 1) the Trial Division, with Criminal and Civil Sections; 2) the Family Division, consisting of the Juvenile and Domestic Relations Branches; and 3) the Orphans' Court Division with jurisdiction over probate and cases involving incapacitated individuals. The Philadelphia Municipal Court structure has two constituent parts; the Civil and Criminal Divisions.⁴ This project concentrates on the implementation of electronic filing within the Trial Division's Civil Section.

Consistent with the ABA's recommendation, the FJD has successfully implemented electronic filing in the Civil Section of its Municipal Court Division and in its Orphans' Court Division, during calendar years 2003 and 2005, respectively.

Trial Division – Civil Electronic Filing Steering Committee

Based on this success, in March 2005, the FJD established a Civil Electronic Filing Steering Committee which is charged with designing, planning and implementing an electronic filing system within the Trial Division's Civil Section and the Prothonotary's Office. The Steering Committee, which consists of judges, court administrators and attorneys, is devising a system that will improve access to justice, increase efficiency, reduce errors, and be considered a valuable tool by all users.

⁴ <http://www.courts.phila.gov>. First Judicial District of Pennsylvania's 2006 Annual Report, *The Philadelphia Courts Today*, at pages 6-7.

Trial Division – Civil Section

The Trial Division's Civil Section and the Prothonotary's Office (see below) work together - closely and smoothly - despite having separate budgets, departments and staff. The Civil Section is responsible for all of the Court's civil case management operations, procedures and programs, which include the following: Complex Litigation Center (Mass Tort, Asbestos and Class Action Programs); Day Forward Major Jury Program; Commerce Case Management Program; Major Non-Jury Program; Motions Program; Discovery Program; Arbitration Program; Arbitration Appeals Program; and the Governmental and Administrative Agency Appeals Program. The Civil Section receives in excess of 35,000 new case filings and in excess of 70,000 motions annually. There are 53 full time employees assigned to the Trial Division's Civil Section.

Prothonotary

The Prothonotary is the official within Philadelphia, Pennsylvania who performs Clerk of Court responsibilities for civil cases filed within the Court of Common Pleas and Municipal Court. The Prothonotary is appointed by the Board of Judges of the Court of Common Pleas of Philadelphia County. The Prothonotary's Office is responsible for issuing judgments; filing all complaints, notices of appeal, foreclosures, and liens; maintaining court files; issuing notices; and indexing records. The Prothonotary's Office receives in excess of 200,000 filings per year, of which about forty percent (40%) require judicial involvement. There are 65 full time employees assigned to the Prothonotary's Office.

Significance of the Problem

Overall, the Court has a problem with increasing caseloads and a growing volume of paper which must be managed. Lawyers and courthouse messengers play beat the clock as they rush to the Prothonotary's Office and to the Office of Civil Administration to file pleadings, petitions and motions at the very last minute. Throughout the day lawyers and messengers visit the Prothonotary's records department to obtain copies of documents, which may or may not be readily available. Sometimes files and documents are lost or misfiled. There are concerns about space and facilities for the never ending paper files within the various offices. Electronic Filing, which has emerged as a proven alternative to conventional case filing, can and will address and resolve these problems.

First Judicial District's Civil Electronic Filing Project

The objective of the Court's Civil Electronic Filing Project is to design and implement a web-based system which fully integrates electronic filing and an electronic document management system with the court's existing case management system (Banner Courts). The electronic filing system will contain an electronic service and notification component. Through this process, the registered parties in a case will be notified, through the electronic filing system, whenever a pleading, motion, notice or order has been filed with, or issued by, the court.

Soon the public will be able to send and receive documents, pay filing fees, notify other parties, receive court notices, and retrieve court information electronically. The parties to an action will save time and the costs of transporting materials to the courthouse. In addition, users will have improved access to pleadings and other documents. Electronic filing promises greater productivity and effectiveness along with

dramatic savings and improvements in the work of the courts and the practice of law. The projected date for completion of the FJD's Civil Electronic Filing Project is June 2008.

Federal and State Electronic Filing Systems

The idea that a court can operate electronically is nothing new. The Federal Judiciary adopted Case Management/Electronic Case Filing (CM/ECF)⁵, a case management and electronic case files system. CM/ECF implementation in the bankruptcy courts has been underway since early 2001. District court implementation began in 2002. Appellate court implementation began in late 2004.⁶

The CM/ECF is currently in use in 98 percent of the federal courts: 92 district courts, 93 bankruptcy courts, the Court of International Trade, the Court of Federal Claims, the Court of Appeals for the 8th Circuit, and the Bankruptcy Appellate Panel for the 10th Circuit. Almost 27 million cases are on CM/ECF systems, and more than 250,000 attorneys and others have filed documents over the Internet.⁷

CM/ECF allows courts to maintain case documents in electronic form and it gives each court the option of permitting case documents – pleadings, motions, petitions – to be filed with the court over the Internet.⁸ This system standardizes electronic filing across the Federal court system. As a component of the Administrative Office of the U.S. Courts' Pacer Service Center, CM/ECF provides electronic access to all case information to participating courts.

Twenty-six states have adopted court rules enabling e-filing statewide or in at least one court. The states and territories adopting court e-filing rules, in alphabetical

⁵ <http://www.uscourts.gov/cmecf/cmecf.html>. Electronic Access to U.S. Courts at page 1.

⁶ Ibid.

⁷ C. Flango, C. Campbell, and N. Kauder. Future Trends in State Courts 2007: E-Filing Expansion in State, Local and Federal Courts, National Center for State Courts, page 34.

⁸ See Note 6 supra.

order, are Alabama, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Guam, Illinois, Indiana, Iowa, Kansas, Maryland, Nebraska, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Texas, Utah, Washington, and Wisconsin.⁹

There are, however, basic considerations which state and federal courts must take into account as they work to establish electronic filing processes that are reliable; promote and enhance access to justice; and that are effective and fair to all court users.

Purpose and Goals

Based on research, experience and lessons learned from completed and ongoing electronic filing projects within the FJD and the United States District Court for the Eastern District of Pennsylvania (U.S.D.C for the E.D. of PA), the fundamental purpose of this project is to educate and guide any court interested in successfully designing and implementing an electronic filing system by addressing the following questions:

- Will electronic filing and service improve access to justice and the quality of justice?
- What should the court, Bar and public expect?
- What are the key benefits and significant advantages of electronic filing?
- What can the state courts learn from the federal courts about electronic filing?
- What prerequisites need to be met before a court can successfully implement electronic filing?

⁹ See Note 7 supra, page 36 (endnotes).

Outline of the Report

Beyond the abstract and introduction, this report contains a literature review discussing the history of electronic filing; the success of the federal court electronic filing system; and adopted standards for electronic filing processes.

The methodology section addresses the research methods utilized which included field visits to federal court, individual and unstructured interviews with lawyers and questionnaire surveys of lawyers and legal secretaries.

The final sections of the report include findings, conclusions and recommendations relating to the key benefits and advantages of electronic filing to the public, judges, attorneys and court administration.

LITERATURE REVIEW

Introduction

The objectives of this literature review are to demonstrate a solid understanding of the topic under discussion, i.e., “*Providing Electronic Access to Justice*” in the federal and state courts, and, through research, to identify the key benefits, significant advantages and concerns of implementing an electronic filing system.

Recent and ongoing developments in information, communication and associated technologies, including the Internet, and the current and future use of such technologies pose significant challenges to full and equal access to the justice system. Technology can provide increased pathways for access to justice, but it can also create significant barriers.¹⁰

Currently, technology is creating opportunities for people to use their home or nearby library branch or community center to initiate or respond to court or other legal or law related needs.¹¹ This can be especially important for the elderly, the disabled, persons with limited financial means, and those who literally cannot afford to miss time from work for reasons of financial need or jeopardizing their employments. Similarly, a person with limited mobility or hearing may be able to get information electronically about his or her rights as a tenant and a victim of domestic violence can learn on the Internet about what she can do and, in fact, be able to do, to start the legal process of protecting herself. The courts and other parts of the justice system can operate more productively and less expensively, making court and legal records and information

¹⁰ Donald J. Horowitz, Access to Justice Technology Bill of Rights, Washington State Supreme Court’s Access to Justice Technology Principles Committee, page 1.

¹¹ Ibid.

available and receive filings, fees, documents and information, all electronically. These are only beginning possibilities.¹²

However, initial research shows that these very possibilities also create the risk of worsening old barriers or erecting new barriers to access and causing greater disparities. While the opportunities described above seem positive, these innovations assume access to a computer, reasonable proficiency at using the machines and necessary software programs, reading capability, fluency in English and sufficient phone or cable and electricity availability and capacity at affordable cost to support the connections and streams of information and interactivity.¹³

In *Electronic Filing and Service: An Evolution of Practice* (November 2004), author Alan Carlson states the obvious:

"the goal of our justice system is to resolve disputes. When seeking justice the parties expect the resolution of their case to occur in a fair, just, timely and cost effective manner. The basic process for resolving disputes is for the court to apply the law to what it finds to be the facts of the case and render a decision. The presentation of evidence to establish the facts, the legal arguments and the applicable law is accomplished through the exchange of information. The information is usually contained in documents that are prepared by the parties, filed with the court and served on each other. For centuries, the primary media of exchange of documents has been paper. Elaborate practices have been established, and now become entrenched, to prepare, exchange, store and manage what has become a prodigious amount of paper."¹⁴

Tom Clarke, Vice President and Chief Information Officer, Research and Technology (NCSC) points out in a 2005 Future Trends in State Courts statement that

¹² Ibid.

¹³ Ibid.

¹⁴ Alan Carlson, *Electronic Filing and Service: An Evolution of Practice*, The Justice Management Institute, 2004, page 3.

courts are increasingly required to become more efficient and make their services more convenient using technology.”¹⁵

Recent advancements in technology have made it possible to exchange this information electronically instead of relying on paper. There are significant advantages to doing so, and courts should be actively pursuing this new approach.¹⁶

James E. McMillan of the National Center for State Courts raised the following question in an article published in December 2005:

"So what is wrong with paper documents; after all, they have served court systems well for more than 2,000 years?" Mr. McMillan concludes that "unfortunately the answer is that our customers (we refer to them as citizens) demand government to do more with less. Considering that on average between 80 and 90 percent of a court's budget is used by personnel cost, it makes eminent sense that the existing court staff be used efficiently. Finding court files, creating, copying, and physically moving documents is not an efficient process. If it was then banks and Wall Street would still be using paper."¹⁷

History of Electronic Filing

An electronic revolution is currently taking place within court systems across the nation. Electronic filing of documents is gathering momentum as a viable method of conducting the daily business of the courts.¹⁸ According to Richard N. Bien, Esq., Chair of the American Bar Association's Judicial Division, "electronic filing is the fastest growing innovation for managing documents in the American Judicial System."¹⁹ Mr. Bien reports that the first electronic filing project began in Delaware in 1991.

¹⁵ Tom Clarke, Future Trends in State Courts, Court Filing Blue Update, NCSC Trends, 2005, page 1.

¹⁶ See Note 6 supra, page 3.

¹⁷ James E. McMillan, Verification, Validation, and Authentication of Electronic Documents in Courts: How Digital Rights Management Technology Will Change the Way We Work, NCSC, 2005, page 2.

¹⁸ Julie C. Turner, Changes in the Courthouse - Electronic Records, Filings and Court Dockets: Goals, Issues and the Road Ahead, University of Washington Law School Library, page 275.

¹⁹ American Bar Association, Judicial Division, Standards Relating to Court Organization, Standard 1.65: Court Use of Electronic Filing Processes, 2004, page 2.

Research shows that the federal judiciary has played a major role in the development of electronic filing of court pleadings. Beginning in January 1996, when the first federal court began allowing the electronic filing of pleadings and continuing to the present, the federal judiciary has compiled an impressive record of successes.²⁰

Previous studies conclude that the federal judiciary made two key fundamental “e-filing” decisions correctly from the beginning: (1) to use the Internet and (2) to require that documents be in Adobe's PDF (Portable Document Format) to maintain formatting across all platforms. It is widely reported that the federal Electronic Case Files (ECF) system, which is overseen by the Administrative Office of the United States Courts, has been a triumph from the beginning.²¹

As the states struggle with varying private solutions and experience varying degrees of success and failure, the federal courts continue to roll out ECF software upgrades and expand the number of courts using the system. An article entitled “*Electronic Filing in the Federal Courts*” disclosed that by November 2000, the following federal courts had implemented the ECF system:²²

- **District Courts** - the Western District of Missouri, the Eastern District of New York, the Northern District of Ohio, and Oregon.
- **Bankruptcy Courts** - Arizona, the Southern District of California, the Northern District of Georgia, the Southern District of New York, and the Eastern District of Virginia.

²⁰ Sharon D. Nelson, Esq. and John W. Simek, *Electronic Filing in the Federal Courts: A Status Report*, Sensei Enterprises, Inc., 2001, page 1.

²¹ *Ibid.*

²² *Ibid.*

- **Courts of Appeal** - The Court of Appeals for the District of Columbia and the Fourth Circuit Court of Appeals.

By the end of calendar year 2001 an additional 40 federal courts implemented ECF and approximately 50 more federal courts came on board in each subsequent year. Just about all federal courts had implemented electronic filing by the end of 2004 or the beginning of 2005.²³

An April 19, 2005 press release from the United States Courts website indicates that the number of federal jurisdictions implementing the CM/ECF case system is on the rise. Eleven of the nation's thirteen federal appellate courts have begun implementing the Case Management and Electronic Case Files (CM/ECF) system. As of early March 2005, only the U.S. Courts of Appeals for the Second Circuit and the Eleventh Circuit had not begun implementation.²⁴

The Courts of Appeals for the Third and Ninth Circuits were the most recent appellate courts to begin the process to updating their case management systems with one that provides them the option to have case file documents in electronic format, and to accept filings over the Internet. As of mid-March 2005, CM/ECF systems were in use in 69 of the 94 federal district courts, and in 82 of 90 bankruptcy courts. Implementation had begun in another 21 district courts, and in 12 bankruptcy courts.²⁵

The statistics bear witness to the high degree of acceptance electronic filing has received. By the end of calendar year 2002, over 10,000 lawyers had registered with the federal system, over 4,300 had actually filed, and more than 600 members of federal court staff had received training. Excluding the asbestos cases from the Northern District

²³ Ibid.

²⁴ www.uscourts.gov/newsroom/cmecf.htm. CM/ECF System Implementation Continues to Grow.

²⁵ Ibid.

of Ohio, more than 108,000 cases had been filed electronically, representing an average of 7,000 cases per month. More than 1.2 million documents had been filed by the end of calendar year 2002.²⁶ Can you imagine the number of trees we have saved with electronic filing?

As previously mentioned, the CM/ECF is currently in use in 98 percent of the federal courts: 92 district courts, 93 bankruptcy courts, the Court of International Trade, the Court of Federal Claims, the Court of Appeals for the 8th Circuit, and the Bankruptcy Appellate Panel for the 10th Circuit. Almost 27 million cases are on CM/ECF systems, and more than 250,000 attorneys and others have filed documents over the Internet.²⁷

While paper won't disappear from courts in the short term, ECF has already proven its worth. Lost files are a thing of the past. The time consumed in transferring files from place to place has evaporated. Judges and counsel need not carry bulky files to their homes or pack extra suitcases while traveling. When used in conjunction with case management, ECF speeds workflow and provides real time docket entries. The expenses of couriers, postage, and runners have diminished. Service of process is simpler and cheaper.

K.I.S.S. Equals Electronic Success in the Federal Courts

Keep it simple stupid. Studies show that the federal system has been so successful because they apparently kept the essential steps and processes for e-filing simple. The learning curve for ECF isn't steep.

The filing party can simply create a document on their word processing software; convert it to a PDF file; save the document to their hard drive; connect to the Internet; log

²⁶ See Note 12 *supra*, page 2.

²⁷ See Note 7 *supra*, page 34.

on to the ECF system; specify the case in which the document is to be filed; select a docket entry; select the parties; and append the PDF document.²⁸

At training sessions, lawyers and pro se litigants can easily master the process in just a few minutes. The entire electronic filing process (minus the original document creation) takes about five minutes and concludes with an electronic receipt.

All federal systems are not exactly the same but the variations are minor. Courts may have a different "look and feel" to their home page but the core of the system remains the same.²⁹

There have been infrequent technical glitches within the federal system but no disasters. Thus far, there have been no hacking incidents or penetration of the system by viruses or worms, though security remains a constant concern. Unlike the average law firm, of course, the federal courts are religious in updating their virus signatures to ward off the latest and greatest creation of the virus and worm writers.

Electronic Filing Complaints and Criticism

As we all know, nothing new debuts without criticism. The chief complaint has been that the ECF system isn't as fast as it could be. The original technology used, unsurprisingly, became "clunky" as all technologies do in an appallingly short time. The AO continues to target "speed of download" as the most desired improvement of its system.³⁰

The second most frequent complaint involves communication about the ECF system, which is primarily a local issue. Courts need to provide ECF users with frequent

²⁸ I personally attended an Electronic Filing Training Session at the United States District Court for the Eastern District of Pennsylvania in Philadelphia on Tuesday, July 10, 2007.

²⁹ Conclusions based on the examination of several federal court websites.

³⁰ See Note 12 supra, page 3.

training, a lot of hand holding, and constant notification about enhancements and changes.³¹

Federal Case Management and Electronic Case Filing

One prominent change in the ECF system is that it is now CM/ECF - case management and electronic case filing. The AO is emphasizing to the courts that ECF includes case management to expedite cases through the normal workflow process. However, the two systems remain divisible so that paper cases can be scanned into the system and then moved through the new case management system.³²

The remarkable pioneering efforts of the federal courts will be hard to maintain. The AO, having done a first class job to date, is going to be stretched thin by having to support so many courts across the nation and by the demands of keeping up with the technology bombardment. However, the AO deserves high marks for its trailblazing work.³³

What Can the State Courts Learn from the Federal Courts?

Now, what can the states learn from the federal system? First, that the federal system works and that they may not need to reinvent the wheel. Second, that it may be very desirable to have state systems which more or less follow the federal methodology so that users of the state system and the federal system are not confused as they move back and forth between the two.

³¹ Ibid.

³² See Note 12, page 4.

³³ Ibid.

A 2003 publication entitled “*Standards for Electronic Filing Processes*”³⁴, which was prepared by the “*Electronic Filing Standards Subcommittee of the National Consortium for State Court Automation Standards*”³⁵, discloses that electronic filing is still limited to a tiny fraction of the nation’s state court systems. Many courts are reluctant to be on the “bleeding edge” of new technology. Some wait in the hopes that some sort of best practice standards will emerge. Others are unsure about the breadth of changes needed in traditional processes to reap the promised benefits of electronic filing.³⁶

The *American Bar Association’s Electronic Filing Resource Page*³⁷ reports that the following state courts are using a state-wide electronic filing system: Alabama, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, New Jersey, New York, North Carolina, North Dakota (pilot program), Ohio, Texas and Washington.

Federal courts have shown a strong preference for maintaining control of their own databases, which will probably be amplified in state courts. The inherent risks of having court records (with no paper backup) in the hands of a private party have not been enthusiastically greeted by many state court officials entrusted with safeguarding these records.

Roger Winters, Program and Project Manager, King County, Washington stated that:

“Electronic court records and electronic filing are more than technological challenges. They entail changes in practices and presumptions about documents,

³⁴ Joint Project of the Conference of State Court Administrators and the National Association for Court Management Joint Technology Committee, *Standards for Electronic Filing Processes (Technical and Business Approaches)*, February 26, 2003.

³⁵ *Ibid.*

³⁶ F. Dale Kasperek, Jr., John M. Greacen, and Terrie Bousquin, *Standards for Electronic Filing Processes (Technical and Business Approaches)*, Joint Project of COSCA & NACM Boards, 2003, page 4.

³⁷ <http://www.abanet.org/tech/ltrc/research/efiling/home.html>, pages 1-3.

records, signatures, and many related things. Controversy over a state rule to authorize electronic filing in Washington showed how key non-technical issues must be resolved."³⁸

The Reliability and Integrity of Electronic Case Files

An electronic filing system must contain security features that can guarantee for judges and lawyers the integrity of a court's electronic records. The sufficiency of the proposed integrity controls should be judged by whether such controls provide reasonable assurance of integrity in light of the applicable risks, benefits, and costs.³⁹

A reliable and accurate case file system is fundamental to the effectiveness of day-to-day court operations and fairness of judicial decisions. The maintenance of case records directly affects the timeliness and integrity of case processing.⁴⁰ Electronic case file systems must meet this measure. Courts must be able to locate electronic records in a timely manner. Electronic case files must be complete and they must comport with existing federal and state policies relating to privacy.

Privacy and Access to Electronic Case Files

Back in December 1999, an unpublished document was produced by staff in the Administrative Office of the United States Courts' Office of Judges Programs to provide information and analysis of privacy and access issues relating to electronic case files. The paper includes four main sections: (1) An overview of the law on access and privacy as it relates to case files; (2) A review of current (1999) judiciary policies on access to

³⁸ Roger Winters, *Controversy and Compromise on the Way to Electronic Filing, Future Trends in State Courts*, NCSC, 2005, page 1.

³⁹ See Note 25 *supra*, page 22.

⁴⁰ <http://www.courttools.org>, *CourTools, Measure 6, Reliability and Integrity of Case Files*, NCSC, 2005.

case files; (3) A discussion of the potential privacy implications of electronic access to case files; and (4) An initial outline of policy assumptions and alternatives.⁴¹

The growing use of electronic filing technology makes it possible for courts to offer broader public access to case files, including electronic access from locations outside the courthouse. There is increasing awareness, however, of the personal privacy implications of electronic access to court case files, especially through the Internet.

The Judicial Conference of the United States requested that its Committee on Court Administration and Case Management examine issues related to privacy and public access to electronic case files. The Judicial Conference Committee determined that there should be consistent, nationwide policies in federal courts in order to ensure that similar privacy protections and access presumptions apply regardless of which federal court is the custodian of a particular case file.⁴²

The Committee recommended that documents in civil case files should be made available electronically to the same extent that they are available at the courthouse with one exception: Social Security cases should be excluded from electronic access; and one change in policy: the requirement that certain personal data identifiers be modified or partially redacted by the litigants. These identifiers are Social Security numbers, dates of birth, financial account numbers and names of minor children.⁴³

On July 9, 2007, the judges of the United States District Court for the Eastern District of Pennsylvania determined that there is an immediate need to address problems

⁴¹ <http://www.uscourts.gov/privacy.htm>, Privacy and Access to Electronic Case Files in the Federal Courts, 1999, page 2.

⁴² <http://www.privacy.uscourts.gov/Policy.htm>, Report of the Judicial Conference Committee on Court Administration and Case Management on Privacy and Public Access to Electronic Case Files, 2006, page 3.

⁴³ Ibid.

engendered by an Internet Web site which uses publicly available information to identify and publicize individuals suspected of cooperating with law enforcement agents appearing on the docket as accessed through the court's CM/ECF system. The court issued a notice and protocols to deal with the security problems.⁴⁴

Adopted Standards for Electronic Filing Processes

The Conference of State Court Administrators (COSCA) and National Association for Court Management (NACM) adopted Standards for Electronic Filing Processes (Technical and Business Approaches) in April 2003. These standards track the COSCA/NACM standards verbatim. As the COSCA/NACM standards evolve to reflect changes in the underlying technology supporting electronic filing or in the national consensus concerning the best policies and practices for its use by courts, practitioners, other governmental entities, and commercial service providers, these standards will also require updating.

The promulgation of these standards marks the transition of electronic filing from an experimental process to an operational reality for America's state and federal courts.⁴⁵

Interviews, Surveys and Questionnaires

Expert advice and assistance was obtained for the development of quality electronic filing surveys and questionnaires. A conference call - which lead to an exchange of explanatory e-mails - was held with Kim Nieves, Ph.D., Assistant Director of Policy and Research, Administrative Office of the Pennsylvania Courts. Dr. Nieves recommended a conventional approach, which will be described further in the next section of this report.

⁴⁴ Legal Intelligencer, Volume P. 5599, Notice to the Bar, Wednesday, August 15, 2007, page 15.

⁴⁵ <http://www.ncsconline.org>, The COSCA/NACM standards are available at the Technology Standards link from "Popular Links" on the website of the National Center for State Courts.

Law must follow society. Technology is changing rapidly. Courts must respond to, and keep up with, the technological advancements of society. Research indicates that electronic filing is inevitable.

METHODS

Research methods during this project included:

- field visits to the United States District Court for the Eastern District of Pennsylvania;
- individual interviews;
- unstructured interviews and meetings; and
- questionnaire surveys of legal secretaries and the civil bar.

FIELD VISITS: UNITED STATES DISTRICT COURT

It has been determined that nationwide the federal courts' electronic case filing system (ECF) works well. State courts could easily adopt the federal electronic case filing methodology.

To examine, evaluate and learn about the federal court's electronic case filing system, five field visits were made to the United States District Court for the Eastern District of Pennsylvania, 601 Market Street, Philadelphia, Pennsylvania, between May 2006 and December 2007. The following members of the FJD's Electronic Filing Steering Committee, hereafter state court officials, attended some or all of the federal court meetings: Former Supervising Judge William J. Manfredi; Deputy Court Administrator, Charles A. Mapp, Sr.; Prothonotary Joseph H. Evers; Project Manager Harold Palmer; and Senior Staff Advisor Deborah E. Dailey.

Initially, the state court officials met with United States District Court Judges John R. Padova and Petrese B. Tucker, Clerk of Court Michael E. Kunz and members of his management team. At this meeting the following questions were proposed to the federal court officials:

- How should the electronic case filing process work from beginning to end?
- How accurate, complete and reliable is the federal court's electronic case filing system?
- Did electronic filing improve access to justice and the quality of justice?
- What can a state court implementing electronic filing expect?
- What is the impact on the court, Bar and general public?
- What problems have the federal courts encountered?
- What lessons have the federal courts learned?
- What can go wrong? How do we avoid technical failures?
- What type of training and support programs have the federal courts implemented, if any?

Four additional visits were made to the United States District Court for the Eastern District of Pennsylvania to view their system. On Tuesday, July 10, 2007, state court officials sat through the same federal court electronic filing training session afforded to attorneys and pro se litigants. The federal court's user manuals, processes and procedures were examined. The education and training sessions were thoroughly conducted by federal court managers and deputy clerks.

It must be noted that plans to visit Delaware, New Jersey and New York, (jurisdictions with electronic case filing systems) fell apart due to budget and time restraints and a complex work schedule. Therefore the scope of this project was limited to the federal and state courts in Philadelphia, Pennsylvania.

CONFERENCE CALL WITH DR. KIM NIEVES

A telephone conference call was held with Kim Nieves, Ph.D., Assistant Director of Policy and Research, Administrative Office of the Pennsylvania Courts. Dr. Nieves assisted with the development of the questionnaire surveys that were distributed to legal secretaries and the civil bar. Dr. Nieves recommended that this writer develop survey questions for this project based on the interviews. In professional research language, interview respondents in this framework are referred to as key informants. Themes and issues commonly raised by key informants during interviews form the basis of validity for relevant choices of questions. Dr. Nieves believes that the proposed survey questions (listed below) are ideal for a structured interview schedule for this project.

- Do you have any experience with electronic filing?
- Have you filed any documents electronically in federal or state court?
- Are you prepared for electronic filing in the Philadelphia Court of Common Pleas Trial Division – Civil and the Office of the Prothonotary?
- What features do you believe should be included in an electronic filing system?
- What do you believe are some of the potential challenges of an electronic filing system?
- Would you be comfortable using the Internet to file documents with the court?

UNSTRUCTURED INTERVIEWS:

TWO PHILADELPHIA BAR ASSOCIATION MEETINGS

On Wednesday, August 1, 2007, The Philadelphia Bar Association (PBA) invited the court to its monthly State Civil Section Committee meeting to discuss the court's plans relating to electronic filing. Approximately 50 lawyers were in attendance. Over a two hour period, the members of the PBA openly expressed their support for - as well as their concerns about - the courts soon-to-be released electronic filing system. Extensive notes were taken and the stakeholders' views were considered. The members of the committee were impressed with the potential benefits of an electronic filing system but questioned its security and 24/7/365 reliability. The meeting lasted two hours.

On September 28-29, 2007, the court was invited to the Philadelphia Bench/Bar's two day conference in Atlantic City, New Jersey. Over 400 judges and lawyers were in attendance. The court presented a thorough PowerPoint presentation which explained the entire electronic filing process, from beginning to end, and permitted the attorneys to register for a login and password to be used upon implementation.

Individual conversations were held with the attendees about the benefits of an electronic filing system. Many electronic filing questions were asked and answered and many of the Bar's concerns were addressed.

Interviews were held to gather information and opinions from attorneys, judges, and court staff.

INTERVIEW WITH ATTORNEY STEVEN B. BARRETT

On Tuesday, January 8, 2008, an interview was conducted with Attorney Steven B. Barrett from the law firm of Hamburg, Rubin, Mullin, Maxwell & Lupin, 375 Morris Road, Lansdale (Montgomery County), Pennsylvania 19446-0773. The interview was conducted in the Office of the Deputy Court Administrator, Room 297 City Hall, Philadelphia, Pennsylvania. Mr. Barrett was selected because he is a highly respected member of the Philadelphia Bar and because of his prior experience with electronic filing in federal and state courts. He was asked to express his views as to the benefits of electronic filing, particularly those benefits that would be realized with an electronic filing system being implemented in the Philadelphia Court of Common Pleas' Trial Division - Civil.

CIVIL ELECTRONIC FILING STEERING COMMITTEE MEETINGS

Interviews were conducted with the following members of the Civil Electronic Filing Steering Committee: Attorneys Rudolph Garcia, Daniel J. Siegel and Nancy H. Fullam.

INTERVIEW WITH ATTORNEY RUDOLPH GARCIA

On Tuesday, January 15, 2008, an interview was conducted with Attorney Rudolph Garcia from the law firm of Buchanan Ingersoll & Rooney, PC, 1835 Market Street, 14th Floor, Philadelphia, Pennsylvania 19103-2985. The interview was conducted while attending a Philadelphia Bar Association Business Litigation meeting in Philadelphia, Pennsylvania. Mr. Garcia was selected because he is a highly respected member of the Philadelphia Bar; he serves on the FJD's Civil Electronic Filing Steering Committee; and because he has experience with electronic filing in federal and state

courts. He was asked to express his views as to the court's relationship with the Philadelphia Bar throughout the project.

INTERVIEW WITH ATTORNEY DANIEL J. SIEGEL

Attorney Daniel Siegel is a member of the Editorial Board of The Philadelphia Lawyer, a sole practitioner in the Philadelphia area and the President of Integrated Technology Services, LLC. He is also a member of the court's Civil Electronic Filing Steering Committee. After interviewing several judges and court administrators, Mr. Siegel wrote and published two articles. The first article, "Era of E-Filing: Philadelphia Court of Common Pleas to Introduce Civil Case E-Filing in 2008"⁴⁶ was published in The Philadelphia Lawyer in the Spring of 2007. The second article, "E-Filing is Coming: Here's How to Prepare"⁴⁷ was published in the technology section of Law Practice Management. In the articles he addresses how electronic filing works and the many benefits of electronic filing.

INTERVIEW WITH ATTORNEY NANCY H. FULLAM

Attorney Nancy H. Fullam, a founding partner of the law firm of McEldrew & Fullam, P.C., Bell Atlantic Tower, Suite 4040, 1717 Arch Street, Philadelphia, Pennsylvania 19103-2713, was telephonically interviewed and asked to test the court's electronic filing system. Ms. Fullam was recruited to electronically file a medical malpractice action in the court's testing database. On January 31, 2008, Ms. Fullam sent a letter to the court reporting the results of the test.

⁴⁶ Daniel J. Siegel, Era of E-Filing: Philadelphia Court of Common Pleas to Introduce Civil E-Filing in 2008, The Philadelphia Lawyer, Spring 2007, Pages 14-15.

⁴⁷ Daniel J. Siegel, E-Filing is Coming: Here's How to Prepare, The Philadelphia Lawyer, Law Practice Management – Technology Section, Fall 2007, Pages 8-9.

QUESTIONNAIRE SURVEYS: CIVIL BAR and LEGAL SECRETARIES

As mentioned in the literature review section of this project, expert advice and assistance was obtained for the development of a quality electronic filing questionnaire. Questionnaires were used because they are an inexpensive way to gather sound data from a potentially large participant group which would consist of judges, court administrative staff, lawyers, paralegals and legal secretaries. Also, they are cheap to administer when compared to other data collection methods. It was learned, however, throughout the course of this project that questionnaires are expensive in terms of design time and interpretation.

Recognizing that a questionnaire is only as good as the questions it contains, it took several days to design an understandable and appropriate questionnaire for this project. A total of 25 survey questions were designed to (1) assess the respondents overall experience with electronic filing in Philadelphia County; (2) determine what service attributes are important to the filer; (3) determine the potential challenges associated with an electronic filing system; and (4) determine how often the filer used the Internet for financial transactions.

Prior to administering the questionnaire to the targeted participant group, the questionnaire was pre-tested to see if it was clear and understandable to all. A small group of trusted Trial Division - Civil managers and court administrative officers were asked to examine and critique the questionnaire. The following individuals participated in the pre-testing of the instrument and provided feedback:

Stanley Thompson, Esquire, Director, Complex Litigation Center

Joseph L. Hassett, Esquire, Director, Arbitration Center

Evelyn Thompson, Assistant Manager, Office of Civil Administration

Steven Wulko, Quality Assurance Officer, Trial Division - Civil

Joseph J. DiRosa, Court Administrative Officer, Major Jury Program

Felicia Brown Clark, Court Administrative Officer, Major Jury Program

An individual interview was held with Mr. Thompson where he carefully reviewed the questionnaire survey and provided meaningful feedback.

Distribution of Questionnaire

The questionnaire was distributed at a series of electronic filing training seminars and programs that were planned and conducted in Philadelphia County for the benefit of the legal community.

On Monday, October 29, 2007, the Pennsylvania Bar Institute (PBI) conducted a three hour Continuing Legal Education seminar in Philadelphia County. Approximately 350 lawyers from Philadelphia and its surrounding counties registered, attended and participated in the seminar. The court's Administrative Judge, D. Webster Keogh; Supervising Judge, Esther R. Sylvester; Coordinating Judge Allan L. Tereshko; Deputy Court Administrator, Charles A. Mapp, Sr.; Prothonotary, Joseph H. Evers; Project Manager Harold L. Palmer; and Staff Advisor Deborah E. Dailey were course planners and/or presenters. Attorneys Rudolph Garcia and Daniel Siegel - who are members of the court's e-filing steering committee – were also presenters.

On Wednesday, November 28, 2007, the Philadelphia Legal Secretaries Association invited Messrs. Mapp, Evers and Palmer to its monthly educational dinner to discuss the nuts and bolts of electronic filing. Approximately 60 legal secretaries were in attendance. The program lasted three hours.

At the beginning of each program the electronic filing questionnaire was distributed and explained to all participants. The participants were asked for their assistance in developing the range and characteristics of anticipated electronic filing services. They were told that their participation was very important and that it would assist the court in identifying the needs of the Philadelphia legal community with respect to electronic filing. Confidentiality was guaranteed. The participants were assured that their responses would be treated in the strictest confidence.

The completed questionnaires were collected at the end of each program. Two-hundred and twelve questionnaires were returned at the conclusion of the Pennsylvania Bar Institute’s Continuing Legal Education seminar. The results were tallied and briefly studied on Saturday, November 24, 2007.

Thirty-two questionnaires were returned at the conclusion of the Philadelphia Legal Secretaries Association’s dinner. The results were tallied and briefly studied on Wednesday, December 5, 2007.

TABLE #1

Questionnaire Returns, Response Rate and Margin of Error by Group and Population

GROUP	POPULATION	RETURNS	RESPONSE RATE	MARGIN OF ERROR
Lawyers	350	212	61%	+/- 3%
Secretaries	60	32	53%	+/- 3%

LAUNCH OF CIVIL TRIAL DIVISION'S E-FILING SYSTEM DRAWS CLOSER

On Tuesday, September 25, 2007, the members of the Civil Electronic Filing Steering Committee were interviewed by Amaris Elliott-Engel, a reporter with *"The Legal Intelligencer."* On Thursday, September 27, 2007, Ms. Elliott-Engel published an article entitled *"Launch of Civil Trial Division E-Filing System Draws Closer."* The article⁴⁸ detailed the project and its ongoing progress.

E-FILING IN-HOUSE TEST SESSIONS

Electronic Filing test sessions were held on Tuesday, January 15, 2008, in the FJD's Training Center, Room 380 City Hall. Ten (10) employees from the Trial Division – Civil and the Prothonotary's Office participated in the test session. Director Stanley Thompson attended, participated and provided written and verbal feedback.

⁴⁸ <http://www.thelegalintelligencer.com>. The Legal Intelligencer, Amaris Elliott-Engel, Launch of Civil Trial Division E-Filing System Draws Closer, Regional News at page 3.

FINDINGS

Harold Palmer, Project Manager for the court's Civil Electronic Filing Project, has designed, constructed and programmed an outstanding civil electronic filing system for the First Judicial District of Pennsylvania's Civil Trial Division and the Office of the Prothonotary, which will provide many benefits to the Philadelphia Bar, the court and the public.

Philadelphia's civil e-filing system, which was designed and built completely in-house by Mr. Palmer and his colleagues, allows counsel and pro se litigants to file documents with the court, electronically, from just about anywhere in the world.

Once a document is filed, it is transferred and integrated into the court's case management and document management systems. The court will immediately serve notice to all counsel that a document has been electronically filed with the court. Counsel and pro se litigants can then review the document online and save it on their own computers or servers. The only documents that the court will not serve are initial process documents (such as complaints and writs of summons), which must be personally served in accordance with the Pennsylvania Rules of Civil Procedure. The court will also issue and serve other court notices and orders electronically.⁴⁹

Field Visits: United States District Court for the Eastern District of Pennsylvania

The federal courts' electronic filing system works. It is very desirable to have state court electronic filing systems that follow the federal methodology so that users of the state system and the federal system are not confused as they move back and forth between the two.

⁴⁹ See Note 44, *supra*, page 15.

The United States District Court for the Eastern District of Pennsylvania implemented its Case Management/Electronic Case Filing (CM/ECF) system, effective May 1, 2002. The system is accurate, complete and reliable. It provides user-friendly electronic case filing features which includes filing and viewing documents 24 hours a day from the office, home or anywhere with Internet access. It is easy to use and manage. Attorneys and pro se litigants are able to electronically file documents directly with the court over the Internet through the CM/ECF system. Standard computer hardware, an Internet connection, a browser and software to convert documents into Portable Document Format (PDF) is all that is required.

The filing party simply prepares a document using conventional word processing software, then saves it as a PDF file. After logging onto the court's web site with a court-issued password, the filer enters basic information relating to the case and document being filed, attaches the document, and submits it to the court. A notice verifying court receipt of the filing is generated automatically. Other parties in the case then automatically receive e-mail notification of the filing. Documents are automatically docketed as part of the filing process and are immediately available electronically.

CM/ECF also provides the court with the ability to make their documents available to the public over the Internet. There are no added fees for filing documents over the Internet using CM/ECF; existing document filing fees do apply. Electronic access to court data is available through the Public Access to Court Electronic Records (PACER) program. Litigants receive one free copy of documents filed electronically in their cases, which they can save or print for their files. Additional copies are available to attorneys and the general public for viewing or downloading at eight cents per page, with

a maximum cost per document of \$2.40. Neither the free copy nor the maximum cost per document applies to transcripts filed with the court. Directed by Congress to fund electronic access through user fees, the judiciary has set the fee at the lowest possible level sufficient to recoup program costs.⁵⁰

The federal court has prepared and made available a CM/ECF Attorney User Manual.⁵¹ The manual provides complete instructions on how to use the ECF system. Training and support programs are also available at the courthouse and through the court's website for members of the bar, paralegals, secretaries and automation support staff.

Unstructured Interviews: Two Philadelphia Bar Association Meetings

Unstructured interviews with members of the Philadelphia Bar Association during their August 2007 State Civil Section Committee meeting and during the 2007 Philadelphia Bench-Bar Conference disclosed that the Philadelphia Bar is ready and prepared for civil electronic filing within the Trial Division – Civil. The members are looking forward to the many benefits that will be established through electronic filing, especially the ability to file 24 hours per day, 7 days per week, 365 days per year (24/7/365). Electronic service and notification of documents filed electronically with the court was recognized as a major benefit for most members of the Civil Bar.

⁵⁰ http://www.uscourts.gov/cmecf/cmecf_about.html. U.S. Courts Case Management/Electronic Case Files (CM/ECF), at page 1, January 2008.

⁵¹ <http://www.paed.uscourts.gov/documents/CMECF>. United States District Court for the Eastern District of Pennsylvania's Case Management/Electronic Case Filing System.

Interview with Steven Barrett, Esquire

Attorney Steven Barrett expressed his views as to the benefits of electronic filing, particularly those benefits that would be realized with an electronic filing system being implemented with the Court of Common Pleas of Philadelphia.

Mr. Barrett's experience with e-filing to date has been with the United States District Court for the Eastern District of Pennsylvania and Montgomery County's Court of Common Pleas (Pennsylvania). Mr. Barrett's law firm, Hamburg, Rubin, Mullin, Maxwell & Lupin, P.C., was selected to serve as one of several firms in the pilot program for electronic filing through the Prothonotary's Office of Montgomery County. He personally engaged the program, which is still in effect. He reported that e-filing has been an administrative and professional success story for several reasons.

The first reason is simple convenience. According to Mr. Barrett, with e-filing, a litigator such as himself is empowered to file documents with the court and access filings in a particular case – all without leaving his/her physical office on a 24/7/365 basis. Additionally, his staff is similarly empowered, which is not just plain convenient, but also displaces altogether the process and thus mentality (not to mention the additional costs) of having the extra human factor of preparing and transmitting filings through either mailings or courier service.

Second, the advent of such technology also affords practitioners the same access to the court *remotely*. One need not even be present in one's physical office to have access to court-filed records but can enjoy the convenience of filing or reviewing such filings from one's living room, satellite office, or even client's office.

Third, proficiency with e-filing further affords greater comfort with process, which inevitably reduces one possible source of stress. Mr. Barrett states that:

“As a litigator, the greater control I can have on process, the less I need to fret or worry over. With e-filing, I no longer have to rely on the postal service, FedEx, or even a courier, all of which are subject to multiple factors of both human and mechanical error that may make the difference in a document being filed timely versus late, which if the latter may require more motion practice and/or explanations to clients, the court, and opposing counsel. Electronic filing allows for instantaneous confirmation of a filing’s receipt by court.”

Fourth, the filing deadline is no longer when the Prothonotary’s office closes for the day. With e-filing, such deadlines can be met with, for example, a response to a motion being filed electronically at 9:30 p.m. on the date due. Consequently, a filing deadline no longer is defined by the hours of operation of the Prothonotary’s office. Rather the ability and commitment of the attorney and staff in preparing the document and transmitting same electronically by no longer “day’s end,” but rather “nighttime’s end” will now define the deadline.

Mr. Barrett believes that, notwithstanding these four benefits, perhaps the greatest benefit is the equality that will result with e-filings. As with the program in Montgomery County, e-filings of documents will be “populated” with automatic instructions, filing sheets and requirements. Whether a seasoned attorney, new associate or staff, a state-of-the-art electronic filing program will provide the filing party with the necessary ancillary court documents that are necessary for the court to accept the filing, thereby making the process self-guiding in large measure. As an example, should a motion require a cover sheet or even a certificate of good faith to be attached, the court’s program would recognize the need for such a certificate if absent and automatically advise the filing party. According to Mr. Barrett, “electronic filing has thus made what in many venues

and jurisdictions have been cryptic and foreign due to known or even unknown local rules, a very pedestrian, inviting and friendly process.”

Interviews with Attorneys on the Civil Electronic Filing Steering Committee

Rudolph Garcia

Attorney Rudolph Garcia, a member of the court’s Electronic Filing Steering Committee, appreciated the fact that the court reached out to the Philadelphia Bar Association for advice and guidance. When asked to express his views, Mr. Garcia stated the following:

“We are very fortunate in Philadelphia to have judges and court administrators who value a collegial and cooperative relationship with the bar. At every stage of this process, the court has reached out to lawyers for input and suggestions. A few of us have even been invited to serve on the committee that is developing the system. As a result, potential problems from the user’s perspective are spotted and solved before they are further ingrained by subsequent programming. There may still be a glitch or two once the system goes live, but there will be far fewer. In addition, a six month discretionary period will be provided to address any unanticipated issues before the system becomes mandatory.

It is remarkable that the court has the experience to develop this system in-house. Harold Palmer is doing a magnificent job as the Project Manager. The judges and administrators are also doing an excellent job of ensuring that the work flow will run smoothly. The inner-workings of the system are complex and robust, but its interface is user friendly and intuitive. If you can buy something on the Internet, you will probably be able to use this system with no training at all.”

Daniel J. Siegel

Daniel J. Siegel finds and reports in his article⁵² “Era of E-Filing” that:

“Philadelphia’s e-filing system will be a state-of-the-art process that will eliminate that sinking feeling when the copier jams five minutes before the courier is scheduled to pick up a pleading that, of course, must be filed that day. Counsel will benefit because attorneys and staff will devote less time to compiling documents for filing, and there will be no need to pay copy services, filing services and messengers. More importantly, documents will be available immediately after filing. With the arrival of e-filing in Philadelphia, the days of just saying no to technology are clearly disappearing.”

⁵² See Note 44 supra, pages 8-9.

In his article⁵³ “E-Filing is Coming” Mr. Siegel further finds and reports that:

“there are many benefits to e-filing. It’s easy and requires minimal computer skills. It saves time. It saves storage space and paper because counsel will not necessarily have to print every page of every document. Instead, they can review and save the documents on their computers and print relevant pages as needed.”

Nancy H. Fullam, Esquire

Attorney Nancy H. Fullam, also a member of the court’s Electronic Filing Steering Committee, reported the following when she was asked to test file a medical malpractice case:

“As a member of the Philadelphia Court of Common Pleas E-Filing Committee, it has been my privilege to work with the court on another innovative administrative reform for our court system. As an experienced civil trial lawyer, I applaud this particular effort and congratulate the court on the well designed e-filing system. I completed a test filing of a medical malpractice complaint recently and found the system to work very well. While it did take some time to enter the identifying details for each of the defendants identified in this fictitious pleading, the screens and instructions were well designed, easy to follow, and user friendly. I received the confirming e-mail notification almost immediately. I know my colleagues in the private bar are going to enjoy the ease of filing documents with this system once it is officially in place for the entire Civil Trial Division.”

Questionnaire Surveys: Civil Bar and Legal Secretaries

Stanley Thompson, Esquire

Stanley Thompson, Director of the Philadelphia Court of Common Pleas’ Complex Litigation Center was recruited to critique the survey instruments. Mr. Thompson found that the questionnaire survey was easy to understand and flowed nicely. He also found it to be succinct and easy to complete. He reported the following:

“With respect to Section One: E-Filing Experience, is there any reason the surveyor would not want to know about "other" e-filing experience other than the Orphans' Court Division and Municipal Court? If so, an additional question could be added: "Have you filed documents electronically in any other court or jurisdiction not mentioned above?" Also in this section, with respect to the fourth

⁵³ See Note 45 supra, page 3.

question on e-filing preparedness, I hesitated and grappled somewhat with the meaning of the query. I was not sure whether the question intended to address preparedness in terms of "technological knowledge/training/skills" or "equipment/equipment peripheral compatibility or accessibility." I would think you might be interested in this information. If so, the question could be split into two questions or clarified accordingly."

"With respect to Section Three: Potential Challenges to E-Filing, I thought that perhaps the surveyor may be interested in knowing whether or not e-filing would present a challenge due to cost prohibitive issues -- costs to the user (i.e., computer upgrades, maintenance, computer consulting). If this information is important, another question could be added, accordingly."

All test takers concluded that the questionnaire was simple, self-explanatory, easy to understand and ready for distribution. Therefore, no adjustments were made to the instrument."

Results of Questionnaire Surveys Regarding Electronic Filing in Philadelphia⁵⁴

The court's electronic filing survey was distributed to attorneys and legal secretaries. Out of 350 attorneys, 212 completed and returned the electronic filing survey for a 61% response rate. Out of 60 legal secretaries, 32 completed and returned the survey for a 53% response rate.

E-Filing Experience⁵⁵

The attorneys and legal secretaries were asked the following questions:

- Do you have any experience with electronic filing?
- Have you filed any documents electronically in federal or state court?
- Are you prepared for electronic filing in the Philadelphia Court of Common Pleas Trial Division – Civil and the Office of the Prothonotary?

⁵⁴ The complete questions and results of the questionnaire surveys are published on pages 47 through 52 of this report.

⁵⁵ Please see survey questions and results on page 47 of this report.

Ninety-three percent of the attorneys and ninety-one percent of the legal secretaries responding to the survey reported that they are prepared for electronic filing.

Sixty-seven percent of the attorneys and thirty-three percent of the legal secretaries reported that they have filed documents electronically in federal court.

Service Attributes of an E-Filing System (Significant Benefits)⁵⁶

The attorneys and legal secretaries were asked to provide their opinion on the merits and relative importance of various features that may be included in an e-filing system. They were asked to identify the service attribute(s) they believed would be of the greatest benefit.

Ninety-one percent of the attorneys and eighty-nine percent of the legal secretaries reported that the ability to file documents electronically 24/7/365 was a significant benefit.

Eighty-three percent of the attorneys and one-hundred percent of the legal secretaries reported that e-mail alert whenever something is filed electronically in a case, where they have direct involvement, was a significant benefit.

Potential Challenges to E-Filing⁵⁷

The attorneys and legal secretaries were asked to address the potential challenges of an e-filing system.

Overall, neither the attorneys nor the legal secretaries believed that e-filing was going to make the filing of documents with the court more difficult. They reported the following:

⁵⁶ Please see survey questions and results on pages 48 and 49 of this report.

⁵⁷ Please see survey questions and results on page 50 of this report.

- Documents sent or received electronically are just as secure as documents sent by courier or hand delivered to the court. Electronic document delivery is just as reliable.
- Assembling, preparing and filing pleadings, motions, and other documents will not be more difficult than it is now.
- Filing documents electronically will require some training but not substantial training.
- An e-filing system will not result in more paperwork.

Internet Experience⁵⁸

The attorneys and legal secretaries were asked about their daily, weekly and monthly experience with the Internet, if any.

A good percentage of the respondents – both attorneys and legal secretaries – have Internet experience. Eighty-six percent of the attorneys and eighty-eight percent of the legal secretaries reported that they use the Internet at work for business purposes.

Portable Document Format (PDF) Experience⁵⁹

The attorneys and legal secretaries were asked about their experience with Portable Document Format processes. A fair amount of the respondents appeared to have some working knowledge of Portable Document Format processes. Ninety-five percent of the attorneys and one-hundred percent of the legal secretaries know how to read a PDF document within their web browser.

The total survey results are reported below.

⁵⁸ Please see survey questions and results on page 51 of this report.

⁵⁹ Please see survey questions and results on page 52 of this report.

OUT OF 350 ATTORNEYS, 212 RETURNED THIS SURVEY FOR A 61% RESPONSE RATE.

OUT OF 60 SECRETARIES, 32 RETURNED THIS SURVEY FOR A 53% RESPONSE RATE.

SECTION 1: FILING EXPERIENCE

Are you prepared for electronic filing in the Philadelphia Court of Common Pleas Civil Trial Division and the Office of the Prothonotary?

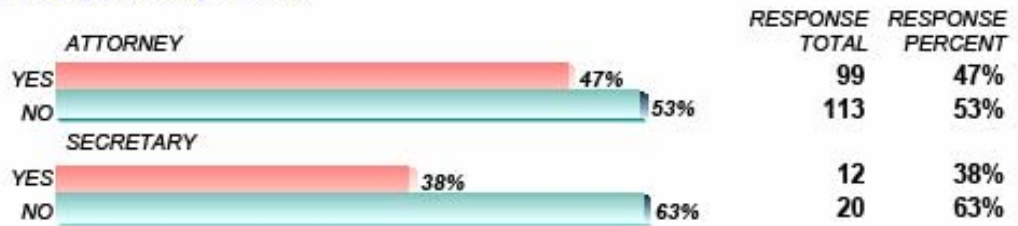


HAVE YOU FILED ELECTRONICALLY IN:

The United States District Court for the Eastern District of Pennsylvania?



The Philadelphia Municipal Court?



The Philadelphia Court of Common Pleas Orphans' Court?



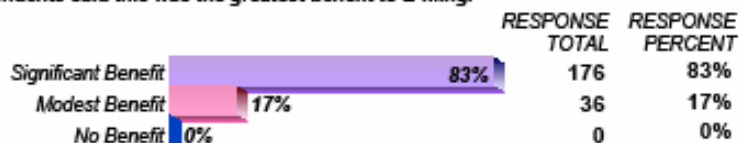
SECTION 2: SERVICE ATTRIBUTES OF AN E-FILING SYSTEM

ATTORNEY RESPONDENTS: 212 - RATE OF RESPONSE: 61%

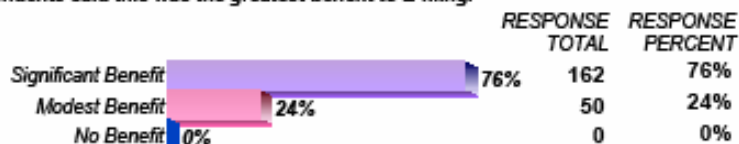
The ability to file documents electronically, 24 hours per day, 7 days a week.
 30% of respondents said this was the greatest benefit to E-filing.



E-mail "alert" whenever something is filed electronically in a case where I have direct involvement.
 29% of respondents said this was the greatest benefit to E-filing.



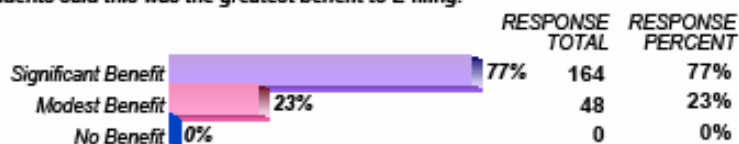
E-mail confirmations for all documents filed.
 25% of respondents said this was the greatest benefit to E-filing.



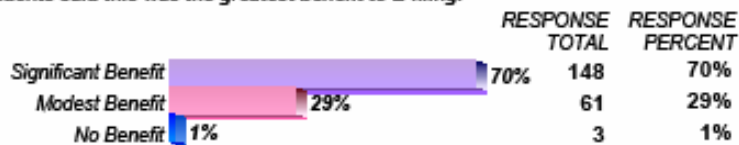
The ability to initiate proceedings and file documents electronically.
 8% of respondents said this was the greatest benefit to E-filing.



The ability to access an electronic record of documents in cases where I have direct involvement.
 4% of respondents said this was the greatest benefit to E-filing.



A single point of access for all filings.
 3% of respondents said this was the greatest benefit to E-filing.



Availability of telephone support to resolve technical difficulties.
 1% of respondents said this was the greatest benefit to E-filing.



SECTION 2: SERVICE ATTRIBUTES OF AN E-FILING SYSTEM

SECRETARY RESPONDENTS: 32 - RATE OF RESPONSE: 53%

E-mail confirmations for all documents filed.

38% of respondents said this was the greatest benefit to E-filing.



E-mail "alert" whenever something is filed electronically in a case where I have direct involvement.

34% of respondents said this was the greatest benefit to E-filing.

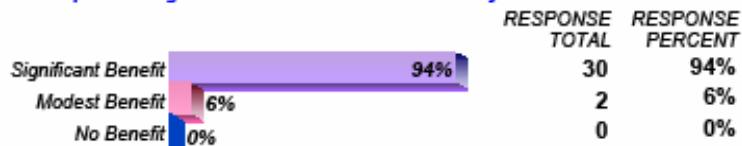


The ability to file documents electronically, 24 hours per day, 7 days per week.

28% of respondents said this was the greatest benefit to E-filing.



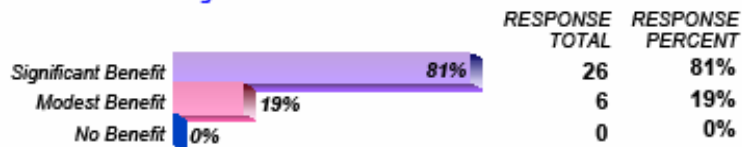
The ability to initiate proceedings and file documents electronically.



The ability to access an electronic record of documents in cases where I have direct involvement.



A single point of access for all filings.



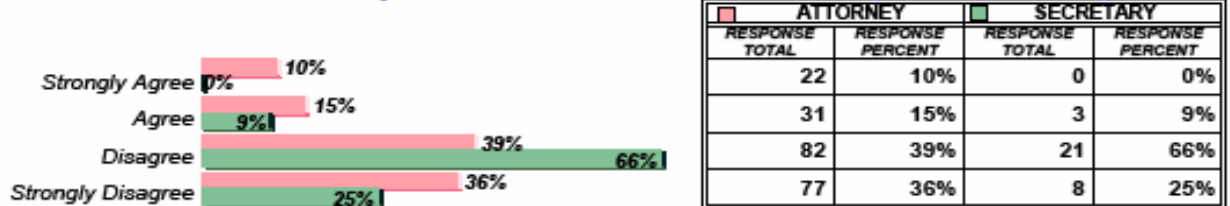
Availability of telephone support to resolve technical difficulties.



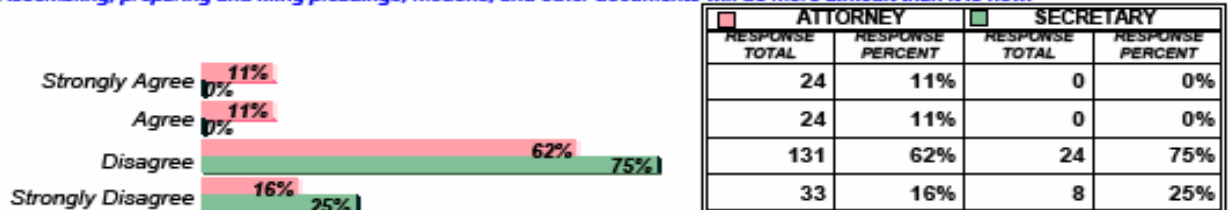
SECTION 3: POTENTIAL CHALLENGES TO E-FILING

■ ATTORNEY RESPONDENTS: 212 RATE OF RESPONSE: 61%
■ SECRETARY RESPONDENTS: 32 RATE OF RESPONSE: 53%

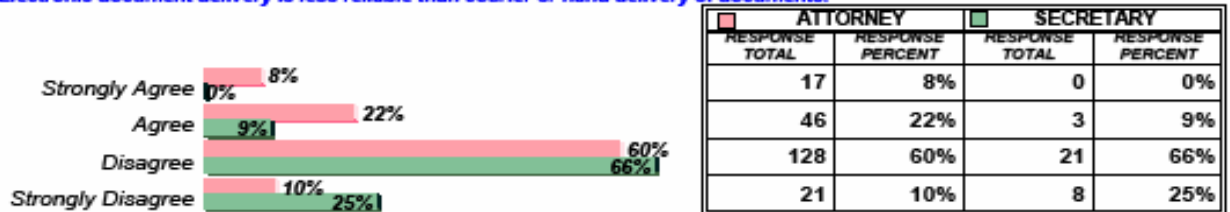
Documents sent or received electronically are less secure than documents sent or received by courier or hand delivery.



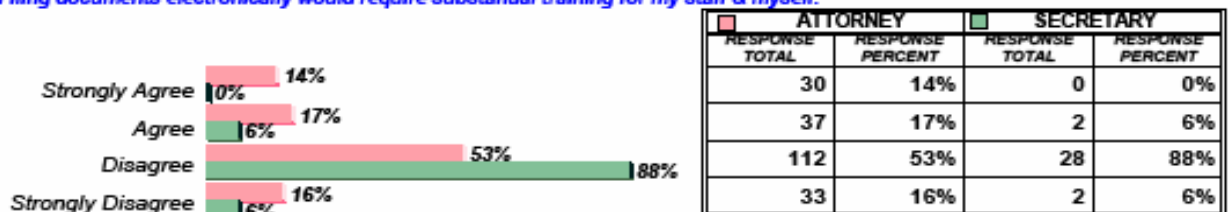
Assembling, preparing and filing pleadings, motions, and other documents will be more difficult than it is now.



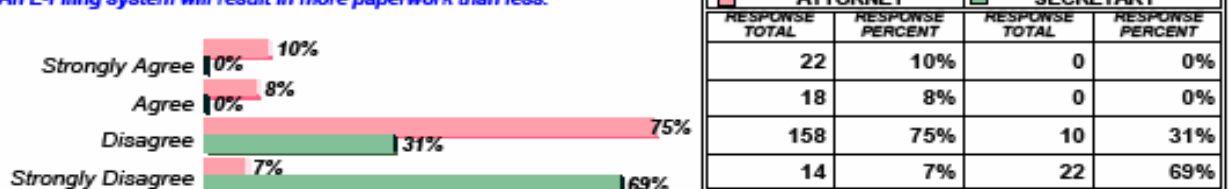
Electronic document delivery is less reliable than courier or hand delivery of documents.



Filing documents electronically would require substantial training for my staff & myself.



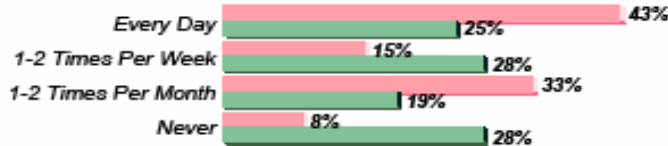
An E-Filing system will result in more paperwork than less.



SECTION 4: PERSONAL AND ORGANIZATIONAL PROFILE

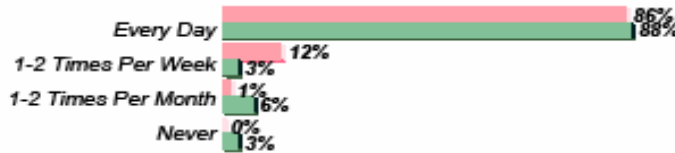
■ ATTORNEY RESPONDENTS: 212 RATE OF RESPONSE: 81%
■ SECRETARY RESPONDENTS: 32 RATE OF RESPONSE: 53%

I use the Internet at home for business purposes.



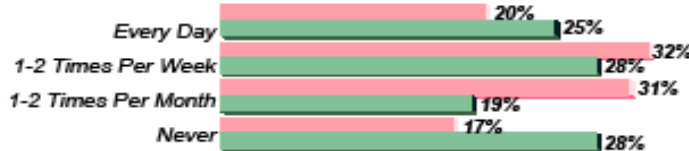
ATTORNEY		SECRETARY	
RESPONSE TOTAL	RESPONSE PERCENT	RESPONSE TOTAL	RESPONSE PERCENT
91	43%	8	25%
32	15%	9	28%
71	33%	6	19%
18	8%	9	28%

I use the Internet at work for business purposes.



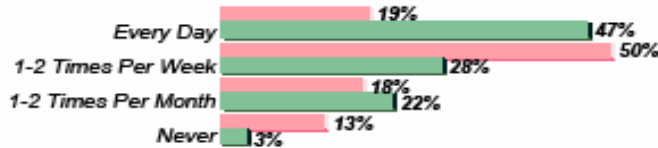
ATTORNEY		SECRETARY	
RESPONSE TOTAL	RESPONSE PERCENT	RESPONSE TOTAL	RESPONSE PERCENT
183	86%	28	88%
26	12%	1	3%
3	1%	2	6%
0	0%	1	3%

I send and receive business related email from home.



ATTORNEY		SECRETARY	
RESPONSE TOTAL	RESPONSE PERCENT	RESPONSE TOTAL	RESPONSE PERCENT
42	20%	8	25%
68	32%	9	28%
65	31%	6	19%
37	17%	9	28%

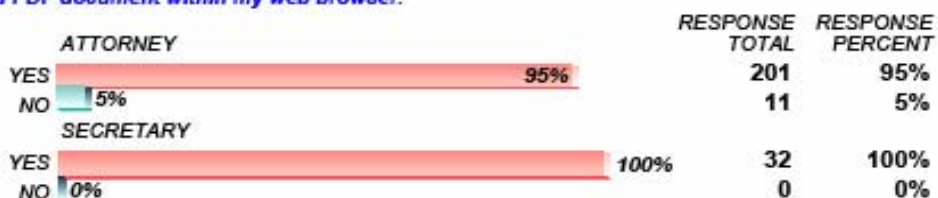
I complete financial transactions online.



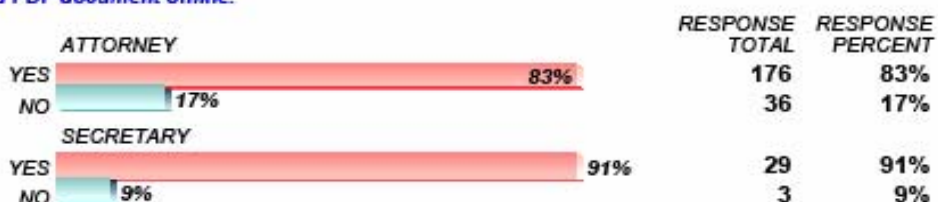
ATTORNEY		SECRETARY	
RESPONSE TOTAL	RESPONSE PERCENT	RESPONSE TOTAL	RESPONSE PERCENT
40	19%	15	47%
106	50%	9	28%
38	18%	7	22%
28	13%	1	3%

SECTION 5: PDF* ACTIVITY

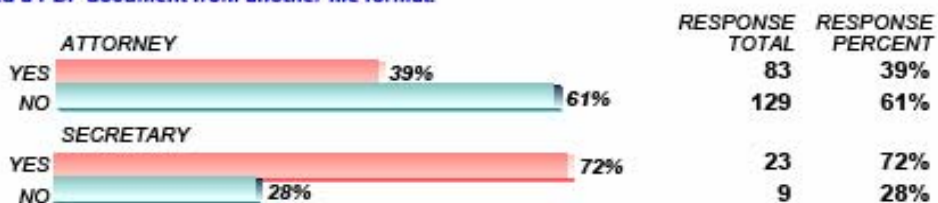
Read a PDF document within my web browser.



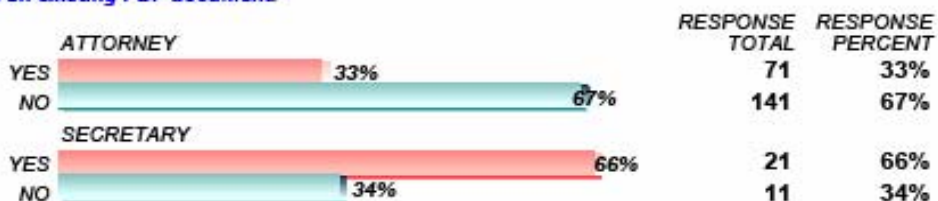
Read a PDF document offline.



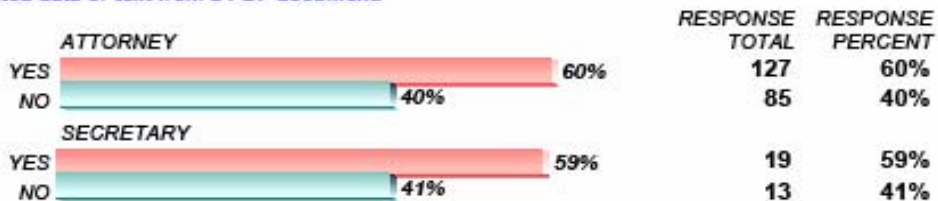
Created a PDF document from another file format.



Edited an existing PDF document.



Extracted data or text from a PDF document.



*PDF - Portable Document Format is a registered product of Adobe Acrobat Professional.

LAUNCH OF CIVIL TRIAL DIVISION'S E-FILING SYSTEM DRAWS CLOSER

The court's plan is to launch its state-of-the-art civil e-filing system by June 2008. In an article⁶⁰ published in "*The Legal Intelligencer*" on Thursday, September 27, 2007, Court Administrator David C. Lawrence stated that

"the court's Civil E-Filing Steering Committee would have never undertaken two-and-a-half years of intensive work if moving the Civil Trial Division to e-filing wouldn't increase the division's efficiency."⁶¹

In the same article⁶², Andrew Stern, Esquire, a partner with the law firm of Kline & Specter and a member of the court's Civil E-Filing Steering Committee, states that:

"Philadelphia's civil e-filing system is superior to the federal court e-filing system. The committee has reviewed other filing systems, has invited input from the bar on what they would like to see in the system and has done excellent outreach to inform the bar of the impending change. I'm impressed with their sincere efforts to make this the best system around. I think we're going to be one of the model systems."

Mr. Siegel points out the following.

"The e-filing system will accomplish many goals: litigants will have instant access to pleadings; lawyers will be able to remotely file from anywhere – even Africa on a safari"; paper waste will be prevented; it will not matter if an attorney moves to another law firm or moves into another office as long as their e-mail is up-to-date with the court system; and legal documents won't be lost or destroyed when someone accidentally spills a cup of coffee.

Joseph H. Evers, Prothonotary of the Philadelphia Court of Common Pleas and Co-Chair of the Civil E-Filing Steering Committee stated that:

"With the institution of the civil e-filing system court staff will be able to spend less time on processing documents and more time on quality control and examining the accuracy of filings. The volume of filings, whether it is in hard copy or electronic form, keeps us rather busy. We are building a robust civil e-filing system that will be intuitive

⁶⁰ See Note 45 supra, page 3.

⁶¹ Loc. Cit.

⁶² Loc. Cit.

enough for all users to negotiate and complete their filings, electronically, with minimal, if any, problems.”

E-FILING IN-HOUSE TEST EXPERIENCE

Stanley Thompson reported that he filed five test items: three complaints (one major non-jury, one major jury, and one mass tort-asbestos); one petition (forfeiture action); and one request for discovery court hearing (motion to compel). He paid for the electronic filings using both the credit card and cash (to be paid at the courthouse within five days) options. The petition action required no payment as it was “filed by the City of Philadelphia.”

Generally, Mr. Thompson was very impressed with the format of the system, which he found to be fairly easy to understand and user friendly. He reported that it was painless to navigate through the various screens. He thought the instructions were easy to follow and that the fields and drop down screens made the process faster, more efficient and less intimidating than what he had expected.

It must be noted that Mr. Thompson never filed any action electronically in any jurisdiction prior to the testing.

CONCLUSIONS AND RECOMMENDATIONS

It is safe to conclude that electronic filing is inevitable. It will improve access to justice and enhance the quality of justice.

As litigation and life become more complex, it becomes increasingly imperative that state courts implement electronic filing. Research and experience – in both federal and state courts – confirm that the electronic filing process is straightforward, reliable and the preferred way for courts to do business in today’s wonderful world of high-technology.

With regard to the key benefits and significant advantages of electronic filing, as the NCSC concludes in its draft Standards for Electronic Filing Processes⁶³, ultimately, electronic filing will achieve the following improvements in the justice system:

- Speedier processes by eliminating the time required for mailing or personal delivery of pleadings and other documents;
- Greater efficiency from the instantaneous, simultaneous access to filed court documents for participants in the case, for judges and court staff, and members of the public (to publicly available court documents) wherever participants may be located throughout the world;
- Fewer delays caused by lost or misplaced paper files;
- Increased efficiency and reduced cost from the ultimate reduction or elimination of handling and storing paper case files in courts, lawyers’ offices, and official archives;

⁶³ See Note 34 *supra*, pages 2-3.

- Increased security of court records arising from more reliable electronic backup copies of records, increased ability to detect any alteration to an electronic document, and easier enforcement of limitations on access to documents;
- Improved legal processes, as judges and lawyers learn to take advantage of the universal availability and ease of sharing of electronic documents; and
- Enhanced public safety arising from electronic service of and instantaneous access to court orders (including domestic violence orders of protection) and warrants.⁶⁴

E-filing helps attorneys get documents to the courthouse more quickly and it is not complicated at all. The filing party (attorney or pro se litigant) simply prepares a document for filing; submit the document to the court electronically; and pay the appropriate filing fees on-line. The court, in turn, reviews and accepts the document on-line; updates its files and document management system; and notifies the filing party of its receipt and acceptance or rejection.

Many steps in the process, such as printing and transporting papers, are eliminated, saving time and money. Postage costs also are reduced, particularly when service can also be completed electronically. Because the court has an electronic case file, the attorney can access it without leaving his or her office. This may result in the elimination of many paper records in law firms. With the access mechanisms that allow attorneys to see court case files, they also should be able to view calendars and other important records. Many individuals can access these materials simultaneously from different locations, a feat that is impossible in a paper environment.⁶⁵

⁶⁴ See Note 34 supra, pages 2 and 3.

⁶⁵ See Note 2 supra, page 18.

The court will recognize many benefits from electronic filing as well. Fewer documents will be returned due to processing and clerical errors. Less staff will be required to process, review and pull files. Case files will always be available because they will not be lost or misplaced and the integrity of the case files will be guaranteed.

Successful development and implementation of a mandatory e-filing system requires very careful planning by the court and education of the bar. Before a jurisdiction can successfully implement e-filing, several prerequisites need to be met. (1) State or local rules should provide that the official record of the court is electronic and should permit e-filing; (2) The court should have a stable case management system with which to interface an e-filing system; and (3) The court should be prepared to exercise leadership to promote e-filing and build a consensus among tradition-minded stakeholders, having considered all points of view and concerns.⁶⁶

Within the State of Pennsylvania, five judicial districts (Allegheny, Beaver, Lancaster, Montgomery and Philadelphia Counties) have already instituted electronic filing systems and nine additional judicial districts are preparing and planning for electronic filing.

It is strongly recommended that state courts implement mandatory electronic filing. We can conclude definitively that electronic filing and service can and will dramatically improve state court operations and provide law firms with a better way to manage litigation. It has worked well within the federal court system.

Thanks to the outstanding work of the members of the Civil Electronic Filing Steering Committee, the future of electronic filing and service within the First Judicial District of Pennsylvania (Philadelphia County) is extremely bright. The Philadelphia Bar

⁶⁶ See Note 7 *supra*, page 34.

is educated, ready and prepared for the cultural changes that electronic filing in the civil courts will bring.

The court's soon-to-be-released civil e-filing system will improve access to justice, increase efficiency, reduce errors, and be a valuable tool to all users. It will definitely be a model for any state court system to follow.

BIBLIOGRAPHY

Carlson, Alan. Electronic Filing and Service: An Evolution of Practice. Denver, Colorado: The Justice Management Institute. Copyright 2004.

duPont Ridgely, Henry and Dixon, Jr., Herbert B. “Standards Relating to Court Organizations: Standard 1.65, Court Use of Electronic Filing Processes.” San Antonio, Texas: American Bar Association. Copyright 2004.

Elliott-Engel, Amaris. “Launch of Civil Trial Division E-Filing System Draws Closer.” The Legal Intelligencer, Thursday, September 27, 2007, pages 3, 7 and 9.

Flango, Carol; Campbell, Chuck; Kauder, Neal. Future Trends in State Courts 2007. Williamsburg, Virginia: National Center for State Courts. Copyright 2007.

Horowitz, Donald J. and Zorza, Richard. “Washington State Supreme Court’s Access to Justice Technology Principles: A Perspective for Justice System Professional.” The Justice System Journal. Copyright 2006

Kasperek, Jr., F. Dale, Greacen, John M. and Bousquin, Terrie. “Joint Project of the Conference of State Court Administrators and the National Association for Court Management Joint Technology Committee, Standards for Electronic Filing Processes (Technical and Business Approaches).” Williamsburg, Virginia: National Center for State Courts. Copyright 2003.

McMillan, James. “Verification, Validation, and Authentication of Electronic Documents in Courts: How Digital Rights Management Technology Will Change the Way We Work.” Williamsburg, Virginia: National Center for State Courts. Copyright 2005.

McMillan, James; Walker, J. Douglas; and Webster, Lawrence P. A Guidebook for Electronic Court Filing. Williamsburg, Virginia: National Center for State Courts. West Group, Inc. Copyright 1998, 1999

Nelson, Sharon D. and Simek, John W. "Electronic Filing in the Federal Courts: A Status Report." Fairfax, Virginia: Sensei Enterprises, Inc. Copyright 2001.

Peters, Tracy; Flango, Carol; Campbell, Chuck; Kauder, Neal. Future Trends in State Courts 2005. Williamsburg, Virginia: National Center for State Courts. Copyright 2005.

Siegel, Daniel J. "Era of E-Filing: Philadelphia Court of Common Pleas to Introduce Civil E-Filing in 2008." The Philadelphia Lawyer. Spring 2007. Pages 14-15.

Siegel, Daniel J. "E-Filing is Coming: Here's How to Prepare." The Philadelphia Lawyer: Law Practice Management-Technology. Fall 2007. Pages 8-9.

Turner, Julie C. "Changes in the Courthouse – Electronic Records, Filings and Court Dockets: Goals, Issues and the Road Ahead." Washington: The University of Washington Law School Library. The Haworth Press. Copyright 2002.

American Bar Association - Legal Technology Resource Center. "Electronic Filing Resource Page."

<http://www.abanet.org/tech/ltrc/research/efiling/home.html>.

E-filing for Courts. "About E-filing for Courts."

<http://www.efilingforcourts.com>.

First Judicial District of Pennsylvania's 2006 Annual Report. "*The Philadelphia Courts Today*." <http://www.courts.phila.gov>.

National Center for State Courts. "COSCA/NACM - Technology Standards." <http://www.ncsconline.org>.

National Center for State Courts. "CourTools, Measure 6, Reliability and Integrity of Case Files." Copyright 2005. <http://www.courtools.org>.

Report of the Judicial Conference Committee on Court Administration and Case Management on Privacy and Public Access to Electronic Case Files. Copyright 2006. <http://www.privacy.uscourts.gov/Policy.htm>.

United States Courts. “U.S. Courts Case Management/Electronic Case Files (CM/ECF)” Copyright 2008.

http://www.uscourts.gov/cmecf/cmecf_about.html.

United States Courts. “Electronic Access to U.S. Courts.”

<http://www.uscourts.gov/cmecf/cmecf.html>.

United States Courts. “Privacy and Access to Electronic Case Files in the Federal Courts.” Copyright 1999. <http://www.uscourts.gov/privacy.htm>.

United States Courts. “CM/ECF System Implementation Continues to Grow.” www.uscourts.gov/newsroom/cmecf.htm.

United States District Court for the Eastern District of Pennsylvania. “Case Management/Electronic Case Filing System.”

<http://www.paed.uscourts.gov/documents/CMECF>.