## **Investment Business Case Summary**

# JUDICIAL ADMINISTRATION: ELECTRONIC FILING

Proposed Phase - Design, Implementation

Objective of the Project

To complete the Electronic Court Records program by implementing its final phase, Electronic Filing, to allow attorneys and others to file documents electronically and for the data to be "lifted" into current data capture systems. Included in the project is an electronic commerce component to automate basic collection of payments, fees, and fines, plus a digital signature component for authenticating documents and payments.

**Project Description** 

Electronic Filing completes the Electronic Court Records (ECR) program by extending the Core ECR application to accept documents formatted with eXtensible Markup Language (XML) codes based on Standards being developed nationally and locally for electronic court filings. The project will determine the components to add to Core ECR, the already implemented document management system, to process XML documents and extract data elements from them for automated transfer into SCOMIS (Superior Court Online Management Information System) and other target systems. An electronic commerce component will enable the automated collection of payments and fees and transfer them to financial programs used by DJA to account for Court and Clerks' Office receipts. Digital signatures will use secure software tools to authenticate documents and payments.

**Business Requirements** 

The Clerk must index all documents filed for the Superior Court case file and manage all funds associated with fees, fines, trusts, and other programs of the Court. Document imaging has realized many benefits for the Clerk and Court, but full use of contemporary document management technology comes only with electronic filing, the culmination of ECR. If existing methods were "frozen," the Clerk would never achieve the long-term business goal of ECR of automating all the data entry and financial processing tasks that can be automated. Achieving this would turn the work of the Clerk away from duplicated data entry on a large scale toward quality control and verification of automated, self-aware documents. Further, without this project developing the basis for electronic transfer of data among different information systems, King County will not be able to use this project as a foundation for Law, Safety and Justice Integration. It has been an expectation of the LSJ BAC that Electronic Filing will introduce and test basic tools and techniques through which automated data transfer within the LSJ system can be achieved.

Costs (Summary)

This Phase \$ 868,138

Overall Project \$3.5 - 4.0 million

Schedule (Summary)

This phase - Completion date: December 2002 Overall Project - Completion date: December 2002

Value Score = 67

Risk Score = 16

## **ELECTRONIC COURT RECORDS, PHASE 3: ELECTRONIC FILING**

## 1. Project Overview (Background).

- Project Name. Electronic Court Records (ECR), Phase 3, Electronic

Filing

- Project Sponsor. Paul Sherfey, Interim Chief Administrative Officer, Superior Court
  - Project Manager/Leader. Martha Woodworth, Project Manager
  - Start Date. July 1, 2000
  - Estimated End Date. June 30, 2002
  - Estimated Useful Life. 10 years.

The Superior Court and the Department of Judicial Administration (DJA) are implementing the second of two phases of the Electronic Court Records (ECR) project. The first, "Core ECR," the electronic document management system for Superior Court case records (from year 2000 forward and from many archived cases), has been implemented. The second, "ECR Connectivity," will be completed by the end of November 2000. Together, these two phases bring electronic forms of paper documents into the law, safety, and justice departments as images accessible through a web browser on a standard PC workstation. The Clerk scans, processes, and stores case records as images on a powerful "jukebox" of optical disks. The Court will soon be able to retrieve case files and documents in chambers or at the bench, whenever the Judge or Commissioner needs them. Prosecutors, Defenders, Jail staff, Sheriff's investigators, and others similarly will look up case records on their PCs. Time-consuming trips to the Clerk's Office will be eliminated, along with such time-wasters as waiting for the return of a checked-out file or for staff to find a misfiled folder. Staff within DJA are now doing their work by selecting document images from workflow queues, rather than by working through stacks of papers handed from one desk to another; Core ECR even knows how to open the correct pages in SCOMIS, the mainframe into which data entry from these documents is done. The file users in the public areas of DJA will be obtaining the files and documents they need from computer terminals without waiting for their retrieval from the Clerk's large open shelving area. The foundation has been laid for the extension of access to the case record to users over the Internet. This external connectivity will in turn open the Court and legal community to the final phase of ECR, Electronic Filing.

#### 2. Business Need.

Electronic Filing (also called "E-filing") will bring to the Court, DJA, and litigants the greatest benefits of the ECR Program. Although DJA can now create thousands of images per day from filed documents, capturing them from hard copy is very labor-intensive. The incoming paper is varied in thickness, quality,

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and type. There are heavy bond papers with high quality embossing, documents printed on plain bond, NCR sheets, and even hand-written text on store-bought writing paper. This means documents must be carefully prepared for scanning and artfully handled as they move through DJA's scanners. Every imaged document has many advantages for users: quicker access, access for more than one person at a time, access from many locations, and access for longer than just business hours. The documents are still nothing but pictures of hard copy. Clear as the images might be, they are not text-searchable, cannot be hyperlinked, cannot be electronically indexed, and they require an average of 35 kilobytes of storage space (and transmittal time) per page. A person must read every document, even the most routine, to locate, and then re-type, information contained in the document that must be duplicated in the SCOMIS system and related state databases. Imaging alone does not secure the full potential of electronic court records for King County.

The basic idea of electronic filing is to use a "markup language" to point at data elements within electronic text documents, so the data elements that the Clerk needs to place into SCOMIS or other target systems can be located and extracted without a person having to duplicate the keystrokes originally used to set the data into the document. Where Clerks have been readers and retypers of information. they will become quality checkers, knowledge workers ensuring that the right data goes to the right places. Other important elements of e-filing are also emerging. New methods for citing legal documents in electronic form have been proposed. Digital signatures, as are enabled by Washington's Electronic Authentication Act, give electronic documents the same verifiability and non-repudiability provided by a pen-and-ink signature on paper. These developments have made the time ripe for electronic filing. Electronic filing will mean that within DJA data can be moved from filed document to SCOMIS indexing by automation, producing substantial labor savings. DJA will also be able to automate many financial transactions now handled by staff, once an Electronic Commerce component is incorporated with the Electronic Filing system, to handle receipt and recording of payments associated with many of the filed documents, e.g., filing fees, as well as payments for various services provided by the Clerk, e.g., certified copies.

The benefits to the Court, attorneys, and the public from electronic filing will also be significant. Documents will be available even more quickly than imaging provides. DJA will be able to provide standard forms on its web pages for everyone's use in preparing XML-marked documents. (The complexities of XML coding will be invisible to most people using such forms.) Judges and Commissioners will be able to locate specific information readily because Find and other search tools that do not work with images will help them. Attorneys will be able to avoid rewriting text they use more than once in similar types of cases. Sealed and confidential files and documents will be protected by high-level password security systems and can be further safeguarded through computerized encryption. The smaller, 2-4 kilobytes per page, documents will require less

storage space and can be accessed from the ECR storage system faster than images. Law firms and others will find that XML can be used for their own purposes, with markup pointing to the data elements they use for things like client information, tracking work on their own case files and documents, and integrating document management with their own storage and indexing systems.

One business need is to modify ECR so it can make use of XML standards to receive and process compliant documents within its existing document management system, including developing standard XML forms people can use and identifying proof-of-concept projects. This will enable the automation of data capture from filed documents. A second business need is for an Electronic Commerce component to handle receipt and recording of funds associated with electronically filed documents, using credit cards and other methods of secure collection. A third business need is to educate the Court, the legal community, and the public about electronic filing and to obtain their cooperation in substituting XML-compliant forms for their heretofore paper documents. This marketing effort will build the use of e-filing to enable the labor savings from reduced imaging and increased automation of data capture and transfer.

## 3. Objectives.

<u>Strategic</u>: Electronic Filing will improve the flow of judicial information to the Superior Court by encouraging the legal community to adopt new information technology, making better use of it to retrieve, organize, and transmit information through documents used in litigation.

Business: Electronic filing will help realize benefits to DJA through automation of SCOMIS and other data entry tasks. Electronic filing will also eliminate the tasks that would be involved in creating images from paper: document preparation, scanning, image indexing, and reassembly. DJA will educate Superior Court, litigants, and users of the case records about how XML-marked up documents will bring automated data capture and transfer, text-searchable documents, digital signatures and encryption security, and other benefits into the judicial process. DJA will build electronic filing templates and forms and market their use by the Court and among litigators.

<u>System</u>: Electronic Filing will expand the capacity of the Core ECR system by making it accessible to litigants and the public for access and filing purposes. DJA will establish standard electronic documents containing data markers, compatible with the Core ECR system. DJA will build an automated document screening component for intake and security. DJA will develop components that will bring filed electronic documents into the Core ECR workflow and data processing, document management system. DJA will also develop electronic commerce components to receive, record, and process electronic payments associated with electronically filed documents.

#### 4. Scope.

Electronic Filing will include ASCII files created from standardized forms and templates (prepared and provided to users by the Clerk, with the possibility that some of this work will be done by the State or third parties) that are compliant with the DJA-adopted Standard for XML encoded documents. It will include standardized ways to display such documents, using a selected stylesheet or other feasible mechanism to make the documents human readable in approximately the same format as a traditional Superior Court case filing. Electronic Filing will include modifications to the Core ECR system to incorporate XML based documents into the capture, storage, indexing, workflow, and retrieval/display components of Core ECR. Electronic Filing will include an interface to the World Wide Web designed to screen incoming documents for compliance with required standards, for appropriateness for the Superior Court, for completeness of all information required for receipt into Core ECR, and for security from viruses and other invasive threats to a computer system. Electronic Filing will not prohibit litigants from developing their own modifications of the E-filing forms and templates, so long as the resulting filings are compliant with the ECR system requirements and standards. Electronic Filing will also include an Electronic Commerce component, to manage the receipts and disbursements of funds handled by DJA. Many documents require payments or incur fines and other costs as they are processed.

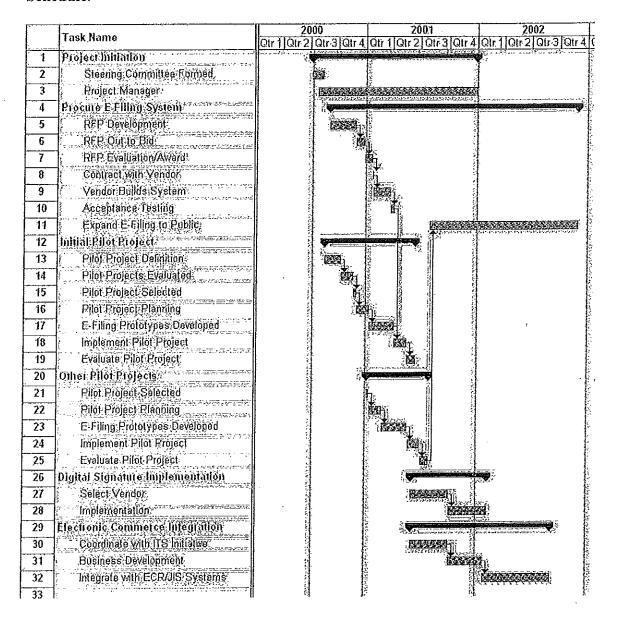
At least initially, Electronic Filing will not accommodate filing documents submitted in word-processed format or as TIFF images. Electronic Filing may later be expanded to allow for such documents, so long as they are linked to compliant XML documents which act like "cover sheets," into which the filer has entered all the required XML data encoding that applies to the attached non-XML document. The reason for focusing exclusively on XML-encoded documents is to ensure that they will be adopted as widely as possible, since the greatest benefit and cost savings comes with using them.

Electronic Filing will not initially include components to direct data from XML documents into systems other than those into which the Clerk now enters data. Such components will have to be defined as separate projects. For example, data needed by the Case Management Information System (CMIS) of Superior Court could, in theory, be extracted from XML based electronic filings received by the Clerk. This would require cross-departmental engineering of data transfer, validation, and entry systems that are not within the present scope.

It is expected that the person who files an electronic document will receive an electronic acknowledgement from the Clerk, either indicating that the filing was not accepted (with an error message explaining the problem and how it might be corrected), or that the filing was accepted for processing. Further distribution of

these notices, for example, to other parties in the litigation, is not within the scope of the present project.

#### 5. Schedule.



6. **Cost and Benefit Summary.** (Complete the Cost & Benefit Worksheet to derive the information.)

Detailed costs for the next phase, summary costs for the rest of the project.

- Total Development Cost:

\$868,138

FileNET software	\$200,000
1 <sup>st</sup> Year Software Maintenance	38,824
E-Filing System Development	413,333
Ongoing vendor support cost (4 mo.)	13,778
Digital Signatures (1 year)	100,000
E-Commerce Development (est.)	165,000
Servers	50,000
Added storage for ECR system	88,000
Storage media (optical disks)	45,000
XML Form Writer	48,457
Staff Office & Equipment	7,500
Unexpended Remainder from Tech Bond	(\$256,297)

#### - Quantifiable Benefits.

Staff involved in production data entry and cashiering = 41.5 FTE in 2000. Total estimated payroll cost (with benefits) = \$1,823,067

Estimated movement to e-filing & electronic commerce = 40% in 10 yrs.

Estimated staff saved over 10 years = 30% of production staff in 10 yrs.

Estimated movement to e-filing & electronic commerce = 4%/year

Estimated staff savings (staff must check transactions) = 3%/year

First year savings = \$54,692

Each subsequent year = Previous year savings + \$54,692

Total Cumulative Savings (10 Years) = \$3,008,061

#### - O&M costs: \$209,333

Software maintenance	\$42,000
Ongoing vendor support	41,333
Digital Signatures (annual)	100,000
E-Commerce maintenance	15,000
Servers maintenance	3,000
Storage maintenance	8,000

## - Payback. (ROI)

Break-Even Year for This Proposal = 5+ (Cumulative savings = \$820,380) Break-Even Year for Total Project = 7 (Cum. Savings = \$1,531,377)

#### 7. Non-Quantified Benefits

#### - Strategic match

Electronic Filing supports the Law, Safety, and Justice Integration initiative. It has been a long-time goal of the LSJ BAC to build LSJ integration in part on ECR as a foundation. ECR has been a testing ground for electronic document management, workflow, and now Electronic Filing. DJA has also been seen as a central point in the LSJ system. Data created by law enforcement flows to the Prosecutor, where charging documents lead to a Court filing and involve the Defender. On case resolution, data conveyed by documents may lead to commitment to the Jail or DOC, and may have direction for the Sheriff (e.g., protection order). Data in documents also moves eventually into the probation system. If the common data in all these documents could be limited to one instance of actual data entry (keystrokes), the benefit when multiplied by thousands of cases per year would be substantial. Further, the electronic transfer of data would greatly speed the process at all points.

Electronic Filing will also connect the Clerk's Office with the IT Electronic Commerce initiative. With many court filings there are required payments, including filing fees, jury demand fees, and more. Thousands of dollars each day are received into and disbursed from the Registry of the Court, which DJA manages. Further, DJA provides copies of documents to agencies and litigants, with charges that vary from twenty-five cents per page to a dollar per page for certified documents. DJA wants to include with the Electronic Filing a robust electronic commerce component that can handle a variety of receipts and interface with state financial systems into which funds must be recorded by DJA.

#### Competitive advantage

There is no competitive advantage in that DJA/Superior Court Clerk functions are assigned to it exclusively by law.

#### - Management information support

Electronic text files, as used in XML documents, enables the use of electronic tools for counting, indexing, and searching. This provides new opportunities for additional information.

#### Legislative implementation

Most of the functions of the Clerk's Office are legislatively mandated. The Clerk is the keeper of the case files and other records of Superior Court.

## IT Investment Business Case - Electronic Filing

There is currently legislation in place that allows for keeping Superior Court records in electronic form.

## - Strategic IT architecture alignment

Electronic Filing is part of a plan DJA began to develop in the mid-90s. The Core ECR and Connectivity phases of ECR were designed in large part with Electronic Filing in mind. E-filing has been seen to be the fulfillment of the ECR vision. Core ECR is architecturally capable of incorporating components needed to add e-filing to its document management and data entry support services. Core ECR uses FileNET Panagon software for image capture, indexing, storage, and retrieval functions. FileNET is a well-developed imaging and document management firm, selected by DJA's vendor, Sierra Systems Group, Inc., for its strength and stability. FileNET is capable of handling a wide number of document formats, including electronic formats, allowing different formats to be organized into case files. It also provides viewing capability for hundreds of document formats used for displaying word processed text and images. Incorporating electronic text documents with XML encoding will be possible using FileNET. Further, the Core ECR system was designed to have a Web interface for viewing images, also supported by the FileNET program. It is capable of handling access requests and, when developed in this proposed project, filing requests.

Hardware used for the Core ECR system, the basic document management system within which images and electronic filings will be housed together, was selected for its reliability and processing power. Two Compaq servers provide imaging and database services that can handle the millions of records created by the system from active case records and archived cases that are part of the Core ECR system. A Hewlett-Packard jukebox of optical disks maintains the documents (images or e-filings), with duplicates of them made on disks that are removed off-site for security. Anticipating the need for additional storage capacity, as the number of case records maintained in ECR continues to grow, the project includes acquisition of an additional storage unit to meet this need.

#### 8. Assumptions and Constraints.

DJA assumes it will succeed in persuading the Court, Prosecutor, and defender agencies to cooperate with the Electronic Filing project by participating in pilot projects and ultimately in adopting XML-based forms and templates for their own documents submitted as filings to DJA.

DJA assumes it will have similar success with most law firms, a substantial number of sole practitioners, and a number of self-represented litigants, so they

will use XML based forms and templates provided by the Clerk's Office on the web, or obtained through third party companies that sell compliant XML forms for their use.

DJA assumes that the combined effect of intra-County and external cooperation in using E-filing compliant XML documents will offset up to 40% of the entire document load received in the Clerk's Office. This would, by the end of 10 years, have resulted in an overall 10-year staff reduction of 30% in the areas of document preparation/scanning, image indexing, and case processing. Projections assume there is not a one-for-one tradeoff between automation of data entry tasks and elimination of staff. Staff continue to be needed to check the information being processed by automation, to provide a quality control function.

DJA assumes that Electronic Commerce components of the Electronic Filing project will result over the life of the project in offsetting through automation of 30% of the financial transactions processed through the Cashiers and Accounting sections of the department. Projections assume there is not a one-for-one tradeoff between automation of data entry tasks and elimination of staff. Staff continue to be needed to check the information being processed by automation, to provide a quality control function.

DJA has assumed that the modifications to the Core ECR program to accommodate E-filing and Electronic Commerce will be technologically feasible and that the entire system will remain functional and will be supported by key vendors, within the limits of ongoing Operations and Maintenance funding, for the life of the project.

#### 9. Risk Assessment.

#### - Business Sponsorship, Support, and Skills

DJA has maintained a close relationship with representatives of key stakeholder groups and agencies since the ECR program was initiated in 1996. From then until 1998, an ECR Steering Committee composed of representatives of the State and Seattle-County bar associations, law librarians, ITS, Superior Court, District Court, the Prosecutor, Defender agencies, and others played an active role in defining the overall scope and direction for ECR, including the final Electronic Filing phase. DJA has participated for even longer with the State Bar Association's Bench/Bar Communications Committee and its current Electronic Communications Committee (EC2). DJA has similarly maintained strong ties with the records community, particularly through the State Archives' Electronic Technology Advisory Committee, the Clerk's Association, the Association of Records Managers and Administrators (ARMA), and the Association for Imaging and Information Management (AIIM). Stakeholders and professional associations

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have lent considerable expertise to the planning process in areas such as technology trends and basic requirements of electronic documents.

Electronic Filing has an Executive Sponsor Committee composed of leaders from key areas. Present membership of this Committee includes the Executive Director of the Washington State Bar Association (Jan Michels), the Manager of the County's ITS division (Leslie Collins), a Superior Court Judge (Michael Trickey), a representative of the LSJ BAC (Gary Shumway, King County Sheriff's Office), and a member of the King County Bar Association (Bill Kinzel). This group provides overall policy guidance to the project: This Committee also has a strong liaison relationship with the Washington Administrator for the Courts. As the project gets under way, Electronic Filing subcommittees will be formed in areas such as Technology, Marketing and Attorney Relations, and Business (including Electronic Commerce). The project team is headed by Martha Woodworth, who has substantial project management experience. The team is composed of Roger Winters, formerly DJA's Records Manager and ECR Program Manager since 1997, along with Bill Bachmann, the ECR Technology Manager. A WSBA staff representative is expected to join the project team.

#### Problem and Solution well Defined to IT

Since the beginning of ECR, DJA has made sure that ITS has had all the information it needs to understand the problems being addressed by ECR and to participate in the development of the solution. DJA has presented detailed reports on all aspects of ECR to individuals and groups at ITS, both to solicit advice and to make sure that decisions affecting both departments are made in concert. Core ECR's main servers and storage are housed within ITS. Its day to day operations rely on ITS having the right environment and support available as is needed for any mission critical County system.

## - Dependence on New Technology

Electronic Filing does rely on the promise of a new kind of technology, the eXtensible Markup Language (XML). Ever since 1994, when DJA first heard about the possibility of capturing data from documents using markup language, DJA has watched the development of technology in this important area. The work to build a Court Filing Standard through the Legal XML collaboration began less than a year ago. However, the participation of XML-skilled technicians with court experience, vendors, and court leaders from all over the country (and a few other countries) and from all levels of court (federal, state, local; limited jurisdiction and general) has resulted in fairly rapid development of the Standards. A Recommended Court Filing Standard, v. 1.0, was presented to and adopted by a technology committee representing major court administration organizations in March of 2000. Continuing work on the second version of this Standard shows great promise in producing a usable result in time for implementation in King

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County. It is also the nature of XML that a local Standard could, if necessary, be defined in a Document Type Definition (DTD) or similar device, providing the basis for data to be transferred within this court according to its principles. DJA expects that the Legal XML Standard, v. 2.0, is likely to be adaptable and ready to use by King County.

## - Requirements Stretch Existing Infrastructure

If the expansion of records contained in the ECR system will require additional storage, DJA has budgeted for an additional jukebox of optical disks. FileNET and the middleware created by Sierra Systems are both architected for substantial expansion from current volume levels. DJA prepared its design for Core ECR so it could include electronic filings alongside images in its electronic document management system. Not knowing the form in which E-filings would ultimately be rendered, DJA chose an architecture using FileNET software, a robust, well-tested document management tool that can display a large number of document formats. The database, SQL Server, was adopted for the project only after it was made clear it would be able to handle the projected volumes involved in the ECR system.

#### 10. Value Scorecard

Technology Investment Value and Risk Scorecard					
·	Weight (1 to 10)	Project Score			
		Score (0 to 5)	Value	Risk	
Business Attributes		destructive description of the second		·	
Provides Cost Benefit	7	1	7		
Empowers Business Strategies		4	20		
Produces Needed Management Information	5 2 8 5	4 3	6		
Legislative Mandates Met	8	4	32		
Business Sponsorship, Support, and Skills	5	0		0	
Technology Attributes					
Aligns with IT Strategies and Architecture	5	5	25		
Problem & Solution Well Defined to IT	2.	2		4	
Dependence on New Technology	4 ·	1		4	
Requirements Stretch Existing Infrastructure	3	0		3	
Raw Scores = Highest Weighted Scores =			90	11	
			135	70	
Score Adjusted to Score Out of 100 =			67	11	
Notes: Weights defined by IRC Scores proposed by project, reviewed by PRB					

#### 11. Success Measurements.

Success will be indicated by the continuation of Electronic filings within the Pilot Projects in general use within the group, litigation area, etc., in which the pilots are operating.

The achievement of 5% of DJA's filings in XML compliant formats within the first year of the project, 2001, would be an indicator that the project is off to a very good start. The annual increase in e-filings should be about 4% more added to the total number of filed documents being e-filed.

#### 12. Stakeholders..

Stakeholders include lawyers, law firms, small law offices, *pro se* (self-represented) litigants, case file researchers, and the general public. They also include attorney staff, paralegals, law firm librarians, law librarians, law firm records specialists, legal forms vendors, legal messenger services, attorney

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support organizations, and vendors of software and related services for law offices of all sizes. The King County Prosecutor's Office, the Office of Public Defense, and the contracted public defender agencies are key stakeholders; several participated in a "Criminal Demonstration" project in 1998-1999 which tested the feasibility of using images to access criminal case files. Associations of lawyers such as the County and State bar associations are also important stakeholder groups.

## 13. Project team.

<u>Executive Sponsor</u>: Paul Sherfey, Interim Chief Administrative Officer, Superior Court, and Superior Court Clerk

Executive Sponsor Committee Members: Jan Michels, Director of the Washington State Bar Association; Judge Michael Trickey, Superior Court (chair of Technology Committee); Leslie Collins, Director, Information and Technology Services Division; Bill Kinzel, Attorney, representing the King County Bar Association; Gary Shumway, Sheriff's Office, representing the LSJ BAC; with other members yet to be named.

Electronic Filing Project Manager: Martha Woodworth

<u>Electronic Filing Project Team Members</u>: Roger Winters, Electronic Court Records Program Manager; Bill Bachmann, ECR Technology Manager; WSBA Staff Representative