

1995-96 SESSION  
COMMITTEE HEARING  
RECORDS

Committee Name:

Joint Committee on  
Finance (JC-Fi)

Sample:

Record of Comm. Proceedings ... RCP

- 05hrAC-EdR\_RCP\_pt01a
- 05hrAC-EdR\_RCP\_pt01b
- 05hrAC-EdR\_RCP\_pt02

➤ Appointments ... Appt

➤ \*\*

➤ Clearinghouse Rules ... CRule

➤ \*\*

➤ Committee Hearings ... CH

➤ \*\*

➤ Committee Reports ... CR

➤ \*\*

➤ Executive Sessions ... ES

➤ \*\*

➤ Hearing Records ... HR

➤ \*\*

➤ Miscellaneous ... Misc

➤ 95hrJC-Fi\_Misc\_pt30

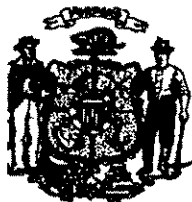
➤ Record of Comm. Proceedings ... RCP

➤ \*\*

# STATE OF WISCONSIN

SENATE CHAIR  
TIM WEEDEN

119 Martin Luther King Blvd.  
P.O. Box 7882  
Madison, WI 53707-7882  
Phone: 266-2253



ASSEMBLY CHAIR  
BEN BRANCEL

119 Martin Luther King Blvd.  
P.O. Box 8952  
Madison, WI 53708-8952  
Phone: 266-7746

## JOINT COMMITTEE ON FINANCE

April 2, 1996

*OK*

TO: Members  
Joint Committee on Finance

FROM: Senator Tim Weeden, Senate Chair  
Representative Ben Brancel, Assembly Chair

SUBJECT: DOA Report on DILHR's Imaging Project

Section 9130(14t) of 1995 Act 27 placed in unallotted reserve in the Department of Industry, Labor and Human Relations (DILHR) budget a total of \$619,900 PR in 1995-96 and \$101,700 PR in 1996-97 for the implementation of an electronic document imaging system for the worker's compensation system. Act 27 provides that these funds may not be released for expenditure until the Secretary of the Department of Administration (DOA) has submitted a report to the Joint Committee on Finance and the Committee has had an opportunity to review the report and have any concerns answered in writing by the DOA Secretary.

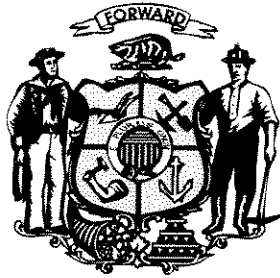
Act 27 further specified that the report should include all of the following: (1) the results of a review of the project by DOA's Division of Technology Management; (2) the objectives of the optical imaging project; (3) the schedule for implementation of the project; (4) an evaluation of project activities to date; (5) any additional funding required in 1995-97; and (6) future funding requirements.

Attached to this memorandum is the report that has been submitted by the Secretary of DOA as required under Act 27. Please let our offices know by April 16th, 1996, if you have any concern regarding this report which you believe needs to be answered by the Secretary of DOA in writing.

TW/BB/kc  
Attachment

STATE OF WISCONSIN  
DEPARTMENT OF ADMINISTRATION  
101 East Wilson Street, Madison, Wisconsin

**TOMMY G. THOMPSON**  
GOVERNOR  
**JAMES R. KLAUSER**  
SECRETARY



Mailing Address:  
Information Technology Services  
101 East Wilson Street  
Post Office Box 7844  
Madison, WI 53707-7844  
Telephone: (608) 266-1651  
Facsimile: (608) 266-2164

March 29, 1996

4-1-96

The Honorable Timothy Weeden, Co-Chair  
Joint Committee on Finance  
37 South, State Capitol Building  
Madison, WI 53703

The Honorable Ben Brancel, Co-Chair  
Joint Committee on Finance  
107 South, State Capitol Building  
Madison, WI 53703


Dear Senator Weeden and Representative Brancel:

Nonstatutory provision s.9130(14t) of 1995 Act 27 requires that the Department of Administration submit a report on the electronic document imaging system project undertaken by the Department of Industry, Labor and Human Relations (now Department of Workforce Development), before the release of funding for the project. The attached report titled "Document Image Management Report" addresses the issue of the interim approval of funding for Phase Two of the DILHR imaging project. The Department of Administration recommends expenditure approval for Phase Two of the project. This recommendation is being submitted to both the Joint Committee on Finance and the Joint Committee on Information Policy.

The DOA Divisions of Technology Management and Information Technology Services have reviewed the DILHR request and have reported me that DILHR should receive the necessary funding to complete implementation of its project. Therefore, it is my recommendation that the requested funding for this phase of the project be allotted to the Department of Industry, Labor and Human Relations.

If you have any questions regarding this report, please direct them to Mark Wahl, Administrator, Division of Technology Management.

Sincerely,

  
James R. Klauser  
Secretary

Department of Administration

---

**Document Image Management Report**  
Department of Industry, Labor and Human Relations

Division of Technology Management  
March, 1996

## I. Introduction:

This report serves to meet the requirements of 1995 Wisconsin Act 27, non-statutory provision 9130(14t), which directs the Secretary of the Department of Administration to submit a report to the Joint Committee on Finance and the Joint Committee on Information Policy detailing the status of the optical imaging project currently underway in the Department of Industry, Labor and Human Relations, Worker's Compensation Division. Legislative committee review and approval of the Department of Administration report on DILHR's document image management project is a condition for the release of funding for the project.

## II. Report on the Department of Industry, Labor and Human Relations Image Project:

### Introduction:

This report is intended to meet the above referenced statutory requirement that the Department of Administration submit a detailed report on the DILHR Worker's Compensation Electronic Document Imaging System before approving the expenditure of \$114,600 in FY96 and \$607,000 in FY97 in s.20.445(1)(ha). The total amount of increased expenditure authority requested in both fiscal years is \$721,600. Act 27 directed a somewhat different distribution of the expenditures between fiscal years. Because this recommendation comes near the end of the fiscal year, the amount requested to be expended in FY96 has been decreased, and the amount requested for FY97 has been increased. The total remains the same. A copy of the 1995-97 budget request is attached to this report. With these funds, DILHR intends to expand the imaging capability to the balance of its Madison office and to its Milwaukee and Appleton offices as well as implement system enhancements which are described later in this document. Although the result of the review of this project by the Division of Technology Management is listed as the first part of this report, it is actually an analysis of the DILHR sections of the report, and should logically follow them. Therefore, the DOA review follows the discussion of the DILHR project.

### Objectives of the Optical Imaging Project:

The Worker's Compensation Division in DILHR has undertaken this imaging project as a means of addressing the Division's need for improved customer service for processing of worker's compensation claims and avoidance of increased operational costs as caseloads rise. Initial installation of system components began in September, 1994 and the system was accepted in March, 1995. The current request is for expenditure authority for the second phase of the project. Therefore, DILHR has already been able to achieve some of the objectives of this project. With its current operation of the imaging system, DILHR can document shorter response times to public inquiries because the electronic documents allow multiple access to files and enable staff to respond to inquiries while they are on the phone with customers. Previously staff receiving requests for claims information had to locate the paper file before responding. This could take anywhere from a few hours to a week. DILHR has stated that for

documents on the system, average response times have decreased from two to three days to a few minutes.

With the requested expenditure authority, DILHR intends to expand the imaging system to claims staff in its Appleton and Milwaukee field offices. Under the current system, the Madison Office must handle all public inquiries because that is where either the paper or the electronic claim information is received and stored. Expanding the imaging system to the field offices will enable staff there to respond directly to customer inquiries rather than forwarding them to Madison.

This system has significantly reduced the need to handle paper file documents, and the department is approaching the goal of processing all non-litigated claims electronically. Some of the insurance companies that do business with Worker's Compensation now transfer documents to the Division electronically via facsimile directly to the imaging system. The Division now receives about 500 documents a month in this manner. Although this is less than 1% of the documents received in a month, one of the division's long-term objective is for customers and division staff to exchange information electronically without the need to produce paper documents. This system vastly increases efficiency and productivity of DILHR claims staff because of the speed at which the files are scanned, indexed, and available on their computer monitors.

DILHR has identified the following additional objectives that it intends to meet during the 1995-97 biennium:

- Improve the reliability of the imaging system. DILHR's goal is to increase the originally specified 97% operating availability of the system to 99%.
- Improve the functionality of the existing system. Some enhancements to the system are necessary to improve use by legal and other staff. This issue will be discussed elsewhere in this report.
- Reduce dependency on paper documents. DILHR plans to expand and promote the use of electronic transmission of documents from outside the department, reducing the dependency on paper documents.
- Continue Process Improvement. As familiarity with the system increases and customer needs are more clearly identified, the department plans some redesign activities to better integrate imaging into business needs.

**Schedule for Project Implementation:**

The Legislature approved this system in the 1993-95 biennial budget when Worker's Compensation received \$1,001,300 in expenditure authority to begin the design and implementation phases. Implementation of Phase One of the project began in September 1994 when thirty-six work stations in the Madison Office were connected with the new system. Almost half of the individuals initially connected to the system were legal staff who immediately identified problems with using the system. These issues will be discussed later in this report.

Functionality problems were also encountered by the claims staff, however, most of those problems have now been corrected. Phase One became fully functional in March 1995.

From January 1995 to January 1996, the Division has imaged 537,000 pages. The total number of pages that the Division has imaged from September 1994 to January 1996 is 630,700. The Division projects that it will image 750,000 pages in 1996, with the total optimum number of pages to be imaged set at 1,000,000.

With the release of Phase Two funding in FY96, DILHR will begin installing an additional 36 imaging workstations in Madison, and 18 additional workstations in the Milwaukee and Appleton offices. The requested expenditure authority will enable the Department to install 22 workstations at \$4,000 each in FY96 and 32 more in FY97. Also in FY97, the Department requests \$324,500 for enhancements in system functionality. These funds are for software and programming which will provide the system with capabilities that were not included in the original design and have been identified by external and internal customers as desirable improvements.

These enhancements will provide the following for system customers: enable staff to access multiple claim files, add a text retrieval feature through a word search, add an imprint mechanism to the scanners so that documents not scanned can be easily identified, add a "print entire file" feature and add other features that will allow staff more operating ease and flexibility in handling the imaged documents. The project schedule that DILHR submitted to the Department of Administration in January 1996 envisioned full system implementation of Phase Two by December 1996. However, because of the current delay in approving the FY96 expenditure authority, it is now DILHR's intention to complete the expansion of the system and any other fine-tuning by the end of FY97.

**Evaluation of Effectiveness of Project Activities to Date:**

DILHR standards for information technology project management include significant involvement by top agency leadership and have been used for the Worker's Compensation imaging project. Each DILHR division has an IT executive review committee, comprised of the Deputy Secretary, Administrative Services and program division administrators or deputies, Bureau of Information Technology Services director and project manager, and the program division's project manager. This committee reviews strategic directions, project progress, resource commitments, timing and implementation problems. They may be involved in department-wide solutions involving multiple projects, vendors and other agencies. This committee meets monthly to review projects from each of the divisions. It meets separately with each division, and discusses each of that division's major and minor projects requiring their attention.

Each division also has an IT implementation committee that meets monthly to discuss project implementation problems, status, timing and resource commitments. This committee meets as a forerunner to the executive review committee meeting. It focuses on more detail, and is more concerned with how projects are being implemented. This committee consists of division IT managers, bureau directors, BITS project managers implementing Worker's Compensation projects and a representative from the administrator's office. This committee is also involved in development of the division's strategic and annual IT plans.

The Department encountered a variety of unanticipated problems during Phase One. The major problems were related to project server down time, and the acceptance of the imaging system by the Department legal staff. Other problems included slow retrieval times, loss of memory, and poor image resolution. These problems are discussed in greater detail in the Department of Administration analysis portion of this report. One problem which may resist a final solution is the need to retain paper files for those claims that are appealed. However, the Department is working with its attorneys in order to develop some enhancements to deal with their problems in using imaged documents. DILHR managers do believe that they have successfully dealt with most of the initial functionality and operational problems of the imaging system.

**Additional Funding Requirements in 1995-97**

As previously discussed, this current DILHR request is for increased expenditure authority of \$114,600 in FY96 and \$607,000 in FY97. This distribution of expenditures between fiscal years is different than what appeared in Act 27. Act 27 directs that the Department receive expenditure authority of \$619,900 in FY96 and \$101,700 in FY97. Both distributions total \$721,600. Because this report will not be approved until the final quarter of FY96, the Department has requested that the bulk of the funding be expended in FY97. With this funding, DILHR will be able to complete the Worker's Compensation imaging project, and will not need additional funding during the 1995-97 biennium.

**Funding Requirements for Completion and Operation of the Project in Future Biennia:**

DILHR does not anticipate that there will be any funding requirements related to further development of the imaging project, however there will be costs for on-going maintenance of the imaging system.

**Review by the Division of Technology Management:**

The review of the Department of Industry, Labor and Human Relations Worker's Compensation Division Imaging Project report was conducted by a team of senior managers and technology experts in the Division of Technology Management led by Barry Larson, Deputy Division Administrator. The review consists of a series of questions designed to determine the extent to which the Department of Industry, Labor and Human Relations has met the non-statutory requirements outlined in section 9130(14t) of Act 27 for the release of funding and includes a recommendation for Legislative action.

**Question #1. Will the imaging project meet its objectives?**

The Worker's Compensation imaging project has certainly met the basic objective of improving customer satisfaction through faster processing of workers compensation claims. This is especially true in their ability to respond to customer inquiries regarding their claims within a few minutes instead of the few days that it previously took. (Need specific information from Carol McCann on this) Also, the department staff are working more efficiently internally because they have examined their workflow and have eliminated some unnecessary steps. File clerks who were formally responsible for transporting files from one desk to the next have been retrained to track documents and maintain the electronic records system.



The Division is continuing to work on reengineering steps in the process in order to be more efficient, and will try to implement enhancements as they determine where they would be useful. The Department has been able to eliminate several huge rows of storage shelves because of the elimination of paper files. The current practice in the Division is to destroy all paper files after 30 days unless the claim is litigated. If it is determined that a case will be litigated, then the paper file is retained for use by legal counsel. If the litigation decision occurs after 30 days, the Division has the capability to produce a hard copy for legal staff from the imaging system.

Other objectives that the Division is still working on include increasing the reliability of the system from 97% to 99%. Reliability is defined as the availability of the system functioning as designed 99% or more of the time. Additionally, Worker's Compensation will work with legal staff to try to reduce their need for paper documents and to integrate imaging into their business needs. Finally, DILHR's expansion of imaging to offices in Appleton and Milwaukee will allow staff in those areas to greatly reduce paper files, and enable people in the three sites to communicate electronically. They also will continue to encourage and assist insurance companies to file their documents electronically to reduce the need for the initial scanning of paper documents.

**Question #2. Is DILHR's schedule realistic and doable?**

DILHR's implementation schedule for Phase Two of the project is dependent on the release of funds through the special 14 day passive review process. The schedule proposed when the request was submitted in January 1996 envisioned release of the funds in February and targeted December, 1996 as the full system implementation date. It now appears that the funds will not be released until mid to late April so the completion date will be moved back by two to three months. This delay is due to the heavy workload in the Division of Technology Management, and is not attributable to DILHR. Since Worker's Compensation staff have been operating the imaging system for over a year, their experience with the system has enabled them to accurately determine the amount of time that the remaining tasks will require. The current schedule is realistic, with the caveat that it will be delayed by the release of funding.

**Question #3. Has DILHR adequately evaluated the effectiveness of project activities to date?**

The effectiveness of the project has been impacted by three major types of problems encountered by the Worker's Compensation Division. First, there were a variety of system functionality problems that were identified and corrected by DILHR staff and the vendor. There was also a serious problem with the division's jukebox (storage device) and finally, the legal staff in the division did not feel that their business needs had been met through the design of the system.

The functionality problems included project server down time, slow retrieval times, loss of memory and poor image resolution. All of these problems have generally been dealt with cooperatively by the vendor and project staff. Server down time was eliminated through changes in the program code, and improvements and corrections to the system software. Retrieval time was shortened by modifications to the original design, and storing the most recently used files on DASD instead of using optical storage and the jukebox.

After initial implementation of the system, many workstations received repeated "out of memory" messages which required that the computer be turned off and rebooted to continue

claims processing work. Some staff had to reboot their workstations as often as five times a day. The DILHR Bureau of Information Technology Services was instrumental in developing a solution to this problem, and memory problems have now been totally eliminated.

Finally, the department dealt with the poor image problems for claims processing by developing a system mechanism that would enlarge poor images, changing the set up of the monitor to provide better resolution and purchasing seventeen new workstations with higher resolution monitors for staff who are involved in extensive reading of the imaged files.

Other improvements to the system have been designed and installed by the software vendor, Xerox/USI. They include identifying the document type in a queue or in-basket, a mechanism that allows for documents to be released from queues when using the document search function, a multiple release function from the in-basket, and softscanning which allows automatic scanning of documents that are outgoing, without first producing a hard copy and scanning it back into the system. All these improvements have greatly enhanced the operation and effectiveness of the claims processing system.

The department has had a continuing problem with the jukebox, the storage device for the optical disks, which was installed by the vendor. The jukebox repeatedly malfunctioned resulting in system down time and disrupting the division workflow. The original juke box purchased for the system by the department was finally shipped back to the vendor for repairs when it was determined that the problem could not be remedied on-site. During that time period, another jukebox was loaned to the department by the vendor. The original jukebox was determined to have a problem in the power unit, and has now been repaired. At one point, possible solutions to this problem were identified as the purchase of a second server or a second juke box but the vendor has now agreed to install the "on-loan" juke box in DILHR at no extra charge to the department so that DILHR will have a back-up storage mechanism which should enable them to move toward 100% reliability.

The DILHR administrative law judges that handle worker's compensation appeals have stated that they encountered a variety of problems in using the imaging system. Staff attorneys need to review two to four files simultaneously when preparing disability estimates but the imaging system does not allow for multiple documents to be viewed simultaneously. In addition, the system does not currently have a windows overlay feature which would allow the user to keep multiple claim files on line. Administrative law judges also regularly conduct hearings out of the office and depend upon using the paper files at hearings. Finally, many of the staff attorneys were unfamiliar with computers, and reluctant to use them for their daily work.

In order to enable legal staff to more easily use the system, DILHR now intends to add a number of improvements to the software. A windows overlay feature will be installed to enable access to multiple claim files without closing out the file in use. Through a text retrieval feature, staff will be able to do a word search for a particular file. An imprint mechanism will be added so that staff can tell if a document has been scanned. Currently, if documents are added to the hard copy file after the initial scanning, there is no indication whether or not a new document in the hard copy file has been scanned. The paper imprint will eliminate the need for legal staff to compare imaged files to hard copy files.

Another enhancement to be added to the system is a "print entire file" feature. Since the administrative law judges need a hard copy of the file to take to hearings, printing the entire file

at once will be much more efficient than printing each entry one at a time. Other enhancements include expanding the "annotate" feature to allow more extensive notes to be added to the file, adding a feature to allow more than one person to view documents that have been clipped together, and adding an auto-indexing feature that will allow Worker's Compensation to automatically index single claim documents containing a bar code header.

The enhancements designed for legal staff should enable them to more fully utilize the Worker's Compensation imaging system. However, DILHR does not believe that all legal staff will be willing to give up their traditional method of working with paper files. Because of that, although the Division will become paperless for its claims processing, hard copies of litigated cases will have to be retained for appeal hearings until the case has been heard and decided and the appeal period has expired. The Division estimates that approximately eight percent of total claims are litigated. This is a relatively small number of files compared to the total number of pages which will be imaged and then destroyed. However, other agencies that develop imaging systems in which the documents could be subject to legal review or litigation should take these issues into account when designing their systems.

**Question #4. Are the costs what DILHR anticipated?**

The costs that DILHR originally anticipated to fully implement this system have not changed. DILHR will be able to realize full implementation during FY97 without additional funding. Because of the delayed release of funding, more of the funds will be spent in FY97 than FY96 as was originally intended, but the overall cost of this project will remain the same.

**Question #5. Will there be any additional costs in future biennia?**

Because of the delayed release of funding, more of the funds will be spent in FY97 than FY96 as has been mentioned previously. Although the department is placing greater emphasis on system reliability and functionality, it will accomplish these objectives without requesting an increase in the project budget. This is possible because of reduced costs for workstations and software during the implementation period, the ability of the department to complete some system enhancements planned for Phase Two with Phase One funding, and the deferral of some system enhancements that have been determined to be of lower priority.

**Recommendation of the Division of Technology Management**

It is the conclusion of the Division of Technology Management Review Team that, although the Worker's Compensation Image Management project has encountered a significant number of system problems, the Division has been able to deal with almost all of them over the past year, and the system is now functioning smoothly. The Division also plans to add enhancements that will increase reliability and enable the administrative law judges to utilize the system more effectively. This can be done without additional cost because the Division was able to realize some economies during the initial implementation.

One issue which cannot be dealt with at this time is the fact that the Division is using Xerox/USI hardware and software instead of the IBM/VisualInfo product which has recently been recommended as the state standard for imaging projects. In 1994, when DILHR solicited bids for its document imaging system, the vendor which submitted the lowest bid meeting DILHR's requirements was Xerox/USI. Since DILHR now has a fully functional system using Xerox/USI,

## Document Image Management

it would not be economically feasible or functionally efficient for DILHR to convert to the standard at this time. However, in discussions with DILHR, it was agreed that in several years when DILHR may need additional storage space and be considering an upgrade to its current

system, it will seriously consider converting to the state standard, and utilizing the more secure, flexible storage available in the Department of Administration's Division of InfoTech Services.

The Division of Technology Management recommends that the requested expenditure authority for the DILHR Worker's Compensation be approved. It further recommends that the Department consider converting to IBM/VisualInfo at some time in the future when it requires additional storage or when the upgrade of its imaging system becomes necessary.

Prepared by: Ann Wiley  
Division of Technology Management  
264-9312

**State of Wisconsin  
Department of Industry, Labor & Human Relations**

**Review of  
Worker's Compensation Division Imaging Project**

**Prepared for  
Department of Administration  
Division of Technology Management**

# Worker's Compensation Imaging Project

## Table of Contents

<b>REQUEST .....</b>	<b>3</b>
<b>BACKGROUND .....</b>	<b>3</b>
<b>TECHNOLOGY .....</b>	<b>4</b>
<b>WC IMAGING TECHNOLOGY PROJECT .....</b>	<b>6</b>
Customer Input to System Design .....	7
Vendor Selection .....	8
Project Management.....	8
Project Progress .....	9
Document Pages Imaged .....	10
<b>PROJECT OBJECTIVES FOR 95-97 BIENNIUM.....</b>	<b>11</b>
Biennial Budget.....	12
Project schedule .....	14
Contingency plans .....	15
<b>SUMMARY .....</b>	<b>15</b>
<b>Attachment A .....</b>	<b>16</b>

## **Worker's Compensation Imaging Project**

### **REQUEST**

The Department of Industry, Labor and Human Relations (DILHR) is requesting release of unallotted reserve funds totaling \$721,600 that were included in 1995-97 Biennial Budget for the second phase of the Worker's Compensation Imaging Project. The Department also requests that the amount of funds originally requested for the first and second years of the biennium be modified to reflect the shortened period of time available in the first year to complete the work planned. Also, the Department plans to place more emphasis on improving system reliability and functionality, and will defer expansion of the system to Milwaukee and Appleton offices to the second year of the biennium.

### **BACKGROUND**

The Worker's Compensation (WC) Division's primary functions are to assure that proper and timely payments are made to injured workers and to adjudicate claim disputes for benefits.

The WC claims information system has traditionally been labor and paper intensive, processing two million documents per year to support claims management and litigated cases. Claim documents, prior to FY95, were maintained as paper files and were routed using traditional mail systems. Staff in Madison, Milwaukee and Appleton used paper files for claims management and adjudication, often needing access to these files simultaneously. Information was copied and distributed to insurance companies, employers and employees. The dependency on paper documents sometimes results in long delays when responding to customer requests for claims information.

The WC Division, through process reengineering efforts and information technology strategic planning, identified optical imaging as a technological solution to address their needs for improved customer services and cost avoidance. WC was granted expenditure authority of \$1,001,300 in the 93-95 biennial budget to design and install the first phase of an optical imaging system. Phase one became operational in Madison in March, 1995. The 95-97 biennial budget identified \$721,600 for the second phase of the project, which expands the optical imaging system to the balance of the Madison office and to Milwaukee and Appleton offices.

The Worker's Compensation Division information technology project intends to support the strategic business goals of:

- ◆ improving customer service,
- ◆ managing workloads and change, and
- ◆ effectively administering the Worker's Compensation law.

Characteristics of optical imaging provide technical support to achieve these goals. WC expects to:

1. Improve service to WC customers System features include shorter response times to public inquiries, shorter turnaround on documents being processed by the WC staff, improved accuracy of information provided by the WC staff. Electronically stored documents offer the benefits of multiple access to claim file information by WC staff. Staff do not have to wait for hard copy file information to respond to customer inquiries. Electronic document storage enables staff to have fast access to information, enabling them to respond to customer calls while they are on the phone with them.
2. Improve access to claim records for WC staff at the Appleton and Milwaukee field offices Currently, most public inquiries are handled by the Madison office, because that is where claim information is received and stored. Electronic access to claim documents will enable the field offices to respond directly to customer inquiries, rather than forwarding such inquiries to Madison.

Reduce handling of paper documents by the WC staff and "customers," i.e. insurance companies, leading to improved efficiency and productivity. Documents may be transferred from insurance companies electronically (via facsimile) directly to the optical imaging system. Customers and division staff will be able to exchange information electronically without the need to produce paper documents.

## TECHNOLOGY

Optical imaging was selected as the best technical solution to achieve the division's goals for improved customer service and cost containment. Optical imaging allows the Worker's Compensation Division use process reengineering methods to improve its claims management and adjudication procedures. The goal of this methodology was to identify changes that would improve the efficiency and effectiveness of program administration

Imaging was selected as a preferred alternative to paper, microfilm and magnetic media storage because:

Imaging provides storage advantages. The *packing density* of optical technology allows the contents of several feet of WC file folders stored on open shelves to be stored on a single optical disk. For comparison, the contents of a typical four drawer filing cabinet (68,000 pages) can be



stored on a single optical disk. It would take 700 microfiche or twenty three reels of microfilm to store this same amount of material. On magnetic media it would take up to 20 reels of tape. While it would be possible to store images on other electronic media, e.g. magnetic tape or direct access storage devices (DASD), the cost would be prohibitive for storing millions of records over tens of years.

Imaging provides fast retrieval of information. Imaging makes it possible for WC staff to access information and respond to customers while they are still on the phone, thus providing a higher level of customer service. Imaged WC documents are simultaneously stored on DASD for fast retrieval during processing and on optical disks for archival storage. The use of DASD supports retrieval of documents in 10 to 30 seconds or less. Responding to inquiries with paper file storage could take hours if the file was on site, or days if the file was stored off site. The storage of data on DASD is temporary. Designed to speed access times, this mode of storage referred to as "cache," is used for only the most frequently needed data.

Imaging supports improved work flow. Imaging work flow software makes it possible to track and retrieve documents once they have been scanned and indexed into the system. Imaging work flow offers several advantages over the current paper system. Rather than dealing with a file folder in a serial fashion, more than one WC staff person in different sections with different responsibilities can be working on/reviewing a document or case at the same time, thus increasing document throughput. The software provides an electronic audit trail. The software also provides management reports. Under the paper file folder system only files could be tracked, not documents and management information had to be manually tallied.

Imaging is compatible with WC's DEC Mini-computer. WC's mini-computer stores claims data and monitors claims' status. The imaging system allows WC staff to display claims data from the DEC and an imaged document simultaneously. The imaging system uses large monitors that allow multiple views or "windows" at the same time.

Imaging provides document availability. An imaging system allows more than one person to simultaneously access the same image or document. This is impossible with a paper based file folder system. Document misfiles are also a problem with paper based systems. Once properly indexed in the imaging system, documents cannot be misfiled.

Imaging promotes system integrity. Many imaging systems utilize "Write Once Read Many" (WORM) technology. This means that once a document has been digitized and burned onto an optical disk, it cannot be changed. The system creates back-up disks that are stored off-site in case of fire or explosion at GEF #1. Under WC's paper based file folder system, there is only one paper based file which carries a risk of being altered by anyone with the folder in their possession.

Imaging promotes document safety and security. Optical technology uses laser beams to read data. Magnetic media uses read heads. Head crashes are more likely using magnetic forms of storage and restoration is more of an issue. An imaging system can also take advantage of the advanced software security technology that is available for mainframe data. User access is

restricted by password and system management functions are in the hands of the system supervisor.

## WC IMAGING TECHNOLOGY PROJECT

The WC imaging project includes technology to accomplish the following:

- Claim related documents which are not electronically provided by insurance companies will be optically scanned, indexed and stored on magnetic media for claims management retrieval.
- Imaged documents will be routed to appropriate staff electronically, and staff can retrieve documents quickly to respond to customer inquiries. Even more importantly, more than one person with proper security can access the documents simultaneously.
- Imaged documents will be accessible to WC staff opening and managing claims.
- Copies of documents can be printed or sent electronically to customers.

The WC imaging project supports many goals listed in Wisconsin's *Statewide Information Technology Plan*.

### WC Imaging Meets State IT Goals

#### Data architecture goals

- ▷ Streamline data capture
- ▷ Enable end-users to get the data they need

#### Application architecture goals

- ▷ Develop applications based on efficient process
- ▷ Use less paper

#### Technical architecture goals

- ▷ Equip state workers to do job
- ▷ Use less paper in State government
- ▷ Improve productivity and service through office automation
- ▷ Establish partnerships with industry

In addition, the WC imaging project is in compliance with the *State of Wisconsin Imaging Standards and Guidelines*, effective July 1, 1993. DILHR was represented on the Imaging Research and Development Project Task Force that developed the standards. A copy of the applicable sections of DILHR's Request for Bids (RFB) for the imaging system is attached.

### Customer Input to System Design

The Worker's Compensation Division conducted extensive research on the use of imaging systems in both government and non-government operations. Staff from the division and from the department's Bureau of Information Technology Services reviewed imaging systems used in the provincial government of Edmonton, Alberta, Canada; in a commercial bank in St. Paul, Minnesota; in the claims processing offices of Wausau Insurance Co.; and in the Wisconsin Departments of Transportation and Public Instruction.

Members of the Worker's Compensation Advisory Council were regularly briefed about the department's progress in defining imaging system requirements and were encouraged to offer their comments regarding priorities and timing. An extensive review of the Phase I draft system requirements was conducted by insurance industry representatives from Heritage, Wausau and Sentry Insurance. The department also re-engineered much of the claims management process in the Worker's Compensation Division and adopted new work flows prior to installation of the new imaging system. Considerable input was provided in this effort by division staff and by selected customers having interaction with the Division.

Wisconsin insurance carriers and self-insured employers support DILHR's efforts to expand the use of information technology to improve operating efficiencies and customer services. They state that the department's investments in information technology are resulting in improved customer service and reduced operating costs for them.

The existing Phase I and the proposed Phase II of the worker's compensation optical imaging system have been fully supported by the carriers and self-insured employers. Discussions were held with representatives of Wisconsin carriers and self-insured employers that process large volumes of worker's compensation claims through the department. The Wisconsin Insurance Alliance also participated in these discussions. There was strong support for improving the functionality of the optical imaging system and expanding its use to Milwaukee and Appleton offices. The carriers and the employers felt the system reduced the department's and their dependency on paper documents. Carriers are beginning to install optical imaging systems at their claims processing centers. The most prominent local example is American Family Mutual.

Other WC jurisdictions are beginning to use optical imaging, including Missouri, Washington, Oregon and Maryland. They are using it for the complete range of claim and file handling functions, including complex reviews of disability estimates, similar to those done by Wisconsin staff.

Other state agencies are planning to use optical imaging. An example similar to the WC project can be found at the Office of the Commissioner of Insurance, where they plan to image complex complaint and insurer response correspondence for investigation files. They will be imaging over 10,000 files per year for their insurance examiners to use as the sole document source.

## Vendor Selection

Management and staff representing various DILHR program areas explored the concepts of imaging as part of a department-wide program to increase awareness of the benefits of technology. Vendor demonstrations were conducted, giving department staff the opportunity to experience the features and customer friendly aspects of each vendor's system. A "request for proposals" (RFB) was developed using input from the Gartner Group consulting firm and from the Department of Administration, Bureau of Information and Telecommunications Management.

DILHR established an imaging bid review team consisting of representatives from the Administrative, Unemployment and Workers Compensation Divisions.

Bids were received from Anderson/FileNet, CSC Partners, IBM Corporation, Strategic Technologies, UNISYS, and Xerox/USI.

The methodology to select the low cost vendor consisted of:

- determining which vendor met DILHR's bid requirements at the lowest cost,
- submitting bid clarification questions to vendors and requiring written responses,
- contacting vendor references by telephone, and
- making on-site vendor reference visits.

Xerox/USI submitted the lowest cost bid for an integrated document management and imaging system. This bid met all of DILHR's technical requirements. Bids were requested from vendors in two configurations. Configuration #1 was built around a single, centralized shared set of servers and juke box. Configuration #2 assumed a separate set of servers and jukeboxes would be purchased for each division that would enable each division to retain more control at the division level over long term system development. Xerox/USI provided the lowest cost bid for both configurations. Because there was only a \$60,000 cost difference between both USI bids over five years, configuration #2 was selected.

In the case of configuration #1, there was a spread of \$620,000 between Xerox/USI and its next lowest cost competitor based on a five year analysis. In the case of configuration #2, there was a spread of \$1,049,000 over five years. The Xerox/USI bid met all of DILHR's bid requirements at a significantly lower cost than the competition. The Xerox/USI clearly stood out from its competition as a superior bid package. There were no appeals from the competition.

## Project Management

DILHR standards for information technology project management include significant involvement by top agency leadership and have been used for the WC Imaging Project. The methodology calls for regular meetings of the project's executive review committee and project implementation committee. Monthly executive review meetings, chaired by a representative of the Secretary's Office and attended by division administrators, ensure the project's direction and progress remain

consistent with departmental policy and strategic priorities. The executive committee makes certain issues receive appropriate attention and resources to minimize implementation problems.

Upon installation of the first components of the new optical imaging system, representatives from the installing vendor were on-site testing the equipment and software. Staff from the Worker's Compensation Division and the Unemployment Insurance Division worked with the vendor to "stress test" the newly installed systems. The system vendor still maintains a fully operational work station at their place of business for the purpose of trouble shooting system problems and developing system enhancements.

Procedures are in place to report system errors and problems. The vendor has established a Help Desk to receive calls and promptly deal with our need for assistance. Maintenance and support agreements are in place requiring 24 hours per day, seven days per week response from the vendor if a system problem is encountered. Most likely equipment parts to break, or those requiring the most maintenance, are kept in stock at the GEF-I office building for immediate replacement. An outstanding support system is in place for the purpose of minimizing system down-time, and will remain in place for Phase 2 of this project.

### Project Progress

The first phase of the imaging project became operational in September 1994. Thirty-six work stations in the division's Madison offices were connected to the new system; nearly half were for legal staff.

Most of the staff receiving new imaging work stations had little or no personal computer experience. They were used to using "dumb" terminals with limited functions. Staff went from having to perform a few basic keystrokes to having to learn how to use emulation software, Microsoft Office, MS Mail and Schedule +, and imaging system functions. A major emphasis was placed on training.

Within a few months after acceptance of the imaging system, it became obvious that the system needed improvement. The nagging problems of server down-time, slow retrieval speeds, loss of system memory, poor monitor resolution and restrictive system functionality resulted in the need to maintain claim file information in both paper and electronic form. This created increased workloads for WC staff and occasionally led to misplaced file information and poor customer service.

System problems during early stages of implementation totaled in the twenties. Vendor representatives worked with department staff to resolve these problems. Within the last 10 months, the number of unresolved system problems has diminished to less than five, none of which are critical to system performance. System reliability has improved, but is still not at an acceptable level.

System problems have generally been given quick response by department technical support staff. Only recently, however, did the vendor overcome the problem of coordination and deploying the

right technical personnel to fix hardware and software failures. The Worker's Compensation Division has trained staff and established procedures to deal first hand with imaging system problems. The Division also calls upon department Help Desk staff and the imaging vendor's technical support staff to address problems they can not resolve.

As the worker's compensation staff became more accustomed to using the imaging system and as the more serious problems were resolved, the system became more and more useful. A series of seven enhancements have been made to improve system functionality. Recurring problems that have plagued the system during its early months have been corrected. The need to maintain both paper and electronic documents has been reduced, although litigated claim files are still maintained in both electronic and paper form. The number of work stations connected to the imaging system and use of the system continues to expand.

However, the imaging system still needs improvement. There is a need to make this system better than ninety-nine percent reliable and there are still some limitations in its functionality; there are still certain types of work that this system can not perform rapidly or efficiently; there are still some nagging problems which result in minor system down-time and lost productivity for worker's compensation staff. The most important and difficult challenge is to improve the system capability to make it more useful for legal staff.

**Document Pages Imaged**

Document pages that have been scanned are indexed for retrieval purposes. The following table lists DILHR's experience with imaged pages and projects imaging volumes for the future.

**Imaging History**

Total indexed pages to date	630,700
Total indexed pages last 12 months	537,000

**Imaging Projections**

Projected indexed pages in 1996	750,000
Projected annual indexed pages when imaging file becomes "file of record"	1,000,000
Projected annual indexed pages with full implementation, including Insurance Bureau	1,250,000

## PROJECT OBJECTIVES FOR 95-97 BIENNIUM

Phase II objectives include:

Improve the reliability of the imaging system. Phase I of the imaging system was designed and specified to meet a performance requirement of 97 percent availability. WC, based on Phase I experience, now intends to increase this standard to not less than 99 percent. A higher availability rate will enhance the division's ability to process worker's compensation claims in a timely manner. To accomplish this objective, changes in vendor support agreements are necessary. Additional equipment and software modifications are needed to provide the required system redundancy.

Improve the functionality of the existing imaging system. Enhancements to the original system software are needed to improve use of the system by division legal staff and claims management staff. There is need to improve document retrieval speeds and modify system techniques used to access specific records. As the system is currently designed, it does not satisfactorily meet some of the work requirements of the division's legal staff. The administrative law judges, in particular, require virtually simultaneous access to multiple documents from a claim file in order to reach conclusions about medical facts or points of law. The current system can not meet this requirement and must be enhanced before it will be an acceptable and useful tool for Administrative Law Judges.

Reduce dependency on paper documents. The Division still places a high priority on eliminating the need to receive, process and store large quantities of paper documents associated with claim files. This is one of the principle objectives for installing this imaging system. Phase II will expand and promote the use of electronic transmission of documents, thereby reducing the need for worker's compensation clients, insurance carriers and employers to send the department paper documents.

Install imaging workstations for staff not supplied in Phase I. An additional 36 workstations are needed in the Madison offices and an additional 18 in the Milwaukee and Appleton offices. Documentrix software licensing agreements for the imaging system and Microsoft Office, Mail and Schedule + software also need to be purchased to make these workstations compatible with those installed in Phase I of this project. However, it is intended that the reliability and functionality of the imaging system be improved to our higher standards before expanding its use to the Milwaukee and Appleton offices.

Continue process redesign. Certain sections of the WC Division have been extremely successful in adapting to imaging, particularly the claims analysis functions. WC continues to redesign the claims and hearings processes to better integrate imaging into business needs, reduce paper handling and storage, and improve the overall productivity of staff throughout the division.

## Biennial Budget

The 95-97 Biennial Budget included a Worker's Compensation Division request for \$619,900 PRO in FY96 and \$101,700 PRO in FY97 in appropriation 20.445(1)(ha) to implement Phase II of the Optical Imaging Project. The second phase includes improvements in system reliability, installation of optical imaging equipment needed for workstations in Madison not equipped in Phase I, plus additional programming and equipment needed for division offices in Milwaukee and Appleton. The following table summarizes the budget request. Additional supporting documentation is available.

### WC Optical Imaging Biennial Budget Request

If the funding currently held in unallotted reserve is released in January 1996, the following project budget is proposed.

	SFY96	SFY97	Total
<b>One-Time Costs</b>			
Hardware, software for 54 workstations	\$ 152,000	\$ 64,000	\$ 216,000
System reliability improvements	\$ 200,000	\$ 124,500	\$ 324,500
<b>Supplies and Services</b>			
Programming hours (PR-S)	\$ 22,600	\$ 51,700	\$ 74,300
T! lines	\$ 0	\$ 55,200	\$ 55,200
Services from vendor related to enhancements	\$ 12,000	\$ 12,000	\$ 24,000
Printing supplies	\$ 2,000	\$ 2,000	\$ 4,000
Vendor maintenance agreements		\$ 23,600	\$ 23,600
<b>TOTAL</b>	<b>\$ 388,600</b>	<b>\$ 333,000</b>	<b>\$ 721,600</b>

If the funding currently held in unallotted reserve is not released until March 1996, the following project budget is proposed.

	SFY96	SFY97	Total
<b>One-Time Costs</b>			
Hardware, software for 54 workstations	\$ 88,000	\$ 128,000	\$ 216,000
System reliability improvements	\$ 0	\$ 324,500	\$ 324,500
<b>Supplies and Services</b>			
Programming hours (PR-S)	\$ 12,600	\$ 61,700	\$ 74,300
T! lines	\$ 0	\$ 55,200	\$ 55,200
Services from vendor related to enhancements	\$ 12,000	\$ 12,000	\$ 24,000
Printing supplies	\$ 2,000	\$ 2,000	\$ 4,000
Vendor maintenance agreements		\$ 23,600	\$ 23,600
<b>TOTAL</b>	<b>\$ 114,600</b>	<b>\$ 607,000</b>	<b>\$ 721,600</b>



The department has not requested an increase in project funding from that originally requested for the 95-97 biennium, but requests that the funds originally requested for the first and second years of the biennium be modified to reflect the reduced time available to make system improvements in the first year of the biennium. The department is also placing greater emphasis on system reliability and functionality. To accomplish these objectives without requesting an increase in the project budget is feasible due to reduced costs for workstations and software, completing some system enhancements planned for Phase II with Phase I funding, and deferring some system enhancements that have been determined to be of lower priority.

Funding for this project will be obtained from the annual WC administrative fee assessed to all worker's compensation insurance carriers and self-insured employers in Wisconsin.

**Project schedule**

**WC Imaging Project**

December 1995	<ul style="list-style-type: none"><li>■ Prepare documentation and request the release of funding for Phase II. Submit project background material to DOA Div. of Technology Management.</li><li>■ Respond to questions from the Dept. of Administration.</li><li>■ Conduct requirements analysis for imaging system enhancements to improve functionality and reliability</li></ul>
January 1996	<ul style="list-style-type: none"><li>■ DOA submits report to the Legislature's Joint Committee on Information Policy and the Joint Committee on Finance.</li><li>■ Respond to questions from Legislative committees.</li><li>■ Evaluate proposed system enhancements and determine priorities</li><li>■ Procure critical system enhancements based upon available funding</li></ul>
February - March 1996	<ul style="list-style-type: none"><li>■ Test imaging system enhancements procured from imaging system vendor</li><li>■ Install system enhancements fully tested and accepted</li><li>■ Train staff in the use of new enhancements</li><li>■ Evaluate methods to improve system reliability</li></ul>
April 1996	<ul style="list-style-type: none"><li>■ Procure imaging workstations for Madison staff not connected to the imaging system</li><li>■ Install imaging workstations for Madison staff and connect to network</li><li>■ Initiate imaging system training for Madison staff receiving new workstations</li></ul>
May - June 1996	<ul style="list-style-type: none"><li>■ Obtain cost estimates and conduct cost benefit analyses to determine what improvements should be made to improve system reliability</li><li>■ Design changes to improve system reliability; prepare specifications</li><li>■ Continue training Madison staff in use of the imaging system</li></ul>
July 1996	<ul style="list-style-type: none"><li>■ Procure and install additional server, network capability and software needed to improve system reliability</li><li>■ Arrange for system disc storage redundancy; physical connections and software</li></ul>
August 1996	<ul style="list-style-type: none"><li>■ Review and select enhancements needed to improve system functionality for legal staff</li><li>■ Obtain cost estimates for enhancements from vendor(s)</li><li>■ Procure enhancements from selected vendor(s)</li></ul>
September - November 1996	<ul style="list-style-type: none"><li>■ Test and install imaging system enhancements</li><li>■ Procure and install new workstations in Milwaukee and Appleton offices</li><li>■ Train Milwaukee and Appleton staff to use new imaging workstations and software</li></ul>
December 1996	<ul style="list-style-type: none"><li>■ Full system implementation</li></ul>

### Contingency plans

From the lessons learned in Phase I of this project, the department intends to focus its attention on problem avoidance in Phase II, rather than the establishment of procedures and action plans to deal with system problems. Hardware and software changes will improve system reliability. Project components will be unit tested and analyzed thoroughly for impact to the overall system of service delivery before they are merged with other components for integration testing. The object is to avoid implementing a process change that results, even temporarily, in lost productivity and system down-time.

### **SUMMARY**

The Worker's Compensation Division was granted \$1,001,300 in the 1993-95 biennial budget to design and install the first phase of an optical imaging system that has been fully supported by Wisconsin insurance carriers and self-insured employers. Phase I provided the software system, equipment and process flow necessary to scan and index WC claim file information and to install imaging equipment for retrieval of electronic file information in approximately half of the division's 100 workstations.

Phase II activities completed during the 95-97 biennium will improve system reliability, provide system enhancements and expand the WC optical imaging system to all staff in Madison, Milwaukee and Appleton. Full implementation will improve customer services. Information retrieval speed and access to information will be further enhanced and less file storage space is required. Customer phone inquires can be responded to promptly with on-screen electronically retrieved claim information rather than returning the customer's phone call at a later date after retrieval of paper files. Insurance carriers and employers will be able to transmit information via fax and it will be indexed and processed (no paper to scan into the system). The exchange of information between WC, insurance companies and medical providers will be easier and quicker. It is anticipated that, with full implementation of optical imaging, staff currently handling mail and files may be trained to do other work.

T:\budbur\wcimag

## **Attachment A**

Request for Bids (RFB)

### **Integrated Document Management & Imaging System Operating in a LAN Environment**

*including:*

RFB Sections 1-9  
Attachment I to RFB  
Attachment J to RFB  
Attachment K to RFB

*issued:*

August 27, 1993

## 20. PECFA Awards Adjustment

Source of Funds	Agency Request		Governor's Recommendation	
	FY96 Dollars (Positions)	FY97 Dollars (Positions)	FY96 Dollars (Positions)	FY97 Dollars (Positions)
SEG-0	8,500,000 ( .00)	8,500,000 ( .00)	8,500,000 ( .00)	8,500,000 ( .00)
TOTAL	8,500,000 ( .00)	8,500,000 ( .00)	8,500,000 ( .00)	8,500,000 ( .00)

The Governor recommends increasing the PECFA awards appropriation as required by 1993 Wisconsin Act 416. This increase represents a transfer of revenues from the sunseting Vapor Recovery Program to support additional petroleum storage tank clean-up grants.

## 21. School-to-Work Grant

Source of Funds	Agency Request		Governor's Recommendation	
	FY96 Dollars (Positions)	FY97 Dollars (Positions)	FY96 Dollars (Positions)	FY97 Dollars (Positions)
PR-F	6,179,700 ( 2.00)	6,680,000 ( 2.00)	4,500,000 ( .00)	6,180,000 ( .00)
TOTAL	6,179,700 ( 2.00)	6,680,000 ( 2.00)	4,500,000 ( .00)	6,180,000 ( .00)

The Governor recommends increased funding to reflect the actual federal award received by the state from the federal School-to-Work Opportunities Act. The 2.0 federal FTE positions requested by the department have already been created in this fiscal year.

## 22. Optical Imaging Phase II

Source of Funds	Agency Request		Governor's Recommendation	
	FY96 Dollars (Positions)	FY97 Dollars (Positions)	FY96 Dollars (Positions)	FY97 Dollars (Positions)
PR-0	619,900 ( .00)	101,700 ( .00)	619,900 ( .00)	101,700 ( .00)
TOTAL	619,900 ( .00)	101,700 ( .00)	619,900 ( .00)	101,700 ( .00)

The Governor recommends increased funding to permit DILHR to implement phase II of the optical imaging project in the Worker's Compensation Division. Phase II includes the installation of imaging equipment in Madison workstations not equipped in phase I, plus additional programming and equipment needed for offices in Milwaukee and Appleton.

## 23. Replacement of Minicomputer System

Source of Funds	Agency Request		Governor's Recommendation	
	FY96 Dollars (Positions)	FY97 Dollars (Positions)	FY96 Dollars (Positions)	FY97 Dollars (Positions)
PR-0	84,800 ( .00)	62,200 ( .00)	84,800 ( .00)	62,200 ( .00)
TOTAL	84,800 ( .00)	62,200 ( .00)	84,800 ( .00)	62,200 ( .00)

The Governor recommends providing funding to convert the department's obsolete minicomputer system to an IBM compatible, client-server platform.