

STATE AUTOMATION SYSTEMS STUDY

SITE VISIT: MARCH 3 - 5, 1993

HAWAII STATE REPORT

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FINAL

Prepared for:

**Ms. Diana Perez, Project Officer
Office of Analysis and Evaluation
Food and Nutrition Service
U.S. Department of Agriculture**

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HAWAII STATE REPORT
Site Visit: March 3 - 5, 1993

STATE PROFILE

System Name: Hawaii Automated Welfare Information (HAWI) System

Start Date: June 1983

Completion Date: October 1988

Contractor: Systemhouse, Inc.

Transfer From: Arizona

Cost:

Actual:	\$9,492,920 (through September 1989)
Projected:	\$15,118,770
FSP Share:	\$1,230,249
FSP %:	12.96%

Number of Users: 1,440

Basic Architecture:

Mainframe:	IBM 3090-180J
Workstations:	IBM PS/2 Model 30; Wang PC250; IBM 3179, 3192, and 3472 terminals
Telecommunications Network:	SNA/SDLC Gateways, Microwave between islands, and 9.6 and 14.4 KB lines on each island

System Profile:

Programs:	Food Stamp Program, Aid to Families with Dependent Children, Medicaid, General Assistance
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1.0 STATE OPERATING ENVIRONMENT

The Department of Human Services (DHS) is the designated State agency for the administration of the Food Stamp Program (FSP) and other public assistance programs in Hawaii. Public assistance in Hawaii is State-administered. The following seven operational divisions are part of the Department of Human Services:

- Family and Adult Services Division (FASD)
- Vocational Rehabilitation and Services for the Blind Division
- Health Care Administration Division
- Hawaii Housing Authority
- State Commission on the Status of Women
- Office of Youth Services
- Self Sufficiency and Support Services Division

The Family and Adult Services Division of DHS is the organization that administers the Food Stamp, Aid to Families with Dependent Children (AFDC), Medicaid, and General Assistance (GA) Programs. The Income Maintenance Management (IMM) Office is the group within FASD with this administrative responsibility. The IMM Administrator reports to the FASD Administrator.

The Hawaii DHS Information Systems Office (ISO) provides system development, support, and computer operations staff for the seven DHS operating divisions.

The State of Hawaii consists of seven islands of non-uniform population and size, one of which is privately owned. Approximately 75 percent of the State's population resides on the island of Oahu, which contains the State's largest city, Honolulu. Oahu had 66 percent of the total public assistance caseload and 65 percent of the food stamp only caseload in January 1993. Of all of the islands, Kauai is in the worst shape economically due to damage from the 1992 hurricane. The seven inhabited islands are divided into four counties.

In 1990, the total population of the State was 1,115,274. Approximately 7.1 percent of the population were food stamp recipients.

Hawaii's unemployment rate has decreased from 6.7 percent in 1982 to 2.8 percent in 1991, when the State had the lowest unemployment rate in the nation. State staff indicated that unemployment levels have increased to about 4.8 percent since 1991. Hawaii's economy generally follows the mainland economy by one year. Tourism is the primary industry in Hawaii, and it has been affected in recent years by the national recession. The second largest industry is sugar cane production. The closure of large sugar cane companies also has contributed to higher unemployment in Hawaii.

The October 1992 report, *The Fiscal Survey of States*, provides the following information compiled by the National Association of State Budget Officers and the National Governors' Association:

- Hawaii's nominal expenditure growth for Fiscal Year (FY) 1993 was in the 5.0 percent to 9.9 percent range, which exceeded the national average of 2.4 percent.
- Hawaii reduced its 1992 State budget by \$22 million after it was approved. The areas exempted from cuts included education, community hospitals, unemployment insurance, and workers' compensation.
- State government employment levels in Hawaii increased by 5.6 percent. This change differed in direction from the national average decrease of 0.6 percent in State government employment.
- Hawaii did not implement any changes to increase or decrease revenues for FY 1993.
- The regional outlook indicated weaker economic performance in the Far West region than nationally; however, the regional statistics were dominated by California's poor economic performance. The regional weighted unemployment rate of 8.8 percent was higher than the national average of 7.8 percent. In Hawaii, the unemployment rate was below the national average, and there was a 0.5 percent increase in jobs. The per capita personal income increase for the region (1.6 percent) was lower than the national average of 2.4 percent, but Hawaii's per capita personal income growth was higher than the national average.

2.0 FOOD STAMP PROGRAM OPERATIONS

At the local level, FSP operations are administered by the four branch offices located in the State's four counties: Oahu, Hawaii, Maui, and Kauai. The branch offices oversee local welfare units. The branch administrators manage the delivery of income maintenance services through 32 local unit offices and are directly responsible to the FASD Administrator.

Several organizations within DHS provide system and application support for the Food Stamp Program. The ISO provides system development, support, and computer operations staff for DHS systems. The Information Communication Services Division (ICSD), which is the central data processing agency for the State of Hawaii, provides data processing services. The Systems Operations and Requirements Office (SORO) provides user level support.

Hawaii's unique geographic features must be considered in every aspect of FSP operations, from training to telecommunications and system maintenance.

2.1 Food Stamp Program Participation

Public assistance participation levels increased in Hawaii between 1989 and 1992. The number of FSP households in Hawaii increased by over 7,000, a 22.2 percent increase, during this period. The increase in AFDC cases between 1989 and 1992 was 21.2 percent. Recent natural disasters, downturns in tourism, and sugar cane company closings are expected to result in food stamp caseload increases in the coming year.

Changes in participation levels for the Food Stamp Program and other assistance programs are shown in Table 2.1 below. The Hawaii Automated Welfare Information System became operational in October 1988. Caseload information prior to 1988 is unreliable; therefore, 1988 data are not provided in the table.

Table 2.1 Average Monthly Public Assistance Participation

Program	Participants	1992	1991	1990	1989	1988
AFDC	Cases	16,666	15,075	14,305	13,753	N/A
	Recipients	47,277	45,882	43,668	42,414	N/A
Foster Care	Children	N/A	N/A	N/A	N/A	N/A
General Assistance	Cases	6,366	5,786	5,158	4,949	N/A
	Recipients	9,400	8,531	7,585	6,837	N/A
FSP ¹	Households	38,825	34,958	32,392	31,762	N/A
	Individuals	93,286	84,255	78,762	79,017	N/A
Medicaid	Individuals	91,265	83,785	73,228	65,919	N/A

2.2 FSP Benefits Issued Versus FSP Administrative Costs

The ratio of benefits issued to FSP administrative costs has improved from 13.3:1 in 1988 to 15.1:1 in 1992.

Hawaii's average monthly benefit issuance per household over the last five years, as provided in Table 2.2, has increased during the period.² There was a decrease, however, in the average benefit per household in 1989.

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	\$256.42	\$242.19	\$216.71	\$198.62	\$210.14

¹ Source: USDA FNS National Data Bank V3 System SR #6, Food Stamp Households and Participants Actual as of FY 1992, 3/4/93.

² The number of households and benefit amounts use data reported in the FNS *State Activity Reports* each year.

2.3 FSP Administrative Costs

Hawaii's Food Stamp Program administrative costs for the past five years are presented in Table 2.3.³ Both total cost and average cost per household indicate a general upward trend over the period; however, average cost per household increased significantly in 1991 and decreased in 1992.

Table 2.3 FSP Federal Administrative Costs

	1992	1991	1990	1989	1988
Total FSP Federal Admin. Cost	\$8,007,173	\$7,686,705	\$6,266,577	\$5,819,162	\$5,857,682
Avg. Federal Admin. Cost Per Household Per Month	\$17.02	\$18.56	\$16.72	\$15.59	\$15.81

2.4 System Impacts on Program Performance

Food stamp systems typically have an impact in several program performance areas. This section examines the system impact in the areas of staffing, responsiveness to regulatory change, error rates, and claims collection.

2.4.1 Staffing

Since July 1986, when there was a reduction in force and a decrease in the number of caseworkers in Hawaii, staffing levels have remained constant. Current staffing levels are as follows: 395 eligibility workers (EW), 41 EW supervisors, and 145 clerical staff. The number of other administrative users was not available by type from State staff; however, Management Information Systems (MIS) staff indicated that the total number of security identifications, which are required to gain access to the system, was 1,440. This total includes users from other DHS divisions besides FASD and other State-level departments (e.g., Department of Education) who have inquiry only access to the system.

Hawaii has experienced some problems with recruiting and maintaining staff in recent years. The State converted to a generic caseworker approach prior to HAWI implementation. While this change caused some staff turnover in 1989, staffing levels did

³ The number of households and FSP Federal administrative costs are derived from data reported in the FNS *State Activity Reports* each year.

not change because departing staff were replaced. State staff indicated that turnover continues to negatively impact performance and morale. Recruiting and maintaining qualified staff presents problems on some islands, such as Maui, where unemployment levels are relatively low.

2.4.2 Responsiveness to Regulatory Change

Of the 14 regulatory provisions shown in Exhibit A-2.1 in Appendix A, State staff indicated that 11 had been implemented on time. Two provisions were not relevant to Hawaii because the State does not have any migrant workers [Code of Federal Regulations (CFR) 273.10(a)(1)(ii)] or use mail issuance [CFR 274.2(c)(1)]. Staff indicated that changes were not necessary for Hawaii to implement CFR 274.7(f), which involved the destruction of unusable coupons within 30 days.

Some types of regulatory changes are more difficult or time consuming to implement than other types. Regulatory changes that negatively affect clients take about six months because the State must implement administrative procedures to change rules related to clients. When regulations do not have a negative impact on clients, DHS is able to implement the regulations more quickly and initiate the appropriate administrative procedures. Regulatory changes that are more difficult to implement are those that affect the database design, such as the addition of data elements and changes to system interfaces.

Mass changes are easily managed with the table-driven HAWI system architecture.

2.4.3 Combined Official Payment Error Rate

As indicated in Table 2.4, Hawaii’s official combined error rate decreased each year from 1988 to 1991 and increased in 1992. Hawaii’s error rate was the lowest in the nation each year between 1990 and 1992.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	3.85	3.19	4.06	5.06	5.34

2.4.4 Claims Collection

Table 2.5 presents claims collection data indicating the total value of claims established, the total value of claims collected, and the percentage of claims established that were collected. The dollar value of claims established decreased in 1989 and increased in each subsequent year. Both the value of claim collections and the percentage of claims established that were collected varied significantly during the five year period.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	\$1,550,812	\$1,135,512	\$968,490	\$723,439	\$888,061
Total Claims Collected	\$964,538	\$434,694	\$415,631	\$700,043	\$563,871
As a % of Total Claims Established	62.2%	38.3%	42.9%	96.8%	63.5%

2.4.5 Certification/Reviews

The HAWI system has been reviewed by the Department of Health and Human Services (DHHS) and Food and Nutrition Service (FNS). DHHS performed its Family Assistance Management Information System (FAMIS) certification review in December 1988. HAWI received FAMIS certification in March 1989. FNS conducted a post-implementation review during April 1989. The FNS Post-Implementation Report was dated February 2, 1990.

3.0 OVERVIEW OF THE SYSTEM

HAWI supports the Food Stamp, AFDC, General Assistance, and Medicaid Programs. Child support enforcement is handled by the Attorney General's Office and Child Welfare is handled by the Child Protective Services System.

3.1 System Functionality

HAWI is a statewide system providing direct on-line data entry and inquiry to a central host with overnight batch processing of authorizations and benefit issuance. Major features of HAWI functionality are described in this section. Areas addressed include:

- **Registration.** Hawaii has separate offices for client registration and intake. Clients submit applications for participation in the assistance program(s) in which they wish to participate. Registration workers help clients that need assistance in selecting programs.

When an application is registered on HAWI, initial screening is performed on the client's name and Social Security Number (SSN) to determine whether the client has previously participated or is currently participating in the AFDC, FSP, or GA Programs. Since HAWI records had not been purged or archived as of March 1993, the search includes nearly five years of participation records. HAWI also

checks the Disqualified Recipient System (DRS). Pre-certification searches are conducted for each household member. If there is a match, the information is printed and attached to the application in the case file. If there are historical records, the system copies the record into the current record. Using HAWI terminals, staff perform on-line searches of State Labor Department, Motor Vehicles Department, and real property data files at the time of application registration.

The application data is entered into the system by clerical staff, and an interview is scheduled with the caseworker. The need for expedited service is determined by the intake worker based on information provided on the client application and Federal eligibility requirements.

- **Eligibility Determination.** HAWI was not designed for interactive interviewing, but at the discretion of the individual caseworker, the system sometimes is used in this manner. The majority of workers, however, conduct the interview and obtain information needed for the case file prior to entering data into the system.

The system presents only the relevant screens to the worker, e.g., AFDC screens are not presented for a FSP only case. The worker also is able to bypass screens to reach a desired screen. HAWI screens emulate the paper application forms. The system provides immediate on-line edits for codes that are entered onto the screens. HAWI also provides an on-line calculator screen for estimating monthly budgets.

HAWI determines applicant eligibility.

- **Benefit Calculation.** HAWI calculates the amount of benefits that the client is entitled to receive. The worker reviews and authorizes the benefits. Supervisory benefit authorization review is required for all new workers.
- **Benefit Issuance.** Food stamp issuance in Hawaii uses an authorization-to-participate (ATP) system. ATPs are generated by HAWI and are mailed to clients on the second, third, and fifth days of each month. Clients exchange ATPs for food coupons at financial institutions. Selected financial institutions in Hawaii issue food coupons, but they do not have access to HAWI. Financial institutions return ATPs to the State, and ATP data are entered into HAWI for reconciliation. The State has no plans for implementing an electronic benefit transfer (EBT) system.

Workers are authorized to reissue ATPs in the next daily issuance or they can manually issue an ATP. HAWI links the document numbers of the original and replacement issuances and provides an on-line display of the entire issuance history.

- **Notices.** HAWI generates both automatic and worker-initiated notices to households. Worker input, to complete mandatory fields, is required for worker-initiated notices. AFDC and FSP notices are not combined.
- **Claims System.** Hawaii has a separate claims collection system, the Automatic Recovery System, that interfaces with HAWI and runs on an IBM 36. The worker can enter the cause of over- or under-payments on-line, but the worker must send a separate form to accounting to establish a claim. If fraud is suspected, the worker notifies the investigator. The corrected benefit amount is calculated by the system, but for some types of errors, the worker can override the system. The Accounting Office enters information regarding payments into the system.
- **Computer Matching.** Hawaii performs both on-line and batch computer matching. Matching is performed on-line against various State data sources including: Department of Labor wage files, Unemployment Insurance files, Motor Vehicles records, and State files on real estate assets. Computer matching is performed in batch mode monthly for Benefit Earnings Exchanges System (BEERS) for Social Security Administration (SSA) wages, State Data Exchange (SDX) for Supplementary Security Income (SSI) information, Beneficiary Data Exchange (BENDEX) for SSA benefit information, and SSN Numident. Monthly matching is performed against IRS files, and quarterly matching is used for worker compensation files. State staff believe that the most useful matches are those performed for duplicate participation and against State wage files.

The data used for Income and Eligibility Verification System (IEVS) batch-mode matching sometimes pertains to a different period than the information provided to the caseworker at application or recertification. Apparent matches may result that merely reflect this timing difference. This creates unnecessary follow-up activities for workers. Hawaii is planning to develop a targeting approach on certain databases to eliminate unnecessary matches.

- **Alerts.** HAWI provides a pending notice that lists all items that need to be completed by the caseworker. The worker can also generate alerts for verifications. HAWI generates alerts on SSA and BENDEX matches.
- **Monthly Reporting.** HAWI generates the Monthly Eligibility Report Form (MERF), which subsequently is mailed to the client. If the MERF is not received and registered by clerical staff by a specified date, the system automatically generates a notice to the household. The monthly report is returned to the caseworker who enters into the system any changes in household circumstances. HAWI has a screen that lists all of the cases that have no change; these can be automatically authorized. The State is looking at cost reduction options and is considering the elimination of monthly reporting in the future.
- **Report Generation.** HAWI provides several types of paper format reports. Supervisors can generate a report -- indicating the number of cases that are

assigned, processed, or pending -- that can be used for workload allocation. HAWI automatically produces the Monthly Reconciliation Report and the Report on Untransacted Outstanding ATPs. The State Coupon Issuance and Participation Estimates (form FNS 388) is produced automatically in a format similar to the format required by FNS.

Enhancements are pending to generate additional management reports.

- ***Program Management and Administration.*** HAWI provides electronic mail capability to all income maintenance staff, but the feature is not available to some workers who have inquiry only access. On-line policy manuals are being considered as a possible future system enhancement.

HAWI maintains a history of actions that records every transaction made to a case record and which worker made the change. Only the unit that is assigned a case can update client records. The action history information is maintained for several months.

3.2 Level of Integration/Complexity

HAWI has a high level of integration and complexity. It supports the Food Stamp, AFDC, GA, and Medicaid Programs. HAWI has an integrated database as well as many integrated modules and subsystems. Whenever there is a change in one program area, it is possible that other programs supported by HAWI can be affected.

3.3 Workstation/Caseworker Ratio

The workstation to caseworker ratio for the HAWI system is 1:1. By design, each worker has his or her own terminal.

3.4 Current Automation Issues

Hawaii staff would like to be able to concentrate more effort on improving their ongoing operational system. Most of the State's staff resources, however, are needed to address modifications required by FNS for the Food Stamp Program, the Agency for Children and Families (ACF) for AFDC, the Health Care Financing Administration (HCFA) for Medicaid, or the State for GA. Of the 88 requested modifications in March 1993, nearly half were system enhancements. The remaining modifications were those required by the Federal Programs, all of which have higher priorities than enhancements that would improve system operations.

State staff expressed concern regarding changes that would be required in HAWI's database structure to comply with the Ninth Circuit Court's ruling. In 1991, DHHS advised Hawaii that the State will be required to change its methods of determining eligibility for AFDC related eligibility groups to comply with the Court of Appeals' decision in Sneed versus Kizer. This change related to the filing unit composition rules

for certain Medicaid applicants and affects the parent/child relationships that are integral to the definition of a case in the HAWI system. Although this is related to Medicaid eligibility, any change in HAWI's database structure will impact other programs supported by HAWI.

4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

This section provides an overview of the HAWI system development process. Areas described include: the system that HAWI replaced, the reasons for developing the new system, the activities involved and problems encountered in development and implementation, the conversion approach used, project management, and State FSP and MIS involvement throughout the process.

4.1 Overview of the Previous System

Before HAWI, two separate systems that interfaced with each other were used for administering the Food Stamp Program and delivering benefits. Eligibility information for the Food Stamp, AFDC, and Medicaid Programs was maintained by a system transferred from Oklahoma in 1974. AFDC and FSP issuance functions were handled by the Benefit Payment System. Medicaid payments were handled by the Medicaid Management Information System, which was administered through another (fiscal) agency. The eligibility information system provided for on-line inquiry and on-line data entry by key entry operators located at the unit office with batch updates. A turnaround form was used to update the system. To provide for the required manual processing of the turnaround form, all changes for on-going cases had to be submitted by the sixth working day before the end of the month to be effective the following month. Eligibility determination was a completely manual process, and payment authorization and notice generation were performed at the local level. The system did not perform automated checks on incoming data. Since historical data were not retained in the system, there was a heavy reliance on physical case files.

4.2 Justification for the New System

Implementation of the HAWI system was expected to achieve the following benefits:

- Reduced caseworker time in preparing handwritten notices
- Facilitated monthly reporting and processing
- Improved administrative and planning activities
- Increased administrative and operational flexibility
- Increased expenditure control
- Enhanced case management capability

- Reduced potential for client and worker fraud
- Improved client service and uniformity in program policy
- ~~Reduced computation errors~~

- Phase IV - Eligibility Determination (1986 - 1988)

The State no longer maintains complete documentation of the APD history; however, an overview of the APD process was developed using available information. Hawaii submitted its initial APD in June 1983. The APD did not specify the transfer system. In subsequent APD submissions, the State identified the Alaska EIS system as the transfer system. Following a May 1984 visit to Alaska, however, the State amended the APD to specify the North Dakota TECS.

In February 1986, FNS approved funding of the HAWI project through the planning and software development phases. The approved APD specified the North Dakota TECS as the transfer system.

The June 1987 APD Amendment first identified AZTECS as a transfer candidate. This amended APD and subsequent amendments in September 1987 received conditional FNS approval in October 1987. FNS approved development and implementation activities through the pilot test, scheduled for January 1988.⁴

APD Amendment and APD Update (APDU) documents were submitted by the State during system implementation and after implementation had been completed. The areas addressed in these APDs included training and maintenance support from the contractor, Systemhouse, enhancements to improve system performance, implementation of changes to meet Federal requirements, and plans to add other programs to HAWI.

4.4 Conversion Approach

Conversion to the generic caseworker approach and worker cross training for all programs began in 1987 before HAWI conversion.

Following the pilot test, HAWI conversion of all local offices occurred between February and August 1988. Staff training included one week of program training and one week of system training. Conversion began the week after training. During conversion, an on-site monitor conducted random case reviews. A "train the trainer" approach was used. Staff from the branches and units that had already been converted provided assistance in the conversion of offices scheduled for conversion in the future. Cases that did not involve Federally funded programs were not converted. Only current household information for active cases was converted; historical case information was not included. The greatest amount of time was spent in preparing the cases and entering the data on a data entry sheet. During conversion, the systemabend frequency was very high which slowed down the process. System support for conversion was provided by a staff member designated as the conversion coordinator. Three months were required to convert Oahu, which has nearly 70 percent of the State's caseload. The conversion effort for Kauai required only one month.

⁴ Source: Letter, October 1, 1987.

4.5 Project Management

Project management and control during development and implementation was provided by the program area. The project manager had many years of program experience in local welfare offices and as a branch administrator. Four major groups reported to the project manager: the Users' Committee, the Technical Development Group, the Quality Assurance Group, and the Implementation Team. The technical architect from the contractor's project team had intimate knowledge of the Arizona system. Over 18 users from various program areas participated.

4.6 FSP Participation

FSP staff participated throughout the system development and implementation period, meeting daily during these phases. FSP staff were involved in the preparation of user requirements and system requirements and the review of the conceptual and detailed system designs.

4.7 MIS Participation

The following number and type of State MIS personnel participated in system development and implementation: one project manager, two systems analysts, three programmers, two system test analysts, and one documentation specialist. The contractor, Systemhouse, Inc., provided 16 staff to support the development effort.

4.8 Problems Encountered During Development and Implementation

State staff believed that contractor support provided for the AZTECS transfer and HAWI development and implementation was excellent, but the quality of contractor performance varied during the period when enhancements to HAWI were being made to include GA, JOBS, and technical training for State data processing staff. Between 1986 and 1991, there were three contractor project managers and many staffing changes. The State believed that many new staff members had little experience.

Hawaii staff indicated that the level of coordination between DHHS and FNS staff and the differences in program requirements between the two agencies presented some problems during HAWI development and implementation. State staff indicated that the coordination between DHHS and FNS has improved since HAWI became operational. The State, however, still would like to see greater similarity in program requirements between the agencies.

5.0 TRANSFERABILITY

Hawaii's selection criteria for a transfer candidate included similar hardware, software, caseload, and policies. The State also sought a system that would reduce its costs. Other desirable features

included the system's ability to perform two-month retrospective budgeting and determine Medicaid eligibility.

As part of the transfer system selection process, MIS staff obtained tapes and documentation from Alaska, North Dakota, and Arizona. The tapes were loaded on the Hawaii mainframe and Hawaii cases were run through the systems. Program users compared the results of the tests. Hawaii vacillated in the selection of a system. The State initially chose Alaska, then switched to North Dakota, and at the direction of FNS in 1986 and 1987, selected Arizona's AZTECS.

State staff believed that there were advantages and disadvantages associated with the selection of AZTECS as a transfer system. Overall, State staff believed that the major advantage associated with the AZTECS transfer was that it saved both time and costs. But, the transfer required several months of dedicated program staff to identify system functional capabilities, to understand why the system functioned the way it did, and to determine what changes were needed for Hawaii.

Two primary State considerations were met with AZTECS because the system had two-month retrospective budgeting and used a similar hardware platform. Since some enhancements had been made to the EIS system when it was transferred from Alaska to Arizona, Hawaii believed that AZTECS provided advanced features that EIS and other TECS systems lacked.

AZTECS, however, was still under development and had not been implemented at the time it was transferred to Hawaii. As a result, Hawaii was working with an unproven system. AZTECS also did not have Medicaid eligibility determination, so Hawaii had to develop this feature and add it to the transfer system.

HAWI was transferred to Montana in 1989.

6.0 SYSTEM OPERATIONS

The following section provides a description of the HAWI system. The description includes a profile of system components and a discussion of the system operating environment.

6.1 System Profile

The components supporting the current Food Stamp system in Hawaii are as follows:

- **Mainframe:** IBM 3090-180J, MVS/XA, CICS, JES2, ADABAS
- **Disk:** IBM 3380
- **Tape:** IBM 3480
- **Printers:** IBM 4224 (remote)
IBM 4248 (central)

- **Front Ends:** IBM 3725
- **Workstations:** IBM PS/2 Model 30
WANG PC250
IBM 3179, 3192, and 3472 terminals
- **Telecommunications:** Microwave to connect the islands and 9.6 KB and 14.4 KB lines on each island

A detailed listing is provided in Exhibit A-6.1 in Appendix A.

6.2 Description of Operating Environment

This section describes the operating environment in Hawaii. Areas addressed include: operations and maintenance, telecommunications, system performance, system response, and system downtime. Current activities in the systems area and future plans also are addressed.

6.2.1 Operating Environment

HAWI operates on its own mainframe and disk system 24 hours a day, seven days a week. The batch cycle runs from 7:00 p.m. to 7:00 a.m. (except the first Saturday of the month when it runs much longer), and 24 hours on Sunday.

HAWI shares the State data center and telecommunications system with all other State systems. All mainframe equipment is leased because of the ACF "trade-in policy" that encourages leasing. Cartridge tapes are predominant, although some 9-track tapes are used. The State would like to get all tape files on cartridge tape and in a silo. Hawaii staff believe that the use of a silo for DHS cartridge tapes would improve efficiency, durability, and reliability. All other State systems currently use silos.

The HAWI system operates under IBM MVS/XA, CICS v1.1.7 and JES2 v2.1.5. Software AG's ADABAS database manager controls the disk database. On-line application code is written in COBOL II. Batch code is written in NATURAL, Software AG's fourth generation language. Products from Software AG, Pansophic, Candle, Goal Systems, and Computer Associates are used to monitor and improve the efficiency and effectiveness of the HAWI system.

There is a problem with the availability of space at the data center housing the HAWI system. The floor is crowded and cannot effectively accommodate additional Direct Access Storage Devices (DASD). Telecommunications equipment has been moved to accommodate the current mainframe configuration.

6.2.2 State Operations and Maintenance

The ICSD is responsible for HAWI computer operations. ICSD executes all system jobs. Changes that are requested by the program areas are coordinated by SORO. Requests are routed from SORO to ICSD through the Information Systems Office. ICSD then runs the jobs.

All staff that currently operate and support HAWI are State employees. These include three ISO staff, of which one MIS manager is dedicated to HAWI; four system analysts and five programmers that provide HAWI support (one analyst and one programmer are dedicated to the FSP portion of HAWI); and less than one full-time equivalent in ICSD support in areas including: system programming, database administration, network support, computer operations, and clerical support.

Adequately staffing technical positions has been a problem in Hawaii. Until recently, the State was unable to fill, with qualified staff, 10 openings for several years. Low unemployment in Hawaii has contributed to the problem. Another factor is Hawaii's small size, which limits the number of other systems that are as large the public assistance system. Moreover, the small number of mainframe systems and systems using ADABAS makes it very difficult for the State to recruit qualified technical personnel. The combination of several factors -- low unemployment rates, large system size, and system hardware and software choices -- require the State to provide technical staff constant training to ensure the adequacy of HAWI support.

Because of the difficulties associated with staffing technical positions in Hawaii, the contractor was retained for two years after the system became operational to maintain the system. Over time, the contractor staff that initially had worked on the project were transferred to other projects, and new contractor staff were assigned to the HAWI system. State staff indicated that there were more problems with system maintenance after the contractor staffing changes were made.

6.2.3 Telecommunications

Hawaii uses microwave to connect the islands and 9.6 KB and 14.4 KB lines on each island. Over 1,000 terminals connect centrally to the Honolulu Data Center. Some remote centers have only one terminal. Interconnectivity is through SNA/SDLC gateways. No digital service is currently available in Hawaii. The State plans to add digital service over the next few years.

The State plans to upgrade its telecommunications capabilities in the near future because a 10 percent increase in caseload will exceed the current capacity of the telecommunications network. There was an exponential increase in transactions through the telecommunications network after the hurricane in 1992. The State currently is planning to upgrade its facilities with a new telecommunications backbone. An upgrade of the communications controllers also is planned to accommodate the increase in network traffic and to support the planned enhancements.

6.2.4 System Performance

Development and production systems both operate on the HAWI mainframe. The current processor is running at 85 to 100 percent of capacity despite recent mainframe upgrades and installation of additional DASD. Since the system is now at its maximum processing threshold, Hawaii has an APD pending to upgrade the CPU and DASD in association with caseload growth and DRS upgrades. The DRS enhancement will add about one million records per month. The number of records that JOBS will add has not been determined.

FSP staff monitor on-going system performance through the HELP desk Problem Report Logs or Requests for Modifications maintained by SORO. Program personnel do not have any other responsibilities related to HAWI system performance monitoring.

System transaction volume varies by day of the month and time of day. The 4th, 5th, 7th, 8th, and 11th days of the month have particularly heavy on-line processing volume because of program deadlines. Peak load times on average days are from 9:00 a.m. to 11:30 a.m. and 1:00 p.m. to 4:00 p.m. There are currently 51 million records in the database. Average daily transaction volume is 185,000 transactions, and peak daily transaction volume is around 210,000.

6.2.5 System Response

Current system response times do not meet the standards set by the State; however, FSP users believe that system response time is adequate. State staff indicated that planned performance levels are three seconds for normal inquiry transactions and three to five seconds for eligibility determination and on-line interactive screen entry. The State measures internal response time, the response time at the central State office. The internal response time for inquiries ranges between 5 and 10 seconds depending on system load. Internal response times for eligibility determination and on-line interactive screen entry average between 5 to 10 seconds for normal loads and 10 to 20 seconds for peak load periods. Response times in the remote offices are much higher.

6.2.6 System Downtime

State staff indicated that system downtime occurs periodically due to batch processing requirements and is an issue that is currently being addressed.

6.2.7 Current Activities and Future Plans

The State has implemented and planned a number of system enhancements for HAWI including:

- Hawaii adopted the three-year on-line history from AZTECS. The State is currently reviewing the criteria for performing backup activities, purging data, and archiving data.

- The State has added alerts as needed when new batch jobs were implemented.
- The State is investigating the use of a high level client index for all DHS clients.
- Enhancements are pending to generate additional reports for administrative and program management reporting purposes.
- The State plans to upgrade the CPU and DASD in association with caseload growth and DRS upgrades.

7.0 COST AND COST ALLOCATION

This section of the report identifies development and operational costs for the HAWI System as reported in the initial APD and subsequent APDUs. This section presents a summary analysis of the cost allocation (CA) methodologies and cost allocation plans (CAP) used to allocate these costs since the inception of the system.

7.1 HAWI Development Costs and Federal Funding

The HAWI system was fully implemented in fiscal year 1989, but development costs were tracked through the end of the first quarter of 1989. Total development cost of HAWI between 1984 and 1989 was approximately \$9,492,920.⁵ The Food Stamp Program's allocated share of total costs was \$1,230,249 (12.96 percent).⁶ FNS costs for HAWI development totalled \$900,853, based on a Federal financial participation (FFP) rate of 75 percent or 50 percent.⁷ Total development costs and the FNS share of these costs are summarized in Table 7.1.

⁵ Development Budget from 10/91 APDU.

⁶ Ibid.

⁷ Source: June 1989 Summary of Program Participation Schedule.

Table 7.1 HAWI Development Costs (1984 - 1989)

FY	Total Development Costs	Total FNS FFP	FFP at 75%	FFP at 50%
1984	\$234,780	\$63,274	\$51,073	\$12,201
1985	409,905	133,147	131,561	1,586
1986	730,168	300,684	298,529	2,155
1987	3,263,448	207,027	206,927	100
1988	4,707,405	180,102	154,130	25,972
1989	147,214	16,619	14,964	1,655
Total	\$9,492,920	\$900,853	\$857,184	\$43,669

7.1.1 HAWI System Components

HAWI was designed to support the Food Stamp, AFDC, General Assistance, and Medicaid Programs. Four phases comprised HAWI development and implementation: Planning and APD, Software Contractor RFP, Hardware Contractor RFP, and Eligibility Determination. Arrangements for contractor support for training and maintenance, enhancements to improve system performance, changes to meet Federal requirements, and plans to add other programs were made after system implementation.

7.1.2 Major Development Cost Components

Table 7.2 presents HAWI developmental costs by component. Contractor personnel, State personnel, miscellaneous, and hardware account for over 92 percent of development costs.

Table 7.2 Major HAWI Cost Components

DEVELOPMENT COST COMPONENT	ACTUAL COST	FNS SHARE (WITH FFP)
Direct Personnel	\$2,794,865	427,128
Contract Personnel	3,202,529	157,781
Hardware	1,230,503	47,612
Software	397,080	21,155
Supplies	212,705	5,107
Miscellaneous	1,548,256	237,142
Training	106,982	4,928
Total	\$9,492,920	\$900,853

7.2 HAWI Operational Costs

HAWI became fully operational in October 1988. Total HAWI operational costs and costs allocated to the Food Stamp Program for the last five fiscal years are provided in Table 7.3.⁸

Table 7.3 HAWI Operational Costs

FY	TOTAL COSTS	FSP SHARE OF TOTAL COSTS	FNS SHARE (50% FFP)
1989	\$4,529,229	\$1,420,626	\$710,313
1990	3,314,300	1,533,590	766,795
1991	6,346,284	2,417,606	1,208,803
1992	3,829,041	1,600,130	800,065
1993 ⁹	4,536,294	1,382,799	691,400
Total	\$22,555,148	8,354,751	\$4,177,376

⁸ Source: Operational budgets from 10/91 and 3/93 APDUs.

⁹ Projected cost per 3/93 budget.

7.2.1 Cost per Case

Annual HAWI operational costs for FY 1992 were \$3,829,041, and the FSP share was \$1,600,130. On a monthly basis, the FSP share was \$133,344. The monthly cost per case -- based on 1992 average monthly participation of 38,825 households -- was \$3.43.

7.2.2 HAWI Operational Cost Control Measures and Practices

HAWI operating costs for personnel, space, utilities, and administrative support are funded within the Information and Communication Services Division's budget. These costs are itemized in the KOMAND billing system using a Program Management System (PMS) code for each application used by the Hawaii DHS and can be tracked on the *KOMAND Billing System Report*. Monthly ICSD invoices include costs for services on the general mainframe and on the HAWI mainframe. The invoices show total costs for each PMS code. Whenever possible, costs associated with a specific user program or organizational unit are allocated directly to that unit. For example, personnel hours assigned directly to the FSP are shown on the *Information Systems Timesheet Report* under PMS code, "KHQ."

However, in most cases, costs from a single PMS code must be spread over multiple benefitting programs or organizational units. The Hawaii DHS creates intermediate cost pools to allocate costs assigned to these PMS codes as shown in Table 7.4, HAWI Cost Allocation Pools.

Table 7.4 HAWI Cost Allocation Pools

NAME OF POOL	APPLICATIONS/PMS CODES	BASIS OF ALLOCATION
Administrative pool	AA, BC, BD, BE, EA, EC, EC, FB, FG, HF, JL, JM, ND, VC, VD, VF, WA, XI, XJ, IP, XA, FF, VE, TA, AY, AM	Department-wide full time equivalents (FTEs)
Social Services (SS) pool	FI, FJ, FL, FN, FP, FS, FT, VB, FF, FA	Random Moment Sampling (RMS)
HAWI pool	Includes all PMS codes for applications processed on the HAWI computer - HA, HB, HF, HK, HL, HP, HQ, HR, HW, JB, JD, JE, JF, JG, JH, JJ	RMS
Shared pool CP-5	Applications utilized by income maintenance, social services, food stamps, and medical assistance using PMS codes JN and NB	case counts
Shared pool CP-5A	Applications utilized by income maintenance, food stamps, and medical assistance using PMS codes - QA, ST, TC, and VA.	case counts
Shared pool CP-5B	Applications utilized by income maintenance, social services, and food stamps using PMS code PB.	case counts

In addition to the ICSD charges, the following costs are paid from the Family Adult Services Division's System Operations and Requirements Office account 131-107, and are included in the costs billed for the HAWI computer:

- SORO personnel
- Photocopying HAWI Handbook changes
- Teleprocessing line charges
- EDP supplies
- Software leases

- Data processing equipment maintenance
- Computer lease payments

These costs are accumulated in the Hawaii DHS Financial Accounting and Management Information System and can be tracked on the *Expenditure and Encumbrance Report*. These HAWI related charges are accumulated according to activity code "107" and a number of different object codes describing expenditures ranging from computer hardware to delivery service charges.¹⁰

7.3 Hawaii Cost Allocation Methodologies

This section addresses the cost allocation methodologies used for allocating HAWI development and operational costs.

7.3.1 Historical Overview of Development Cost Allocation Methodology

Costs incurred for the design, development, and implementation of the HAWI system were allocated directly to the benefitting program whenever possible. For each phase of the development effort, the cost allocation percentages changed for the various programs. Development costs incurred before March 30, 1985 were allocated based on the *Workload Cost Allocation Plan*. This plan involved multiplying the number of cases times a work unit factor to arrive at a total workload. The workload totals were summed for each program and divided by the total to arrive at cost allocation percentages by program.¹¹ After March 30, 1985, development costs were allocated using the percentages derived from the Hawaii Random Moment Sampling (HIRMS) system.

7.3.2 HAWI Operational Cost Allocation Methodology and Mechanics

The operational cost allocation methodology is based on a revised Cost Allocation Plan implemented on July 1, 1992. At the time of the State visit, the plan had not received final approval from DHHS.

Each quarter, the Administrative Services Office (ASO) inputs charges from the *Expenditure and Encumbrance Report* and the *KOMAND Billing System Report*, and hours from the *Information Systems Timesheet Report by PMS Code Sequence* into detailed spreadsheets.

These spreadsheets are linked together and perform the necessary calculations to summarize detailed data. On the summary page, the main cost categories to which the allocation percentages are applied include:

- Personnel services

¹⁰ Source: *General Administration* document, pp. VI-38 and XI-1 through XI-17.

¹¹ Source: July 1986 APDU.

- Fringe benefits
- Hardware
- Depreciation
- State purchases
- Other indirect charges

After all charges have been appropriately accumulated, the percentages from the *Random Moment Time Study Report* are input into the spreadsheet and the allocations are automatically made to each program. The above charges are allocated to State programs, AFDC, Food Stamp Program, and Medicaid. The ASO spreadsheet also applies the appropriate FFP rate to the allocated share to calculate the reimbursement request amount for each Federal program.

APPENDIX A

STATE OF HAWAII

EXHIBITS

**Exhibit A-2.1
Response to Regulatory Changes**

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to DHHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91	Y	N	Y
1.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(5)(i)(F)	8/1/91	Y	N	Y
1.3	1: Mickey Leland Memorial Domestic Hunger Relief Act	3: Excludes as resource for Food Stamp purposes, household resources exempt by Public Assistance (PA) and SSI in mixed household. 273.8(e)(17)	2/1/92*	Y	Y	Y
1.4	1: Mickey Leland Memorial Domestic Hunger Relief Act	4: State agency shall use a standard estimate of shelter expense for households with homeless members. 273.9(d)(5)(i)	2/1/92*	Y	Y	Y
2.1	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(e)(5),etc.	7/1/89	Y	N	Y
2.2	2: Administrative Improvement	2: Combined initial allotment	1/1/90	Y	Y	Y

**Exhibit A-2.1
Response to Regulatory Changes**

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
3.1	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	1: Exclusion of job stream migrant vendor payments. 273.9(c)(1)(ii)	9/1/88	Y	N	Y
3.2	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	2: Exclusion of advance earned income tax credit payments. 273.9(c)(14)	1/1/89*	Y	N	Y
3.3	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	3: Increase dependent care deductions. 273.9(f)(4), etc.	10/1/88	Y	N	Y
3.4	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	4: Eliminate migrant initial month proration. 273.10(a)(1)(ii)	9/1/88	N/A	N/A	N/A
4.1	4: Issuance	1: Mail issuance must be staggered over at least ten days. 274.2(c)(1)	4/1/89	N/A	N/A	N/A
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	Y	N/A	Y
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	N/A	N/A	N/A

* These dates were changed after the State completed this form and the site visit occurred; therefore, the responses to these particular regulatory changes may be inaccurate.

**Exhibit A-6.1
State of Hawaii
Hardware Inventory**

Component	Make	Acquisition Method	Number/ Features
CPU			
3090 - 180J	IBM	Lease	(1)
DISK			
3380	IBM	Lease	40 gigabytes Controllers - 3880 (2) Drives - 3380 (16)
TAPE			
Cartridge	IBM	Lease	3480 (2)
9-Track	IBM	Lease	3420 (4)
PRINTERS			
Laser	Xerox IBM	Lease Purchase	9790 (Central site - 1) Remote sites (36)
Impact	IBM	Lease	4224 (Remote/central - 37) 4248 (1)
FRONT ENDS			
3725	IBM	Lease	(1)
REMOTE EQUIPMENT			
Workstations	IBM Wang	Purchase Purchase	PS/2 Mod 30 PC250
Terminals	IBM	Purchase	3179 3192 3472

APPENDIX B

STATE OF HAWAII

ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Operational Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Operational Level User Satisfaction Survey are the perceptions of eligibility workers in Hawaii. In other words, these responses do not necessarily represent a "true" description of the situation in Hawaii. For example, the results presented regarding the response time of the system reflect the workers' perceptions about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of EWS in Hawaii	Number Selected to Receive Survey	Percentage Selected
359	63	17.5%
	Number Responding to Survey	Response Rate
	41	65.1%

The eligibility workers selected to receive the survey were selected randomly so their perceptions should be representative of eligibility workers in Hawaii. The response rate of 65 percent is acceptable, producing a sample whose responses should be representative of eligibility workers in Hawaii.

Summary of Findings

Most of the respondents are satisfied with the computer system in Hawaii. They generally find it responsive, accurate, and fairly easy to use. Two complaints are that response time is sometimes too slow during peak periods and that the system is down too often.

Most respondents also think the computer system helps them do their jobs and makes them more efficient, although 44 percent feel the system adds stress to their jobs.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents (%)
Poor	4	9.8
Good	36	87.8
Excellent	1	2.4

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents (%)
Poor	33	80.5
Good	8	19.5

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents (%)
Rarely	3	7.3
Sometimes	29	70.7
Often	9	22.0

The eligibility workers who responded almost all agree that the system's response time is generally good or excellent but a majority (81 percent) also agree that response time is often poor during peak periods.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents (%)
Sometimes	6	14.6
Often	35	85.4

How often is the system down?

	Number of Respondents	Percentage of Respondents (%)
Rarely	6	14.6
Sometimes	31	75.6
Often	4	9.8

A large majority (85 percent) of the eligibility workers who responded think the system is generally available; a similar majority agrees that it is sometimes or often down.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents (%)
Poor	2	4.9
Good	35	85.4
Excellent	4	9.8

How often is a case terminated in error?

	Number of Respondents	Percentage of respondents (%)
Rarely	31	75.6
Sometimes	10	24.4

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents (%)
Rarely	31	75.6
Sometimes	9	22.0
Often	1	2.4

How often is the systems data out-of-date?

	Number of Respondents	Percentage of Respondents (%)
Rarely	23	57.5
Sometimes	16	40.0
Often	1	2.5

Under the new (current) system, how difficult or easy is it to calculate benefit levels accurately?

	Number of Respondents	Percentage of Respondents (%)
About the same	2	16.7
Easier	10	83.3

Most of the eligibility workers who responded feel that the operations of the system are accurate. A large majority (95 percent) of them think the information in the system is either good or excellent.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents (%)
Rarely	26	65.0
Sometimes	13	32.5
Often	1	2.5

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents (%)
Rarely	28	71.8
Sometimes	10	25.6
Often	1	2.6

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents (%)
Rarely	32	86.5
Sometimes	5	13.5

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents (%)
Rarely	33	86.8
Sometimes	4	10.5
Often	1	2.6

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	32	82.1
Sometimes	7	17.9

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	33	84.6
Sometimes	6	15.4

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents (%)
Rarely	34	94.4
Sometimes	2	5.6

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents (%)
Rarely	34	85.0
Sometimes	6	15.0

How often do you have difficulty identifying recipients already known to the State?

	Number of Respondents	Percentage of Respondents (%)
Rarely	33	80.5
Sometimes	7	17.1
Often	1	2.4

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	31	83.8
Sometimes	6	16.2

How often do you have difficulty updating eligibility and benefit information from recertification data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	35	92.1
Sometimes	3	7.9

How often do you have difficulty identifying cases which are overdue for recertification?

	Number of Respondents	Percentage of Respondents (%)
Rarely	32	86.5
Sometimes	4	10.8
Often	1	2.7

How often do you have difficulty monitoring the status of all hearings?

	Number of Respondents	Percentage of Respondents (%)
Rarely	16	66.6
Sometimes	7	29.1
Often	1	4.2

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents (%)
Rarely	20	55.5
Sometimes	15	41.6
Often	1	2.7

How often do you have difficulty automatically notifying households of case actions?

	Number of Respondents	Percentage of Respondents (%)
Rarely	25	67.5
Sometimes	12	32.4

How often do you have difficulty notifying recipients that recertification is required?

	Number of Respondents	Percentage of Respondents (%)
Rarely	32	86.5
Sometimes	4	10.8
Often	1	2.7

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents (%)
Rarely	26	70.3
Sometimes	10	27.0
Often	1	2.7

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents (%)
Rarely	17	54.8
Sometimes	11	35.5
Often	3	9.7

How often do you have difficulty identifying cases involving suspected fraud?

	Number of Respondents	Percentage of Respondents (%)
Rarely	16	42.1
Sometimes	15	39.5
Often	7	18.4

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents (%)
Rarely	30	96.8
Sometimes	1	3.2

Under the new (current) system, how difficult or easy is it to determine eligibility?

	Number of Respondents	Percentage of Respondents (%)
About the same	5	41.7
Easier	7	58.3

Under the new (current) system, how difficult or easy is it to track receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents (%)
About the same	3	25.0
Easier	9	75.0

Under the new (current) system, how difficult or easy is it to automatically terminate benefits for failure to file?

	Number of Respondents	Percentage of Respondents (%)
Easier	12	100.0

Under the new (current) system, how difficult or easy is it to generate warning notices?

	Number of Respondents	Percentage of Respondents (%)
About the same	2	16.7
Easier	10	83.3

Under the new (current) system, how difficult or easy is it to determine monthly reporting status?

	Number of Respondents	Percentage of Respondents (%)
About the same	4	33.3
Easier	8	66.7

Under the new (current) system, how difficult or easy is it to restore benefits?

	Number of Respondents	Percentage of Respondents (%)
About the same	1	8.3
Easier	11	91.7

Most of the eligibility workers responding do not have difficulty performing any of the system-specific tasks such as assigning new case numbers or generating adverse action notices, although 45 percent report some difficulty tracking outstanding verifications and identifying error prone cases. One exception is identifying cases of suspected fraud, 58 percent of the eligibility workers experience some difficulty with this task. A significant majority of the eligibility workers feel the new system is easier to use.

FOOD STAMP PROGRAM NEEDS

Worker Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents (%)
Often	41	100.0

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents (%)
Rarely	23	56.1
Sometimes	15	36.6
Often	3	7.3

How often is the system more of a problem than a help?

	Number of Respondents	Percentage of Respondents (%)
Rarely	32	80.0
Sometimes	8	20.0

Under the new (current) system, how satisfying do you find your work now?

	Number of Respondents	Percentage of Respondents (%)
About the same	4	33.3
More	8	66.7

Under the new (current) system, how pleasant do you find your work now?

	Number of Respondents	Percentage of Respondents (%)
About the same	5	41.7
More	7	58.3

Under the new (current) system, how stressful do you find your work now?

	Number of Respondents	Percentage of Respondents (%)
Less	3	25.0
About the same	4	33.3
More	5	41.7

Under the new (current) system, how much are you able to get done now?

	Number of Respondents	Percentage of Respondents (%)
About the same	3	25.0
More	9	75.0

Under the new (current) system, how efficient are you in your work now?

	Number of Respondents	Percentage of Respondents (%)
Less	1	8.3
About the same	2	16.7
More	9	75.0

How do you rate the new (current) system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents (%)
About the same	2	16.7
Better	10	83.3

Most of the eligibility workers who responded think that the current system is a great help to them in their work and 83 percent

feel that it is better than the previous system.

Client Service

How often is expedited service difficult to achieve:

	Number of Respondents	Percentage of Respondents (%)
Rarely	25	62.5
Sometimes	14	35.0
Often	1	2.5

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents (%)
Rarely	28	71.8
Sometimes	9	23.1
Often	2	5.1

Under the new (current) system, how difficult or easy is it to interview a client in a timely manner?

	Number of Respondents	Percentage of Respondents (%)
More Difficult	1	8.3
About the same	7	58.3
Easier	4	33.3

Under the new (current) system, how would you rate the number of trips the client has to make to obtain benefits?

	Number of Respondents	Percentage of Respondents (%)
About the same	8	66.7
Fewer	4	33.3

Under the new (current) system, how would you rate the amount of time a client has to wait in the office?

	Number of Respondents	Percentage of Respondents (%)
About the same	7	58.3
Less	5	41.7

Under the new (current) system, how would you rate the amount of paperwork demanded of the client?

	Number of Respondents	Percentage of Respondents (%)
More	1	8.3
About the same	9	75.0
Less	2	16.7

Between 62 and 72 percent of the eligibility workers who responded agree that expedited service is rarely difficult to provide. Providing other client services usually requires about the same level of effort with the new system.

Fraud and Errors

Under the new (current) system, how difficult or easy is it to collect overpayments?

	Number of Respondents	Percentage of Respondents (%)
About the same	3	25.0
Easier	9	75.0

Under the new (current) system, how many errors are made?

	Number of Respondents	Percentage of Respondents (%)
About the same	2	16.7
Fewer	10	83.3

Under the new (current) system, how many instances of fraud get by?

	Number of Respondents	Percentage of Respondents (%)
About the same	8	66.7
Fewer	4	33.3

A majority of the eligibility workers feel that overpayments are easier to collect with the new system. Opinions as to the instances of fraud and errors are mixed. About one third feel that the instances of fraud and error are about the same.

APPENDIX C

STATE OF HAWAII

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Managerial Level User Satisfaction Survey. Frequency counts of responses to all items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Managerial Level User Satisfaction Survey are the perceptions of supervisors in Hawaii. In other words, these responses do not necessarily represent a "true" description of the situation in Hawaii. For example, the results presented regarding the response time of the system reflect the managers' perceptions about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of Supervisors in Hawaii	Number Selected to Receive Survey	Percentage Selected
44	30	68.2%
	Number Responding to Survey	Response Rate
	22	73.3%

The supervisors selected to receive the survey were selected randomly so their perceptions should be representative of the population of supervisors in Hawaii. The response rate of 73 percent is good, producing a sample whose responses should be representative of the eligibility worker supervisors in Hawaii.

Summary of Findings

Most of the supervisors think the system is very good and easy to learn. Very few had any difficulty performing specific system-related tasks. User satisfaction levels were generally positive; 83 percent of the supervisors responding rate the current system superior to the previous system.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Poor	5	22.7
Good	17	77.3

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents
Poor	17	77.3
Good	5	22.7

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents
Rarely	1	4.5
Sometimes	18	81.8
Often	3	13.6

The supervisors who responded mostly (77.3 percent) agree that the system's response time is generally good although an equal number also feel that the system response time during peak usage is poor.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents
Often	22	100.0

How often is the system down?

	Number of Respondents	Percentage of Respondents
Sometimes	22	100.0

Almost all the supervisors who responded think the system is generally available but again an equal number feel that the system is down sometimes.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Poor	1	4.5
Good	20	90.9
Excellent	1	4.5

Under the new (current) system, how difficult or easy is it to calculate benefit levels accurately?

	Number of Respondents	Percentage of Respondents
About the same	1	8.3
Easier	11	91.7

The supervisors find the information provided by the system to be accurate. Most of the supervisors who responded think the new system makes it easier to calculate benefit levels accurately.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents
Rarely	15	68.2
Sometimes	7	31.8

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents
Rarely	17	77.3
Sometimes	5	22.7

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
Rarely	18	81.8
Sometimes	4	18.2

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents
Rarely	19	86.4
Sometimes	3	13.6

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	20	90.9
Sometimes	2	9.1

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	21	95.5
Sometimes	1	4.5

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents
Rarely	19	86.4
Sometimes	3	13.6

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	22	100.0

Under the new (current) system, how difficult or easy is it to determine eligibility?

	Number of Respondents	Percentage of Respondents
About the same	1	8.3
Easier	11	91.7

Under the new (current) system, how difficult or easy is it to track receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
About the same	2	16.7
Easier	10	83.3

Under the new (current) system, how difficult or easy is it to automatically terminate benefits for failure to file?

	Number of Respondents	Percentage of Respondents
Easier	12	100.0

Under the new (current) system, how difficult or easy is it to generate warning notices?

	Number of Respondents	Percentage of Respondents
About the same	1	8.3
Easier	11	91.7

Under the new (current) system, how difficult or easy is it to determine monthly reporting status?

	Number of Respondents	Percentage of Respondents
About the same	2	16.7
Easier	10	83.3

Under the new (current) system, how difficult or easy is it to restore benefits?

	Number of Respondents	Percentage of Respondents
Easier	12	100.0

Most of the supervisors responding have no difficulty obtaining information or using the system. Those who responded generally do not have difficulty performing such specific tasks as generating adverse action notices or restoring benefits. Almost all (90 to 100 percent) feel that the new system is easier to use.

FOOD STAMP PROGRAM NEEDS

Supervisor Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents
Sometimes	1	4.5
Often	21	95.5

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents
Rarely	11	50.0
Sometimes	11	50.0

Under the new (current) system, how satisfying do you find your work?

	Number of Respondents	Percentage of Respondents
About the same	4	36.4
More	7	63.6

Under the new (current) system, how pleasant do you find your work?

	Number of Respondents	Percentage of Respondents
About the same	5	45.5
More	6	54.5

Under the new (current) system, how stressful do you find your work?

	Number of Respondents	Percentage of Respondents
Less	4	33.3
About the same	7	58.3
More	1	8.3

Under the new (current) system, how much work are you able to get done?

current system is a great help to them in their work but half also feel that it contributes added stress. More than half feel the system is better in specific aspects such as efficiency and productivity.

Management Needs

What is the quality of the reports produced by the system?

	Number of Respondents	Percentage of Respondents
Poor	7	31.8
Good	15	68.2

What is the quality of the support provided by the technical staff supporting the automated system?

	Number of Respondents	Percentage of Respondents
Poor	3	13.6
Good	13	59.1
Excellent	6	27.3

How often do you have difficulty making mass changes to the system?

	Number of Respondents	Percentage of Respondents
Rarely	10	55.6
Sometimes	5	27.8
Often	3	16.7

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	7	35.0
Sometimes	10	50.0
Often	3	15.0

Under the new (current) system, how efficient are the people you supervise?

	Number of Respondents	Percentage of Respondents
About the same	2	18.2
More	9	81.8

Under the new (current) system, how difficult or easy is it to make mass changes?

	Number of Respondents	Percentage of Respondents
More Difficult	1	9.1
About the same	3	27.3
Easier	7	63.6

Under the new (current) system, how difficult or easy is it to evaluate local office efficiency?

	Number of Respondents	Percentage of Respondents
About the same	2	18.2
Easier	9	81.8

Most of the supervisors responding think the system helps them in their management tasks, although 65 percent reported some difficulty in meeting Federal reporting requirements. Most think the reports produced by the system are good and a majority, 86 percent, think the quality of the support provided by the technical staff is good.

Client Service

Under the new (current) system, how difficult or easy is it to interview a client in a timely manner?

	Number of Respondents	Percentage of Respondents
More Difficult	1	8.3
About the same	10	83.3
Easier	1	8.3

Under the new (current) system, how would you rate the services received by the client?

	Number of Respondents	Percentage of Respondents
About the same	3	25.0
Better	9	75.0

Under the new (current) system, how do you think the average client is being served?

	Number of Respondents	Percentage of Respondents
About the same	2	16.7
Better	10	83.3

Most of the supervisors responding (75 to 83 percent) feel that client service under the current system has improved.

Fraud and Errors

Under the new (current) system, how difficult or easy is it to collect overpayments?

	Number of Respondents	Percentage of Respondents
More Difficult	2	16.7
About the same	4	33.3
Easier	6	50.0

Under the new (current) system, how many errors are made?

	Number of Respondents	Percentage of Respondents
About the same	2	16.7
Less	10	83.3

Under the new (current) system, how many false claims are caught?

	number of Respondents	Percentage of Respondents
About the same	6	50.0
More	6	50.0

Under the new (current) system, how many instances of fraud get by?

	Number of Respondents	Percentage of Respondents
About the same	8	66.7
Fewer	4	33.3

The supervisors feel that the new system has a variable impact on the detection of fraud and errors. A significant majority (83 percent) believe, however, that fewer errors are made under the new system.