

STATE AUTOMATION SYSTEMS STUDY

TENNESSEE STATE REPORT

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FINAL

Prepared for:

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2.1 Average Monthly Public Assistance Participation 3

TENNESSEE STATE REPORT
Site Visit February 10-12, 1993

STATE PROFILE

System Name: Automated Client Certification and Eligibility
Network for Tennessee (ACCENT)

Start Date: 1983

Completion Date: December 31, 1992

Contractor: Systemhouse, Inc.

Transfer From: Ohio (CRIS-E)

Cost:

Actual:	Not completed
Projected:	\$44,500,000
FNS Share:	\$13,471,180 (as of 12/31/92)
FNS %:	34% (as of 12/31/92)

Number of Users: 2,853

Basic Architecture:

Mainframe:	Amdahl 5990-1400 (MVS/ESA)
Workstations:	Memorex/Telex 3270-type
Telecommunications: Network	T1 Backbone/SDLC SNA/9.6 baud multi-drop lines to field offices

System Profile:

Programs: FS, AFDC, Medicaid

1.0 STATE OPERATING ENVIRONMENT

The Tennessee Department of Human Services (DHS) consists of four (4) major operational divisions: Rehabilitation Services, Family Assistance, Social Services and Administrative Services. The Family Assistance Division is the area responsible for the administration and operation of the Food Stamp Program (FSP). The following operational units comprise the Family Assistance Division: Child Support, AFDC and Food Stamps, Medicaid Eligibility, JOBSWORK, and District Program Directors.

Tennessee has 95 counties, divided into eight (8) districts. Shelby County has the largest FSP caseload (61,617) and Moore County the smallest (155). All but three (3) counties use direct mail issuance; the other three use over-the-counter issuance.

The latest population count (1991) placed the number of Tennessee residents at 4,953,000. Approximately 14% are FSP recipients.

The Unemployment rates fell steadily between 1983 (11.8%) and 1989 (5.1%), then began to rise in 1990 (5.2%) and 1991 (6.6%).

Information published by National Association of State Budget Officers in October, 1992 indicates:

- Tennessee's nominal expenditure growth for Fiscal 1993 exceeded 10%, far above the national average of 2.4%
- Tennessee cut the 1992 State budget by \$80 million, mainly in the areas of education and AFDC grant funding
- State employment levels dropped 2.7%, while the national average dropped only .6%
- Tennessee increased revenues by \$458 million through the expansion of the state sales tax and the creation of other taxes (professional privileges, nursing home bed and others) for FY93
- The overall regional 12 to 24 month outlook for the area indicates above average per capita personal income increases (3% v. 2.4%), and weighted unemployment rates below the national average (7.6% v. 7.8%)

2.0 FOOD STAMP PROGRAM OPERATIONS

The Food Stamp Program operations, under the Family Assistance Division, are divided between the District Program Directors and the AFDC/FSP Policy unit.

The District Program Director's unit is responsible for the operation and supervision of all district and local Human Services offices, including those charged with the operation

The Policy unit establishes interpretations of Federal and State policies. It performs planning, evaluation and monitoring of the AFDC and FSP areas, and serves as the general administrative headquarters.

The Administrative Services Division provides support for all computer operations of the FSP through its Information Systems operation. This unit does not operate an independent data center, but functions as a Remote Job Entry (RJE) site connected to the State Data Center, controlled by the Office of Information Resources (OIR), Department of Finance and Administration. The DHS Information Systems unit has three groups, Operations Support, Technical Support and Software Support whose mission is to support the Automated Client Certification and Eligibility Network for Tennessee (ACCENT) system. Major project development and ongoing support is provided by OIR, based on annually approved project and resources plans.

An organization chart indicating the overall structure of State agencies and the Food Stamp Program position within the organization is provided in Appendix A, Exhibit 2-1.

2.1 Food Stamp Program Participation

The average monthly participation for all public assistance programs is contained in Table 2.1 below. Participation in the Food Stamp Program has increased by nearly 101,000 households over the last five years, a 54% increase. There has been an increase in AFDC households of nearly 30,000 over the same five years, and in Medicaid participants, nearly 190,000 during the same time span.

Table 2.1 Average Monthly Public Assistance Participation

Program	1992	1991	1990	1989	1988
AFDC - cases	93,890	88,876	76,591	69,801	67,309
AFDC - individuals	261,641	246,959	211,408	193,059	185,190
FSP - households	286,245	244,272	207,510	193,141	185,314
FSP - individuals	714,969	622,605	532,017	499,506	489,328
Medicaid - individuals	420,082	399,700	303,402	265,610	231,960
GA	N/A	N/A	N/A	N/A	N/A
Foster Care	Sep.	System	Data	Not	Avail.

2.2 FSP Benefits Issued Versus FSP Administrative Costs

In Tennessee, the ratio of benefits issued to FSP administrative costs has improved to approximately 17.4:1 in 1992, from an approximate ratio of 13.3:1 in 1988.

Tennessee's average monthly benefit issued per household during the past five years is depicted in Table 2.2 below:

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	\$167.14	\$160.35	\$150.65	\$135.06	\$131.91

2.3 FSP Administrative Costs

Tennessee's Food Stamp Program Federal Administrative Costs (Table 2.3) for the past five years were:

Table 2.3 FSP Federal Administrative Costs

	1992	1991	1990	1989	1988
Total FSP Federal Admin. Cost	\$32,214,377	\$28,822,238	\$26,230,745	\$23,838,738	\$22,080,720
Avg. Federal Admin. Cost Per Household/ Month	\$9.58	\$10.06	\$10.64	\$10.31	\$9.91

2.4 System Impacts on Program Performance

The system can be expected to have an impact on the following areas of program performance: staffing, responsiveness to regulatory changes, error rates, and claims collection.

2.4.1 Staffing

Current eligibility worker and supervisor staff number 1,345, down 11% from 1,515 in 1986 when ACCENT Phase I (intake) and ACCENT Phase II (Claims system) were in operation, along with TWISS, the ACCENT predecessor.

Caseworkers were required to carry larger case loads as a result. The staff cuts occurred in 1992, during the conversion to ACCENT Phase III (rework of Phase I, as well as eligibility determination and benefit calculation) and were the result of anticipated productivity improvements from ACCENT and a State reduction-in-force (RIF) caused by budget cuts. The ACCENT system design for Phase III changed dramatically in 1989 and delayed implementation.

2.4.2 Responsiveness to Regulatory Changes

As shown in Appendix A, Exhibit 2-2, Tennessee was able to meet all Federal regulatory changes, except for item codes 1.4, the Mickey Leland Domestic Hunger Relief Act covering the use of a standard estimate of shelter expense for households with homeless members, and 2.3, the Administrative Improvement & Simplification Provisions of the Hunger Prevention Act that deals with the combined initial allotment under expedited service timeframes. A waiver was obtained for the latter change (item 2.3) since the capability had not been part of the transferred system and had to be developed in-house. Support for the regulation was implemented in February, 1993.

2.4.3 Combined Official Payment Error Rate

Tennessee's Official Combined Error Rate, Table 2.4 below, generally decreased between 1988 and 1991, with a sharp increase in 1992.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	13.12	8.51	8.28	8.78	12.12

2.4.4 Claims Collection

Tennessee's Total Claims Collected has doubled over the past five years as shown in Table 2.5.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	\$2,597,233	\$3,241,020	\$3,765,261	\$2,920,793	\$3,577,358
Total Claims Collected	\$2,169,427	\$2,133,827	\$1,845,480	\$1,489,781	\$1,355,094
As a % of Total Claims Established	83%	62%	49%	51%	38%

2.4.5 Certification/Reviews

An FNS post-implementation review is scheduled for August 1993. The FAMIS certification review had not yet been scheduled as of February 12, 1993.

3.0 OVERVIEW OF THE SYSTEM

Tennessee's ACCENT system currently supports the FSP, AFDC and Medicaid program areas. General Relief is not available in Tennessee. Child Welfare (Title IV-E) is administered by a separate system, as is Child Support.

3.1 System Functionality

The ACCENT system is a paperless registration, interviewing, eligibility determination and benefit calculation system with an automated, structured interviewing model that prompts the eligibility worker for additional information depending upon answers to previous questions. The system, transferred from Ohio, contains the same basic functionality as the Ohio CRIS-E system, with minor modifications having been made to reflect the particular aspects of the Tennessee environment.

Under the Governor's paper reduction mandate, Tennessee reduced the amount of paper generated by the registration and determination processes. There is, currently, a single-page form being used to initiate the registration process. The remainder of the process is completely electronic. As a result, no case files are maintained in Tennessee. Major features of ACCENT functionality include:

- **Registration.** During registration, the system conducts an automatic search of current and historical files, with other computer matching being performed in an overnight batch process. A "hit", or potential matches, are reported on-line, if found, during the automatic search, and via an on-line "Alert", if discovered during the batch process. Matches are weighted according to set parameters, with a Social Security and/or recipient number match assigned a weight of 100%. All matches above a specified weight must be investigated and resolved. Matching is performed at registration, eligibility determination, recertification and at periodic intervals.
- **Alerts and Notices.** Eligibility workers are notified of outstanding verifications and other necessary actions by use of the alerts. Notices include all key activities of the Food Stamp Program, and the same notice may contain AFDC and Medicaid information. Notices are usually generated automatically, but the eligibility worker has the ability to initiate them.
- **Scheduling.** The system has a well-developed scheduling module which tracks recertification and appointments. The schedule module is not automatically updated by other system activities, except for recertification.
- **Assistance Groups.** Tennessee uses the assistance group approach in which eligibility for various programs, and the groupings of individuals that make up an assistance group, is automatically determined by ACCENT. Each assistance group is formed based on the rules and regulations specific to the individual program area. Multiple assistance groups may exist within this "super case", including the basic Food Stamp household. It is possible for multiple Food Stamp assistance groups to exist within the "super case" and meet all FNS requirements for the "purchase and preparation" criteria.
- **Benefit Calculation.** ACCENT calculates the benefits for each client, which the eligibility worker reviews and verifies. Workers have access to an on-line calculator screen for manual calculations, if necessary.
- **Eligibility Determination.** The eligibility determination process consists of a series of "driver" screens. Depending upon the information entered into these mandatory screens, the system may prompt the worker for additional information by displaying other screens. This structured interview impacts all programs served by the system. These programs include AFDC and Medicaid, as well as Food Stamps. The system's data entry screens all have immediate on-line data edits. Supervisory authorization is not procedurally demanded in Tennessee; however, the system has the capability, through its security profile abilities, to require supervisory approval of eligibility.

- **Issuance.** The original CRIS-E issuance module, transferred from Ohio, had to be modified in order to add direct mail issuance capabilities.
- **Claims Collection.** Tennessee had, prior to the decision to utilize the CRIS-E model, internally developed a comprehensive claims and collection system named the Claims On-Line Tracking System (COTS). The CRIS-E system was modified to eliminate its existing claims module and to install an interface to the COTS system. The interface is functionally transparent to the user and data is exchanged between the two systems nightly. The allotment amount is calculated by ACCENT automatically. Supervisory (only) override is possible. Recoupment amounts are also calculated automatically and the system tracks the claim status, generates a notice to the client regarding over/under payment and automatically creates a collection record once the claim has been established. The claims method is determined by the claims worker via the COTS system.

3.2 Level of Integration/Complexity

ACCENT supports the Food Stamp, Aid to Families with Dependent Children and Medicaid programs in Tennessee. Total caseload for these programs (as of June 1992) was 700,217. ACCENT also supports electronic mail, as well as unlimited on-line narrative notes. No on-line policy manual is present in ACCENT.

The system supports approximately 2,835 users consisting of public assistance caseworkers and administrative personnel. Approximately 1,637 administrative workers have access to ACCENT from at least 11 different departments. Approximately 1,500 caseworkers and supervisors also have terminal access to the system.

ACCENT interfaces with COTS. TWISS, which is currently being phased out, is used for historical data purposes and internal databases are being maintained for use in computer matching. Ad hoc management reporting is accomplished by downloaded sub-sets of ACCENT data to mid-sized systems where it may be manipulated by automated tools, such as EASYTRIEVE and CULPRIT.

3.3 Workstation/Caseworker Ratio

Each caseworker has a terminal on his/her desk. A pool of terminals will be available to use for registration work or whatever overflow work which may need attention.

3.4 Current Automation Issues

The Department of Human Services, according to the Director of the AFDC/FS Policy Section, currently has a backlog of over 1,000 service requests containing problem reports and suggested system modifications. These requests vary in assigned priority from critical to normal, yet the system appears to adequately support the three major program areas it was designed to serve. A portion of these requests includes ongoing support by the primary contractor, Systemhouse, to finish all assigned tasks under the development contract. No specific information was available as to the average time needed to complete a service request.

4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

This section describes the previous system and need for the new system, the development and implementation activities, conversion approach, project management and FSP/MIS participation throughout the project, and problems encountered during the project.

4.1 Overview of the Previous System

The Tennessee Welfare Integrated Services System (TWISS) began operation in 1974. TWISS was a batch-oriented system that depended upon regional (district) data entry of forms generated by local direct service offices. Forms were completed by the local offices, sent to the district office for entry and then batch up-dated to the TWISS database. Confirmation/turnaround documents were then generated and shipped back to the local office for use in case updates. TWISS originally supported the AFDC and medical assistance programs. Food Stamps was added after TWISS became operational.

The batch nature of TWISS, heavy emphasis on paper forms, lags in turnaround time and the lack of accuracy or dependability of data due to the time lags meant that TWISS was primarily a collection of historical data that did not help the operation of the local offices. The actual operation of the Food Stamp Program was forms-driven with TWISS acting as the collection point for data, but not assisting in the day-to-day operations of the program. It was a stable system, according to program and technical personnel, that was useful in reporting and analysis functions, but was plagued by late and inaccurate information.

4.2 Justification for the New System

Based on the problems associated with the batch-oriented TWISS system, Tennessee justified the development of a new system on the following:

- Increased caseworker productivity (20% increase);
- Reduction in error rates (15% reduction);
- Increased clerical staff productivity;

- Improved client service through immediate eligibility and benefit determination;
- Improved management through tracking of workers' actions;
- Increased supervisory and management reporting capabilities;
- More consistency and accuracy in the application of FNS policies;
- Better data integrity through on-line edits and matches against data from other programs;
- Elimination of data entry staff;
- Decreased paperwork;
- Worker alerts;
- Narrative note capability;
- Automated scheduling features; and,
- Mass change abilities.

4.3 Development and Implementation Activities

ACCENT planning began in 1983 with the submission of an APD. The APD outlined a three-phase approach that emphasized the automation of manual requirements, with all development being conducted internally.

- ***Phase I (INTAKE).*** Implemented in August, 1985. This phase provided for the registration and tracking of new applicants, matching against State and Federal databases and verification of client-supplied information.
- ***Phase II (COTS).*** Implemented in mid-1987. COTS is a full-feature claims processing and tracking system that provides payment handling and accounts receivable functions while also linking to the client data base.
- ***Phase III (Certification).*** A workbook-oriented approach where the interviewer completed an eligibility workbook during the interview process, and then submitted it to clerical staff for data entry and benefit calculation. Enhanced funding was contingent upon Regional Office approval. The APD did not have written assurance that development would be in accordance with the program functional standards for Food Stamp system development; therefore, FNS reduced FFP to 50%. The remaining COTS costs were funded at 50% FFP.

Designed to be modified, the original Phase III was dropped in 1988 when the new State administration opted to implement a "paperless" process that emphasized an on-line, interactive interview, instead of the workbook plan. In July, 1988, the State submitted a revised APD requesting additional funding for this approach. FNS has not taken an official position on whether the "paperless" aspect of ACCENT is in compliance with current Program regulations.

This APD met with several FNS objections, including: costs, project schedule, functional requirements and equipment leasing agreements. A subsequent APD was submitted in October, 1988 and conditionally approved by FNS in January,

1989. The Implementation Contractor RFP was approved in February, 1989.

An APD for approval of Systemhouse transfer of Connecticut's Eligibility Management System (EMS) was submitted in August 1989 and, after a number of revisions, was approved in April 1990. In May 1990, Tennessee decided to change the transfer system, as discussed earlier.

Three subsequent APDU's (3/91, 10/91, and 11/92) were submitted which requested significant increases in project costs. The cost increases were due to the need to resolve problems created when functional specifications, developed earlier, proved to be inadequate to develop the redesigned Phase III ACCENT system and extended the development timeframe an additional 7-9 months.

Tennessee considers ACCENT to have been completed by December 31, 1992.

4.4 Conversion Approach

Tennessee's conversion plan was straightforward - convert all open cases using eligibility workers to manually enter the cases into the new system. The conversion was completed within the allotted timeframe. The State selected a group of eligibility workers to train as "conversion specialists", trained them in ACCENT conversion procedures, and then stationed them in the district offices to lead the conversion effort. Staff were then trained at the district training sites on a staggered basis, so as not to disrupt the normal county office activities.

- Total cases converted: 500,000 (est.)
- Avg. time per case: 30 minutes
- Difficulties encountered: Cases with many individuals

4.5 Project Management

The Project Manager of the ACCENT project was assigned from the internal DHS Information System staff. Overall project management was under the direction of the Office of Information Resources unit, which is independent of DHS. A project steering committee was formed that included administrators and executives of DHS, as well as members from other State agencies. This high level steering committee took the place of the project management group commonly seen in FAMIS-type system development projects. These groups usually consist of operational level individuals with an assigned executive in charge. The high level of personnel in Tennessee's ACCENT project team indicates both the importance of the project to Tennessee, as well as the comprehensive role of the contractor team and DHS management in day-to-day project development activities.

4.6 FSP Participation

Food Stamp Program administrative staff were involved from the very beginning (1983) in the planning for the new system. Eight (8) eligibility workers and supervisors were assigned to the planning group for the originally-proposed three-phase internal development of the system to replace TWISS.

The Food Stamp/AFDC Policy Director was, and remains, a key member of the overall project management committee. Along with program policy staff, eight user representatives were involved in the design sessions that tailored the transfer system to meet Tennessee's needs. They were also involved in the development of the ACCENT User's Guide and worked to develop the ACCENT Procedures Guide. They served as the original acceptance test team and, after conversion, were assigned as regional help desk personnel.

4.7 MIS Participation

MIS played an active role in the selection, design, planning, development, testing and implementation of the system. A member of the DHS Information Systems Division was the internal technical Project Manager for the entire project. Key staff from both DHS Information Services and OIR application support played major roles in the creation of specifications, string and system testing, and assumption of ongoing enhancements. Senior Project Management also included managers from DHS Information Systems and OIR provided the Project Director.

4.8 Problems Encountered During Development and Implementation

State staff were forthcoming in discussion of several problem areas experienced during ACCENT development and/or implementation. These included:

- COTS cost and schedule overruns were not reported to federal agencies until after COTS became operational. This resulted in lower FNS FFP and disallowance of some charges.
- Tennessee originally chose the Connecticut Eligibility Management System (EMS) for transfer because it was one of only two systems that used the IMS database software. Systemhouse had no experience with the Connecticut system and was unable to install it without the necessary documentation. After six months of effort to get the transferred system up and running, and without success in obtaining documentation, the decision was made to change course and transfer the Ohio CRIS-E system, which was in development at that time. Note that neither the Connecticut or Ohio system had been FAMIS-certified as of that date. The Ohio system that was transferred was the test version, not the system that was actually in production in Ohio. In effect, Tennessee was faced with the task of

completing development of the CRIS-E system without the benefit of having the developmental "bugs" worked out by the donor state.

- The six month delay in final implementation caused revision to training and hardware installation schedules.
- Tennessee's insistence that the transferred system use the IMS database system, and the lack of current FAMIS systems that operated in that specific environment, created a shortage of possible bidders.
- The need to rewrite the Medicaid module was due to differences in Ohio versus Tennessee's administration of this program.
- The need to rewrite the claims module, in effect, required stripping it from the transferred system and developing a new interface into the existing COTS. The development of this interface, as well as others for IEVS and similar purposes, was cited as a major development problem that consumed larger than expected amounts of technical resources.
- Time consuming exploration of the transferred logic was required to

6.0 SYSTEM OPERATION

6.1 System Profile

The components supporting ACCENT are as follows (detailed hardware and software lists, provided by the state are included in Appendix A, Exhibits 6-1 and 6-2):

- **Mainframe:** Amdahl 5990-1400
MVS/ESA, IMS, CICS, RACF
- **Disk:** Amdahl 6380/6390
- **Tape:** STK 3670 Reel
STK 4480 Cartridge
STK 4400 Robotic Silo
- **Printers:** STK 5000 Laser
IBM 3800 Laser
Xerox 9790 Laser
IBM 3262 Impact
- **Front Ends:** IBM 3745
IBM 3725
- **Workstations:** Memorex/Telex 3270-type
- **Telecommunications:** T1 Statewide SNA/SDLC Backbone with six multiplexed hubs.

6.2 Description of Operating Environment

6.2.1 Operating Environment

ACCENT runs six days a week from 6 am until 7 pm. Since the State covers two time zones, the on-line operation must be up longer than normal. The batch cycle begins shortly after the on-line comes down and processes the computer matching work for out-of-state databases overnight. In-state matching occurs during client registration and eligibility determination phases. The production system also supports two additional on-line IMS regions, as well as a CICS region. Sharing the ACCENT region are TWISS, the ACCENT predecessor which will be phased out by July, 1993, and COTS, the on-line claims tracking system for the public assistance programs. The other regions support all of the other State applications: IMS1 supports Revenue, Mental Health, Purchasing, Personnel, Insurance and Vital Records; IMS2 supports DMV, Law Enforcement, Corrections, Property Assessments, DOT and Secretary of State; the CICS region covers Treasury, EMAIL and Finance and Administration efforts. A discussion of the system workflow is contained in Section 3.1, page 6.

6.2.2 State Operations and Maintenance

The ACCENT system is supported by two software groups: DHS Information Systems and OIR's application support. The DHS function covers the ongoing maintenance support of the production system. They work closely with Food Stamp, AFDC and Medicaid staff to provide correct functional capabilities and to make timely and effective changes to the system. OIR provides analyst and programming staff to produce system enhancements planned and budgeted by the DHS Information Systems department. Project plans are presented annually to OIR for resource allocation and approval. OIR can augment its internal staff with outside contractors, if necessary. They currently employ nearly 50 contractors within OIR to provide this type of support.

6.2.3 Telecommunications

Tennessee has recently completed conversion to an MCI-supported T1 backbone for the entire state network. The backbone carries both voice and data traffic and consists of six hubs tied to six MCI central offices. Hubs and MCI central offices are located in Nashville, Memphis, Jackson, Chattanooga, Knoxville and Johnson City. The T1 circuits are multiplexed from the hubs to each central office to allow for the support of both analog and digital circuits (some areas have no digital service yet, and some locations support only one workstation and the digital cost cannot be justified) so that service from the central office to the State data center can be 100% digital. Backup legs connect the larger hubs so that circuit rerouting can be accomplished in case of outages. The speed of the circuit(s) to each local office is 9.6 bps. The network supports 484 of these data circuits.

The hubs utilize the Paradyne Comsphere 6800 Network Management system which includes all DSUs and multiplexors. Hubs are connected to the central offices via 56 KB circuits. Through agreements with MCI, pre-determined minimum network transmission capacities must be maintained. Outages that bring the capacities below these levels alert MCI to automatically begin to utilize backup facilities to reroute traffic to maintain the prescribed levels. Arrangements are underway to provide for full network switching to a contracted out-of-state disaster recovery site from MCI should a major, extended incident occur.

6.2.4 System Performance

The current mainframe processors are running at 80-85% of capacity (both development and production systems) and are expected to be upgraded before the end of the year. Unspecified growth will occur in all production systems, forcing the need to upgrade. The current processors cannot be upgraded and will be replaced by new, larger systems. Current daily on-line transaction levels for each of the production regions are: IMS1 - 287,000; IMS2 - 558,500; IMS6 - 1,518,000 (of which ACCENT is approximately 1.2 million); and, CICS 350,000. Response times are not kept by any department since performance levels for all transactions are considered acceptable by the users. DASD space is always a very limited resource, but it continues to be added as required. Recently, OIR has begun to use DASD management software to begin more automated control over disk space. Floor space in the data center facility is more than adequate for foreseeable growth for disk and tape. The mainframe replacements will require some detailed planning, but with reasonable space and two systems to stage the installation, burn-in period and production migration, the transition should be easily controlled. Batch cycles did not appear to create any difficulties for either OIR or the FSP area.

6.2.5 System Response

Information regarding response time at the user's terminal is not maintained by either the program area or by OIR. Both DHS Information Systems and FSP management felt that response time performance was as good or better than expected and no major concerns were noted either during conversion or since ACCENT has been in production.

6.2.6 System Downtime

Program area administrators stated that the system was very reliable and that downtime was not a major concern. Technical measurements of downtime were not available from either the OIR or Program areas.

6.2.7 Current Activities and Future Plans

OIR has firm plans to upgrade both processors within the next year with the Production processor being completed before the end of FY93. DASD will add 8-10% to its current 480 gigabytes each year over the next three years to handle all the state's storage growth. Tape growth will be less dramatic.

Network studies will be conducted to evaluate how LANs and TCP/IP might help the state to be more productive, but no specific plans are in place.

Hierarchical Storage Management (HSM) software is being reviewed to determine the best strategy for DASD and tape management. DB2 is the database product for development of new applications.

An Information Systems Plan is created/updated annually, addressing development requirements for all state areas for the next three years.

7.0 COST AND COST ALLOCATION

This section addresses the following areas:

- ACCENT development costs and approved Federal funding
- On-going ACCENT operating costs
- Cost allocation methodologies applied to allocating development and operating costs.

7.1 ACCENT Development Costs and Federal Funding

Total ACCENT development and implementation costs through the end of FFY92 were \$40,607,913; the FNS share was 39%, or \$15,973,697; total FFP was \$11,963,437. These numbers were extracted from ACCENT documentation, as follows:

- The 10/91 APDU, *Summary Accent Project Costs*, lists total ACCENT costs from July 1983 through and including September 1989 as \$4,509,444. The FNS share is listed at \$2,750,861. During this period, INTAKE costs were reported at \$581,683. COTS development costs were reported at \$2,308,707. The difference between the \$4,509,444 reported for the period and the combined costs of INTAKE and COTS of \$1,619,054 were for costs incurred during pre-contract award activities including Certification, APD preparation, and administration.
- The 10/92 APD, *Summary Actual Expenditures*, documents FY90 development costs of \$2,604,823, FY91 development costs of \$6,981,205, and FY92, quarters 1 and 2, of \$14,037,141. The total costs for these periods is \$23,623,169 with the FNS share at \$7,521,515. Therefore, the total ACCENT development costs through the end of second quarter, FY92 were \$28,132,613 with a FNS share of \$10,272,376.
- Cost spreadsheets provided by the ACCENT Program Manager list ACCENT development costs for the last two quarters of FY92 as \$12,475,300, with an FNS share of \$5,701,322 and the ACCENT operational costs for that same period as \$7,863,682, with an FNS share of \$3,731,954. Therefore, through the end of FY92, total ACCENT development costs were reported at \$40,607,913 with the FNS share at \$15,973,699. Total operational costs for this period were \$7,863,682, for a combined total of \$48,962,151.

FNS FFP through the end of the second quarter of FFY92 was reported to be \$7,687,446. The FFP for the FNS development share for the third and fourth quarters (\$5,701,322) was not specifically calculated in the documentation. However, assuming an FFP rate at 75%, the FNS reimbursement for that period would have been \$4,275,991 bringing the total FFP for ACCENT development to \$11,963,437.

Table 7.1. ACCENT Development Costs (1984 - 1993)¹

ACCENT PHASE	TOTAL DEVELOPMENT COSTS	FNS SHARE	FNS %	FFP
Phase I - INTAKE	\$581,683	\$396,481	68	\$11,963,437
Phase II - COTS	\$2,308,707	\$1,446,276	63	
Phase III - ACCENT	\$37,717,523	\$14,130,942	37	
Total ACCENT ²	\$40,607,913	\$15,973,697	39	

7.1.1 ACCENT System Components

ACCENT system development costs were incurred in three phases:

- Phase I (INTAKE).** FNS granted approval for custom development in October, 1984. FNS approved costs for Phase I were \$257,037 with a 50% FFP³ of \$128,519. Phase I was implemented statewide in August, 1985. The actual costs for developing Phase I, however, were \$581,683; the FNS share was \$396,481.
- Phase II (COTS).** FNS granted approval for custom development in October, 1984. The FNS share of the estimated COTS cost was \$318,079 with a FFP of \$159,040⁴. FNS later approved additional funding for COTS in the amount of \$840,672⁵; the FFP was \$420,200 at 50%. Tennessee overran the budget for COTS with the result that FNS suspended funding for Phase III (Certification) and limited COTS overrun to 50% FFP. COTS was implemented statewide in July, 1987. The total cost of COTS was \$2,308,707; the FNS share of this amount was \$1,446,276.

¹Appendix A, Exhibits 7-1 and 7-2, provide the detailed schedule of the actual development costs and the share of those costs allocated to the Food Stamp Program. These costs were extracted from actual costs numbers included in the APD updates submitted by Tennessee.

²Total costs as of February 1993; approximately \$5 million in development costs remain to be processed.

³Letter, 9/10/85

⁴Ibid.

⁵Letter, 3/5/86.

- ***Phase III (Certification).*** Included in the original APD submittal as a hardcopy workbook approach, FNS approved funding for a feasibility study (\$50,000 at a 50% FFP, or \$25,000)⁶, then withheld further funding until Tennessee developed an approved approach for certification development. Tennessee had changed its certification concept in mid-1988 to reduce the paperwork burden for eligibility workers by transferring Ohio's CRIS-E on-line interactive system. Although the CRIS-E transfer meant that the INTAKE component developed earlier during Phase I, had to be changed, COTS remained a stand alone system. Development costs for Phase III more than doubled, eventually totalling over \$36 million. The FNS share of this \$36 million totalled about \$14 million. The FNS funding approval sequence for ACCENT Phase III is documented in Appendix A, Exhibit 7-3, ACCENT Funding History, beginning with the approval of the 1/24/89 APD.

⁶Letter, 9/10/85.

7.1.2 Major ACCENT Development Cost Components

In 1984, Tennessee estimated the total costs for the ACCENT development effort to be \$4,328,932. As documented in the APD requests for federal funding, this estimate was increased by \$35,349,547⁷ for an eight-fold increase in costs over the initial estimate. The increases were attributed to a variety of factors: increased staffing, increased contractor costs associated with change orders, and increases in hardware costs. Table 7.2, Major ACCENT Development Cost Components, presents the actual dollars and estimated FNS share, based on an average 47%.⁸ Since outstanding development costs remain, each component cost may be understated.

Table 7.2. Major ACCENT Development Cost Components

COMPONENT	TOTAL (\$Millions)	FNS SHARE (47% in \$Millions)
Hardware	8.5	4.00
State Personnel	3.7	1.74
Contractor	8.3	3.90
Other *	19.2	9.02
Total	39.7	18.66

* Note: Tennessee did not, routinely, maintain actual costs by components. The costs of major components was extracted from correspondence addressing specific cost issues. The "Other" component covers items such as, training, travel, development operations, supplies telecommunications and overhead costs.

Each of the three major cost components, hardware, personnel, and contractor, are addressed below.

7.1.2.1 Hardware

The state was responsible for competitively procuring all hardware needed to support the ACCENT. The majority of this procurement included a mix of intelligent and non-intelligent workstations, and printers.

⁷Reference Appendix A, Exhibit 7-3, ACCENT Funding History for the history of the ACCENT development cost increases.

⁸The 47% represents the average share allocated to FNS for the Phase III ACCENT development costs. The FFP for the specific cost components cannot be easily determined without a detailed audit of when the individual costs associated with each component was incurred.

During Phase III, hardware charges increased from \$5,078,059⁹ to \$8,496,530¹⁰, a 67 per cent increase of \$3,418,471, due primarily to an increase in the number of terminals. Originally, terminals were to be assigned to Family Assistance workers, supervisors, and clerical personnel; however, in October, 1991, the number of terminal users was expanded to include support personnel such as QC reviewers, hearing officers, family assistance investigators and claims writers, pre-screeners for separation of duties, as well as district and state office policy staff.

Table 7.3, Revised Hardware Requirements, shows the change in hardware items responsible for the majority of the hardware cost increase. Microcomputers were eliminated, except in training centers. The number of addressable printers was also decreased. The terminal and printer charges include the charges for modems, controllers, circuits and maintenance. In addition, the long distance communications charges for each terminal and printer increased from the previously approved APD.

Table 7.3. Revised Hardware Requirements

EQUIPMENT	03/91 APD		10/91 APDU	
	Total Units	Mthly Cost per Unit	Total Units	Mthly Cost per Unit
Terminals	1,813	93 *	2,702	95
Printers	637	125	513	128
Microcomputers	523	100	17	100
Micro Printer	207	17	0	0
Slave Printer	0	0	29	33
TOTAL MONTHLY COST	\$304,053		\$325,011	
MONTHLY INCREASE	\$20,958			

* Includes overhead costs for portions of the line, modems, and Front End Controller ports.

7.1.2.2 Contractor Costs

A fixed price contract for Phase III development was awarded on May 15, 1989, to Systemhouse for \$7,232,141. The period of development was 20 months. An additional 1,375 manhours were allotted in months 21 through 23 for contractor assistance after statewide implementation. The \$110,000 add-on was included in

⁹ As cited in the March 1991 APD.

¹⁰ As cited in the October 1991 APDU.

the fixed price contract although, by that time, development was to be basically complete.

The original contract contained no provision for executing change orders. It did specify a change order rate of \$89 per hour, but contained no contingency dollars. Since the execution of the contract in November, 1989, changes in policy at the Federal level and minor changes at the State level made change orders necessary. An amendment for \$1,084,821 was issued to cover existing and possible future change orders. This was 15 per cent of the fixed priced amount of \$7,232,141. Maximum liability under this contract was \$8,316,962.

7.1.2.3 State Personnel Cost

The increase in State personnel charges was a major component in the increased cost of development addressed in the October, 1991 APDU. Increased numbers of staff were needed to install terminals and conduct training. Additional staff was needed for case conversion and system implementation. The approved APD underestimated the cost and the staffing requirements for the implementation tasks. The greatest increase in state staff charges was for data entry of conversion cases which must be done by eligibility workers. Staff costs were estimated at \$320,230 for FY91 and FY92. The APDU increased this cost to \$3,770,109, an 11-fold increase of \$3,449,879 for FY91, FY92, and FY93.

7.2 ACCENT Operational Costs

ACCENT has been fully implemented since April, 1992. Prior to the implementation of ACCENT, TWISS supported most, but not all, of the functionality now provided by ACCENT. Since August, 1985, when INTAKE was implemented, ACCENT and TWISS operational costs have been intertwined. It is not practical to compare the cost per case of TWISS to the ACCENT system since TWISS costs from before 1985 would need to be compared to ACCENT costs at the point in time when ACCENT had reached a steady operational state. For this report, therefore, the on-going operational costs of automated system operations are presented for the time frame data available. When the information is available, the components of the operational costs are presented. It is expected that by April, 1993, TWISS will be accessed only for historical purposes and that the majority of operating costs would be wholly associated with ACCENT.

7.2.1 Cost Per Case

TWISS operating costs have been declining since ACCENT became fully operational in April 1992. TWISS operating costs associated with Food Stamps cases is minimal. The October 1992 operating costs of \$76,199.44 are still being reviewed to determine which costs could be attributed to the Food Stamp Program.

ACCENT operating costs for July through September 1992 were \$5,891,340, an average of \$1,963,780 per month. The FNS share was almost 53 per cent at \$3,110,231 (\$1,036,743/month). AFDC assumed almost 24 per cent of the cost, at \$1,411,823. The Medicaid share was 23 per cent at \$1,369,286. The number of FSP cases (households) supported for that period was approximately 858,735 for a cost per case of \$3.62.

7.2.2 ADP Operational Cost Control Measures and Practices

The operational costs for ACCENT are provided by the Office for Information Resources (OIR) using a job accounting software product, Multitrak. This system collects operational costs by department and division as they are incurred during processing. By assigning the cost center in the job card, operating costs of batch programs can be collected directly by cost center. Each on-line software module that is assistance program-unique is assigned a cost center related to that module. As that module executes, its processing costs are collected into that assistance program's cost center. Where practical, separate ACCENT batch job streams have been structured to support only one assistance program. For job streams that support one or more assistance programs, individual software programs in that job stream are assigned a cost center identifier. The applicable cost center identifier will be assigned to each on-line module to ensure that the cost of executing that module is collected and attributed to the appropriate assistance program.

7.3 Tennessee Cost Allocation Methodologies

This section addresses the cost allocation methodologies for allocating both development and operating costs to ACCENT. It traces the methodologies submitted for approval to the federal agencies and the justifications for denying approval.

7.3.1 Historical Overview of ACCENT Development Cost Allocation Methodology

The APD Cost Allocation Plan has undergone 15 revisions. Initially, Tennessee proposed to allocate development costs based on duplicate case count. This was never approved. A subsequent attempt to base allocation on available case count was also not approved. Using the case count methodology, the Food Stamp Program was allocated 71 per cent of the initial ACCENT development budget. The remaining 29 per cent was allocated between Medicaid and AFDC. The actual costs of developing ACCENT Phase I (INTAKE) and ACCENT Phase II (COTS) were, however, allocated in the following percentages¹¹:

¹¹Reference Appendix A, Exhibit 7-1, ACCENT Phases I & II Development Costs, for a quarterly breakout of costs and FNS share of these costs.

- Food Stamps: 64%
- AFDC: 25%
- Medicaid: 11%

For Phase III, the Cost Allocation Plan was constructed in line with the methodology put forth in the FNS/DHHS Memorandum of Understanding dated October, 1986. The Plan allocated intermediate and common pools on the basis of direct charges, rather than by caseload. The new cost allocation plan associated with Phase III development allocated costs in the following percentages¹²:

- Food Stamps: 38%
- AFDC: 34%
- Medicaid: 28%

Subsequent revisions to the Plan increased the Food Stamp allocation to 43 per cent. Finally, the Food Stamp allocation was reduced to 35 per cent following the correction of a computation error.

In March, 1990¹³, the allocation methodology was changed from a direct charge method to the Random Moment Sample (RMS) Method. The RMS methodology was accepted by the FNS Regional Administrator on June 12, 1990. TWISS and ACCENT development charges were directly charged to the Food Stamp Program, if the charge could be directly related to that program. Development charges that were shared by multiple programs were allocated based on the results of the monthly RMS, conducted in six groups. The six groups and the staff sampled in each group were:

- Family Assistance staff;
- EDP staff assigned to operations and development;
- Administrative Review (QC) staff;
- Investigative Services staff performing investigative activities for AFDC and Food Stamps;
- Social Services counsellors in the field; and
- Field Operations administrative people.

All personnel in these organizations were sampled monthly. The results were tallied and the allocations adjusted each quarter by Fiscal Services.

¹²Reference Appendix A, Exhibit 7-2, ACCENT Phase III Development Costs, FY89-FY92, for a quarterly breakout of costs and FNS share.

¹³APD Revision #13, dated March 1990.

7.3.2 ACCENT Operational Cost Allocation Methodology

The methodology used to allocate operational costs to date used Random Moment Sampling of the EDP staff. While this method was effective during ACCENT development when the level of effort could be more closely tied a specific assistance program, it did not provide the same level of fairness when applied to ongoing ACCENT operations because the staff being sampled were no longer expending large amounts of time on ACCENT. As a result, Tennessee is testing a cost allocation methodology for allocating operating costs to programs supported using the cost collection and identification features of Multitrak.

This description of the methodology applies only to direct charges, which represent about 10% of all operations costs. The methodology is designed to directly allocate operational costs based on the direct costs collected into each assistance program's cost center. For those operating costs associated with batch software programs or on-line modules that support multiple assistance programs, the allocation of those costs will be based on the percentage of direct operations costs charged to each assistance program. The formula to determine a program's share in a three-program and two-program split would be:

Three Program formula: $\text{DIRECT COSTS}_{\text{PGM}} + \text{DIRECT COSTS}_{(\text{PGM1} + \text{PGM2} + \text{PGM3})}$

Two Program formula: $\text{DIRECT COSTS}_{\text{PGM}} + \text{DIRECT COSTS}_{(\text{PGM1} + \text{PGM2})}$

As an example:

Assume that the total operating costs for ACCENT were \$200,000 with \$150,000 directly allocated to the three assistance programs in the following amounts:

- Food Stamps, \$75,000
- Medicaid, \$50,000
- AFDC, \$25,000.

The methodology would determine the percentage allocation of each assistance program based on the charges directly allocated to that program. Table 7.4, Indirect Allocation Percentages (Example), shows the percentage allocation of the \$50,000 of indirect operating costs using direct operating costs as the basis.

Table 7.4. Indirect Allocation Percentages (Example)

ASSISTANCE PROGRAM	ALLOCATION% AND (AMOUNT) FOR INDIRECT COSTS OF \$50,000			
	3 PROGRAMS	2 PROGRAMS		
Food Stamps	50% (\$25,000)	60% (\$30,000)	75% (\$37,500)	-
Medicaid	30% (\$15,000)	40% (\$20,000)	-	66.7% (\$33,350)
AFDC	20% (\$10,000)	-	25% (\$12,500)	33.3% \$16,650

This methodology will be implemented on a test basis following approval by personnel from all ACCENT supported programs. Until such time, the allocation will be based on the RMS methodology used to allocation development costs.

7.3.3 Allocation Mechanics

Regardless of the methodology used to determine the percentage allocation, the mechanics of accumulating the costs into pools for allocating them to the correct program are consistent for both development and operating costs. Each ACCENT charge related to the Food Stamp Program is assigned to one of four

7.3.3.1 Direct Charge Pools

The Multitrak job accounting system mentioned previously can assign an operations charge to a cost pool with a 100 per cent Food Stamp allocation based on the Project Code assigned to the job identifier. Among the system related charges that can be direct charged are the following: mainframe CPU usage; computer peripheral usage; disk storage utilization; software usage; printer usage; communications equipment usage; LAN usage; Food Stamp reports; and Food Stamp transaction. Food Stamp Program Office personnel salaries are direct charged through the State Employee Information System. Administrative and Support personnel not assigned directly to the Food Stamp Program Office can be directly charged through the State of Tennessee Accounting and Reporting System (STARS). Items that are never direct charged include salaries and related costs for ADP management, administrative, and ADP operations personnel.

7.3.3.2 Allocation Cost Pools

The majority of all charges are allocated based on the percentages determined from the monthly RMS studies conducted in the six groups. Where no strikes were recorded for a particular sampled activity, the allocation was made using Filled Positions. Table 7.5, Allocation of Major Cost Items, identifies the major cost categories associated with ACCENT Development and the basis upon which they were allocated among the programs.

Table 7.5. Allocation of Major Cost Items Associated with ACCENT Development

COST ITEM	METHOD OF ACCUMULATION	FOOD STAMP ALLOCATION BASIS for DEVELOPMENT
ADP technical staff salaries	STARS Cost Center	RMS EDP
ADP management and administrative staff salaries		
ADP support staff salaries		
ADP operations staff salaries		
Food Stamp Program Office staff salaries	STARS Cost Center	RMS Family Assistance
Non-program office personnel (i.e. Finance, Executive Management, Janitorial, etc.) salaries	STARS Cost Center	RMS Family Assistance, or Average filled positions if no strikes in the sample.
Local Welfare Office case worker salaries (regular salary)	STARS Cost Center	RMS Family Assistance
Local Welfare Office Management and Administrative personnel salaries	STARS Cost Center	RMS Field Operations Staff
State personnel salaries	STARS Cost Center	RMS, or Average filled positions if no strikes in the sample
Computer costs (mainframe) utilization Computer peripherals usage Disk Storage utilization Software usage Printer usage Telecommunications equipment usage Personal computer usage Local Area Networks usage	Project Cost Center O.L.R Billing	Direct Charge to Food Stamps, or, in the case of shared data bases, RMS EDP

APPENDIX A

STATE OF TENNESSEE

EXHIBITS

A-2

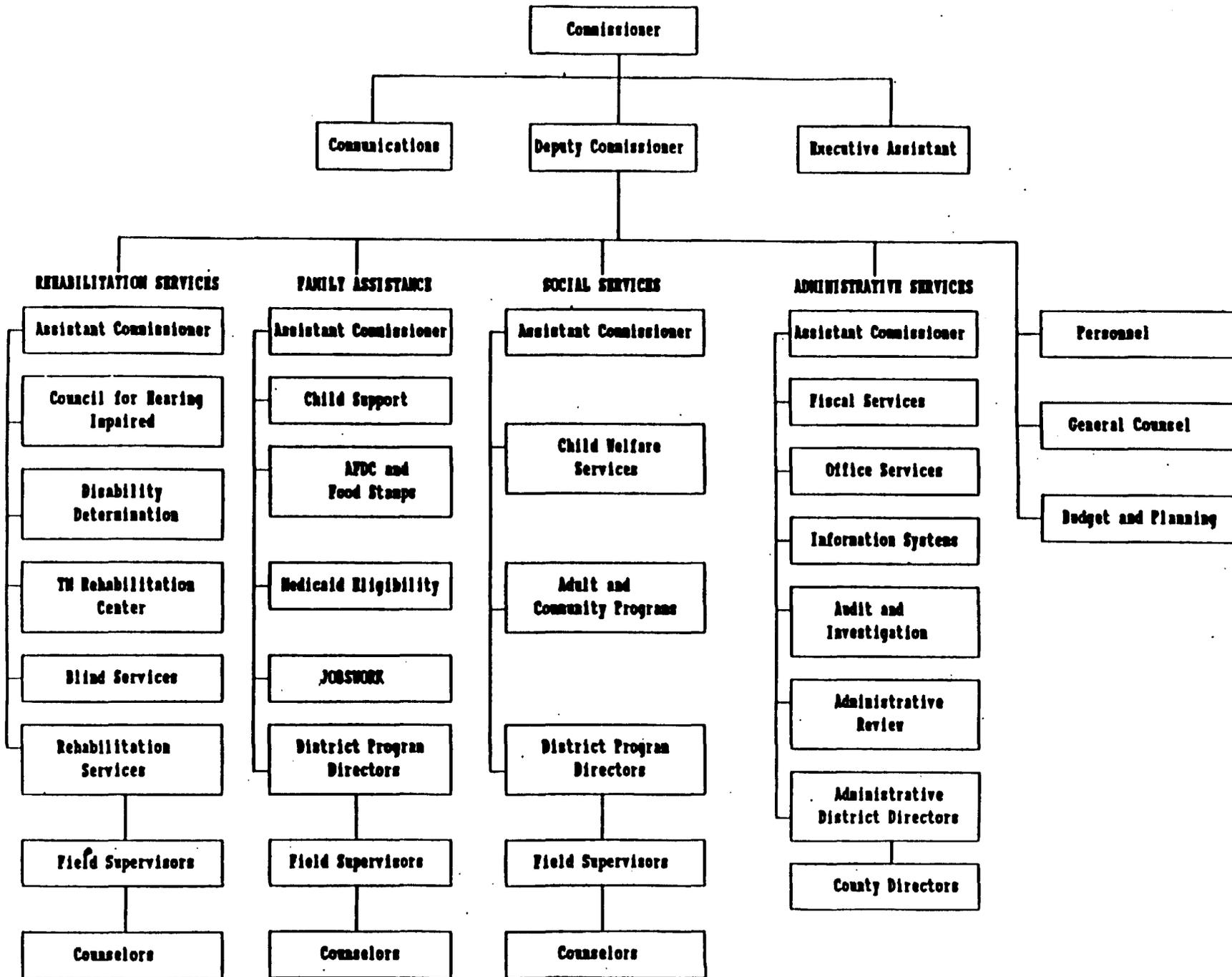


Exhibit 2-1

Code	Regulation	Provision	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 OA payments to HHHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91 N/A in TN			
1.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(3)(i)(F)	8/1/91 N/A in TN			
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)	10/1/91	Y	No - TWISS Yes-ACCENT	State Policy changes to implement
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)	12/4/91	N 02/01/92	No-TWISS Table changes to ACCENT	same
2.1	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(c)(5), etc.	7/1/89	Y		same
2.2	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	2: Combined initial allotment under normal timeframes. 274.2(b)(2)	1/1/90 N/A in TN			

Code	Regulation	Provision	Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
2.3	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	3: Combined initial allotment under expedited service timeframes. 274.2(b)(3)	2/93	N	Y	Y
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 N/A in TN			
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)	1/1/88	Y		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)	?	Y		Y
4.1	4: Issuance	1: Mail issuances must be staggered over at least ten days. 274.2(c)(1)	4/1/89	Y	Y	Y
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	Y	Y	Y
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	Y		

Exhibit 6-1

STATE OF TENNESSEE
 HARDWARE INVENTORY FOR ACCENT SYSTEM

Component	Make	Acquisition Method	Number/ Features
CPU			
CPU - 5990-1400 Test Work	Amdahl	Purchase	96 channels, 384 MB main storage, 385 MB extended storage, 4 processors, Multi Domain Feature, 90 MIPS
CPU - 5990-1400 Production	Amdahl	Purchase	96 channels, 384 MB main storage, 384 MB extended storage, 4 processors, 90 MIPS
DISK			
6100	Amdahl	Purchase	Electronic Storage Units (4)
6380/6390	Amdahl	Purchase	Controllers - 16 6380D - 160 6380J - 56 6380K - 136 6390-2 - 24 6390-3 - 16
TAPE			
Reel-Tape Drives	STK	Purchase	3804-C Ctlrs - 2 3670-E (6250/1600BPI) - 4
Cartridge Drives	STK	Purchase	4400 Ctlrs - 17 4480 Drives - 68
Robotic Silos	STK	Purchase	4400 - 7 Silos
LASER PRINTERS			
5000	STK	Purchase	3 (5000 LPM)
3800-3	IBM	Purchase	2 (18000 LPM)
9790-1	Xerox	Purchase	1 (120 PPM)

Exhibit 6-1 (Continued)

STATE OF TENNESSEE
 HARDWARE INVENTORY FOR ACCENT SYSTEM

Component	Make	Acquisition Method	Number/ Features
IMPACT PRINTERS			
3262	IBM	Purchase	1
284	Telex	Purchase	6
FRONT ENDS			
37XX	IBM	Purchase	3745 - 2 3725 - 1
REMOTE EQUIPMENT (Entire State Inventory)			
Terminal Controllers	Memorex	Purchase	532
Terminals	Memorex	Purchase	8737
Printers	Memorex	Purchase	2752
Intelligent Terminals	Various	Purchase	95
PCs	Various	Purchase	5410
MINIS			
System 36	IBM	Purchase	12
AS/400	IBM	Purchase	7

Exhibit 6-2

STATE OF TENNESSEE
SOFTWARE INVENTORY FOR ACCENT SYSTEM

<u>PRODUCT</u>	<u>RELEASE LEVEL</u>	<u>VENDOR</u>
ABEND-AID	6.0.3/DB2/SPF	Compuware
ACF/VTAM	ESA 3.3.1	IBM
ADF	2.2.1	IBM
APL	4.0	IBM
ATMS	2.0	IBM
AUDITEC		Charlton
CA-1 TMS	5.0	CA
CA-6 PDS	2.4	CA
CA-7 Scheduler	3.0	CA
CA-9 R+	5.7.6	CA
CA-11 Job Mgmt	2.0	CA
CA90S Services	1.0	CA
CA-Activator	2.1	CA
CA-Docview	1.0	CA
CA-Earl	6.0	CA
CA-RIM	1.0	CA
CA-PTF Aid		CA
CA-SRAM	6.4	CA
CA-Teleview	4.0	CA
CICS	3.2.1	IBM
COBOL	2.4	IBM
COBOL/AFP	5.4.1	IBM
COBOL II	3.2	IBM
CULPRIT	10.21	CA
DASD Migration Aids	1.1	IBM
DB2	2.3	IBM
DBTOOLS	2.1	IBM
DB2 Activity Monitor	1.2.04	BMC
DFP	3.2	IBM
DFDSS	2.5	IBM
DFDSS/ISMF	2.5	IBM
DFHSM	2.5	IBM
DISOSS	3.5	IBM
DSF	11.0	IBM
DSIMS (Data Dictionary)	2.2	DSIMS

Exhibit 6-2 (Continued)

STATE OF TENNESSEE
SOFTWARE INVENTORY FOR ACCENT SYSTEM

<u>PRODUCT</u>	<u>RELEASE LEVEL</u>	<u>VENDOR</u>
EASYPLUS	6.0	CA
EASYPLUS/DLI	6.0	CA
EASYPLUS/DB2	6.0	CA
ELIPS	3.9	CA
FDR/Compactor	5.1.34	Innovation
GDDM - various	1.1 to 2.1	IBM
IMS	3.1	IBM
IMS Msg. Requester	1.3	IBM
INFOPAC		Mobius
JES2	3.1.3	IBM
Librarian	3.9	CA
MVS/ESA	3.3.1	IBM
NCCF	2.2	IBM
NCP/ACF 3725	4.3.1	IBM
NCP/ACF 3745	5.4	IBM
EP/ACF	1.6.1	IBM
NPM	1.5.1	System Center
NPM Datamover	5.01	System Center
Office Vision	2.0	IBM
Omegamon II	100	Candle
RACF	1.9	IBM
RMF	4.1.2	IBM
ROSCOE	5.7	CA
SAS	6.07	SAS
SAS/ETS	6.07	SAS
SILO (HSC)	1.1	STK
SMP/E	6.0	IBM
STAIRS	5.0	IBM
Syncsort	3.4 TPF+4	Syncsort
TELON	2.1B	Landmark
TSO/E	2.1	IBM
TSO PC File Transfer		IBM
VIA - various		VIASOFT
VTAM Verify	1.4	CA
XCOM6.2	2.2.3c	Legent
3270 Superopt		
IMS	2.5.02	BMC
CICS	2.54	BMC

**Exhibit 7-1
Tennessee ACCENT Phases I & II Costs**

FY	QTR	PHASE I - INTAKE			PHASE II - COTS			FFP
		TOTAL	FNS SHARE		TOTAL	FNS SHARE		
			\$	%		\$	%	
83	4	22,143	15,852	72	14,113	8,666	61	1,361,817 (75%) ¹
TOTAL FY83		22,143	15,852	72	14,113	8,666	61	
84	1	34,087	24,277	71	13,714	8,752	64	
	2	53,652	38,715	72	12,838	7,906	62	
	3	103,711	67,405	65	14,875	8,332	56	
	4	147,560	99,397	67	19,280	11,172	58	
TOTAL FY84		339,010	229,794	68	60,707	36,162	60	
85	1	114,393	78,852	69	26,602	17,554	66	
	2	71,440	50,162	70	56,385	38,206	68	
	3	29,684	18,839	63	66,030	43,999	67	
	4	4,383	2,982	68	110,779	72,195	65	
TOTAL FY85		219,900	150,835	69	259,796	171,954	66	
86	1				120,833	79,235	66	
	2				142,976	95,712	67	
	3				251,486	165,309	66	
	4		**** IMPLEMENTED ****		270,463	175,775	65	
TOTAL FY86					785,758	516,031	66	
87	1	630	0		262,996	163,799	62	
	2				321,302	197,110	61	
	3				481,816	278,985	58	
	4				93,240	55,312	59	
TOTAL FY87		630			1,159,354	695,206	60	

¹ 10/91 APDU, Exhibit V.H.A, Summary Accent Project Costs, lists the total ACCENT costs from 7/83 through 9/89 as \$4,509,444; the FNS share of \$2,750,861 (61%); FNS FFP \$2,063,146 (75%). Total costs for this period (as documented in 1988 APD, Exhibit XI-14, Total Charges to Date, p. XI-38) included costs for ACCENT components other than INTAKE and COTS: Certification (\$1.2 million; APD preparation, (\$17,000); administration (\$74,000); et al. The FFP for only INTAKE and COTS is not broken out. However, since the total period was reimbursed at 75%, the reimbursement for INTAKE and COTS should be \$1,815,757 (share) at 75% FFP, or \$1,361,817.

FY	QTR	PHASE I - INTAKE			PHASE II - COTS			PPP
		TOTAL	FNS SHARE		TOTAL	FNS SHARE		
			\$	%		\$	%	
88	1				28,979	18,257	63	
	2							
	3							
	4							
TOTAL FY88					28,979	18,257	63	
TOTAL DEVELOPMENT/FNS AVERAGE SHARE		581,683 ²	396,481 ³	68	2,308,707 ⁴	1,446,276 ⁵	63	

² 1988 APD, Exhibit XI-15, Total ACCENT Charges to Date; p. XI-39.

³ Ibid.

⁴ 1988 APD, Exhibit XI-16, Total ACCENT Charges to Date; p. XI-40.

⁵ Ibid.

**Exhibit 7-2
ACCENT Development Costs⁶, FY90 - FY92**

FY	QTR	ACCENT TOTAL	FNS SHARE \$	FNS SHARE %	FFP
90	1	325,481	125,791	39	788,138 (75%)
	2	793,492	366,786	46	
	3	733,518	284,315	39	
	4	752,332	273,957	36	
TOTAL FY90		2,604,823	1,050,849	40	
91 ⁷	1		301,534		1,327,868 (75%)
	2		651,729		
	3		527,792		
	4		97,890		
TOTAL FY91		6,981,205	1,770,489	25	
92	1&2	14,037,141 ⁸	4,700,177	33.5	3,508,295 (75%)
	3	8,955,205	3,775,493	42	4,275,992 (75%)
		<u>1,972,342</u>	<u>621,723</u>	<u>32</u>	
	4	3,520,095	1,925,830	55	1,865,977 (50%)
<u>5,891,340</u>		<u>3,110,231</u>	<u>53</u>		
TOTAL FY92 DEVELOPMENT		26,512,441	10,401,500	39	
TOTAL FY92 OPERATIONS		7,863,682	3,731,954	47	9,650,264
FY90 - FY92 DEVELOPMENT		36,098,469	13,222,838	37	11,766,270
FY90 - FY92 OPERATIONS		7,863,682	3,731,954	47	
TOTAL ACCENT FY90 - FY92		43,962,151	16,954,792	39	

⁶All ACCENT development costs for FY90, FY91, and quarters 1 and 2 of FY92 were extracted from 10/31/92 APD, Exhibit V.H.A, Summary Actual Expenditures; pp. V.H.2-14. Quarters 3 and 4 were extracted from a worksheet provided by the ACCENT Program Manager. Copies of both documents are available upon request.

⁷ACCENT quarterly totals were not available for FY91.

⁸Separate totals for development and operations were not available.

Exhibit 7-3
ACCENT Funding History

DATE	EVENT	ESTIMATED DEVELOPMENT COSTS \$	FNS SHARE		FFP		EXPLANATION
			%	\$	%	\$	
	Initial APD for ACCENT development	4,328,932					
	APD Revision #1 & # 2 Increase	1,062,824					
9/10/85	FY85 APD FNS Approval APD Development INTAKE Review/Recertify Claims Certification Feasibility Study			672,320	50	336,160	75% funding upon approval of feasibility criteria for developing Certification component Granted approval to develop specific components of the proposed ACCENT to automate the Food Stamp Program.
				4,909			
				257,037			
				42,295			
				318,079			
				50,000			
3/5/86	APD Revision #5 FNS Approval Administration Claims (COTS/CHAIRS)			884,672	50	442,336	75% funding was held awaiting for approval for Certification component development
				44,271		22,136	
				940,401		420,200	

Exhibit 7-3
ACCENT Funding History

DATE	EVENT	ESTIMATED DEVELOPMENT COSTS \$	FNS SHARE		FFP		EXPLANATION
			%	\$	%	\$	
12/30/86	APD Revision #6 FNS Approval			2,299,051	75	1,724,288	
	FY 1985 (actual)			707,818		530,864	
	FY 1986 (actual)			657,305		492,978	
	FY 1987 (projected)			615,944		461,958	
	FY 1988 (projected)			317,984		238,488	
2/26/87	APD Revision #7 FNS Approval			2,290,056	75	1,717,542	Revision #7 contained a reduction in the actual costs for FY86.
	FY 1985 (actual)			707,818		530,864	
	FY 1986 (actual)			648,310		486,232	<-Reduction
	FY 1987 (projected)			615,944		461,958	
	FY 1988 (projected)			317,984		238,488	
4/7/88	APD Revision #8 FNS Approval	818,479	62.3	510,763	50	255,381	The COTS incurred a cost increase of over \$8,0, representing a 66% increase over Revision #07.
	Claims Cost Increase	807,479		502,835		251,417	
	Admin Cost Increase	11,075		7,928		3,964	
1/24/89	APD addressing ACCENT Phase III, Certification redirection submitted for FNS approval	450,000	38	171,000	75%	128,250	Tennessee was approved to proceed with ACCENT with a potential cost of \$12.7; funding was approved through contract award.

Exhibit 7-3
ACCENT Funding History

DATE	EVENT	ESTIMATED DEVELOPMENT COSTS \$	FNS SHARE		FFP		EXPLANATION
			%	\$	%	\$	
9/5/89	APD Update Submitted for FNS Approval	15,046,212	43	6,469,849	75	4,852,386	The total development cost increased about \$2.3 million over original APD approval amount to account for additional field staff and network costs. The FNS share (43%) would be reduced under the new Cost Allocation Plan
4/2/90	APD Revision #13 Review by FNS			6,757,654	75	4,586,537	The letter from Robert Grunow to Virgil Conrad stated that a previous ACCENT revision identified the Food Stamp total share as \$8,302,261. The revision in question was not reviewed.
6/12/90	APD Revision #13 FNS Approval		35	5,266,174	75	3,622,828	20 month development period beginning 11/89
					50	217,868	8 month period beginning 7/91
10/91	APD Revision #13 rescinded; Relssue APDU	28,544,924	35	10,001,921			The new APD covers the period from October 1990 through December 1992. The total cost in the rescinded APD was \$19,307,583. Additional costs cover charges for State personnel, additional costs for change orders, and increase equipment charges.
	10/91 APD FNS Approval			990,843		639,841	Contingent approval was granted for 4th Quarter, FY 91 funding only. The remaining funds for FY 92 and, FY 93 were held pending a satisfactory response to FNS concerns about information presented in the APDU.
					75	433,258	
					50	206,583	
11/13/92	10/91 APD; request FNS						Reply not included in correspondence.

APPENDIX B

STATE OF TENNESSEE

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 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 Tennessee. In other words, these responses do not necessarily represent a "true" description of the situation in Tennessee. For example, the results presented regarding the response time of the system reflect the workers' perception about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The survey was sent to 63 eligibility workers. The following table summarizes the potential population size, and the final size of the sample who responded.

Number of EW's in Tennessee	Number Selected to Receive Survey	Percentage Selected
1426	63	4.4%
	Number Responding to Survey	Response Rate
	43	68.3%

The response rate of 68 percent is acceptable and produced a sample large enough for the results to be representative of those selected, rather than the opinions of just a few individuals. Although the proportion of eligibility workers selected to receive the survey is quite small, these workers were selected randomly so their perceptions should be representative of the eligibility workers in Tennessee.

Summary of Findings

Most of the respondents were satisfied with the computer system in Tennessee. They generally found it to be responsive, accurate, and easy to use. The one complaint seemed to be that the information in the system was not kept as up-to-date as they would like. However, there was a subset of the respondents who were more uncomfortable with the system and found it more difficult to use. It might be possible to provide some additional training for this group to increase their comfort level.

Similarly, most of the respondents thought the computer system helped them do their jobs and made them more efficient. Again, a subset of workers felt that the system added stress to their jobs and/or that the system was more of a problem than a help. These are probably the same workers who found the system difficult to use and who might benefit from additional training. Finally, the respondents generally thought the system helped improve client service, particularly in comparison to the old system used.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents (%)
Poor	5	11.6
Good	27	62.8
Excellent	11	25.6

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Poor	11	25.6
Good	28	65.1
Excellent	3	7.0

How often is system response time too slow?

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	18.6
Sometimes	34	79.1
Often	1	2.3

The eligibility workers think the system's response time is generally good, although a substantial proportion (26 percent) think the peak response time is poor.

Availability

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

	Number of Respondents	Percentage of Respondents (%)
Sometimes	8	18.6
Often	35	81.4

How often is the system down?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	20.9
Sometimes	29	67.4
Often	5	11.6

The eligibility workers feel the system is available when they need to use it. Apparently the times that the system is down are not intrusive enough to detract from the perception that the system is generally available.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents (%)
Poor	2	4.7
Good	26	60.5
Excellent	15	34.9

How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents (%)
Rarely	35	81.4
Sometimes	8	18.6

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	29	67.4
Sometimes	12	27.9
Often	1	2.3

How often is the system's data out of date?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	3	7.0
Rarely	26	60.5
Sometimes	14	32.6

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

	Number of Respondents	Percentage of Respondents (%)
More Difficult	3	7.5
About the same	5	12.5
Easier	32	80.0

The eligibility workers think the system's data and computations are reasonably accurate, although some areas for improvement are apparent. Although most feel that cases are rarely terminated in error, a substantial proportion feel that eligibility is incorrectly determined more than rarely. In addition, one-third think the data available for matching is out-of-date more than rarely. However, most of the respondents feel the current system makes it easier to calculate benefits accurately.

Ease of Use

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	24	55.8
Sometimes	18	41.9
Often	1	2.3

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	18	41.9
Sometimes	24	55.8
Often	1	2.3

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	27	64.3
Rarely	10	23.8
Sometimes	5	11.9

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	4	9.3
Rarely	34	79.1
Sometimes	5	11.6

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	3	7.0
Rarely	34	79.1
Sometimes	4	9.3
Often	2	4.7

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	6	14.6
Rarely	27	65.9

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	24	60.0
Rarely	15	37.5

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	33	76.7
Sometimes	8	18.6
Often	1	2.3

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	32	74.4
Sometimes	10	23.3

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	35	81.4
Sometimes	7	16.3
Often	1	2.3

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	36	83.7
Sometimes	7	16.3

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	34	79.1
Sometimes	8	18.6

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	18	41.9
Rarely	20	46.5
Sometimes	4	9.3
Often	1	2.3

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	31	72.1
Sometimes	9	20.9
Often	2	4.7

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	36	83.7
Sometimes	3	7.0
Often	4	9.3

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	28	65.1
Sometimes	11	25.6
Often	3	7.0

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	31	72.1
Sometimes	11	25.6
Often	1	2.3

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	4	9.3
Rarely	26	60.5
Sometimes	12	27.9
Often	1	2.3

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	2	4.7
Rarely	24	55.8
Sometimes	15	34.9
Often	2	4.7

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	2	4.8
Rarely	29	69.0
Sometimes	10	23.8
Often	1	2.4

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

	Number of Respondents	Percentage of Respondents (%)
More Difficult	3	7.5
About the same	5	12.5
Easier	32	80.0

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	29	74.4
About the same	7	17.9
Easier	3	7.7

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	4	10.3
More Difficult	1	2.6
About the same	8	20.5
Easier	26	66.7

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	8	20.0
More Difficult	3	7.5
About the same	7	17.5
Easier	22	55.0

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	27	69.2
More Difficult	1	2.6
About the same	4	10.3
Easier	7	17.9

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.5
More Difficult	4	10.0
About the same	3	7.5
Easier	32	80.0

The eligibility workers think that the system is easy to use in general. They report rarely having difficulty performing most of their usual functions. The only area in which the workers indicate some difficulty is in obtaining necessary information from the system. However, the system apparently poses some difficulties for the workers in learning to use it, which may indicate that training was inadequate more than that the system is difficult to learn to use.

FSP NEEDS

Worker Satisfaction Levels

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	1	2.3
Sometimes	6	14.0
Often	35	81.4

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	20	46.5
Sometimes	16	37.2
Often	7	16.3

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	27	62.8
Sometimes	12	27.9
Often	3	7.0

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

	Number of Respondents	Percentage of Respondents (%)
Less	5	12.5
About the same	21	52.5
More	14	35.0

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

	Number of Respondents	Percentage of Respondents (%)
Less	5	12.5
About the same	19	47.5
More	16	40.0

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

	Number of Respondents	Percentage of Respondents (%)
Less	14	35.0
About the same	13	32.5
More	13	32.5

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

	Number of Respondents	Percentage of Respondents (%)
Less	2	5.0
About the same	7	17.5
More	31	77.5

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

	Number of Respondents	Percentage of Respondents (%)
Less	3	7.5
About the same	14	35.0
More	23	57.5

How would you rate the current system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents (%)
Worse	1	2.5
About the same	4	10.0
Better	35	87.5

The eligibility workers are generally satisfied with the system. Most of them feel the new system is better than the old system, including feeling that they get more work done and are more efficient than when they used the old system. In addition, many (35 - 40 percent) report finding work more satisfying and/or more pleasant with the new system than with the old system. However, there is a subgroup among the workers that think the system makes their jobs more difficult, with 35 percent of the workers feeling the system is more of a problem than a help sometimes or often, 16 percent feeling that the system often adds stress to their jobs, and 33 percent finding work more stressful with the new system than with the old. It might be possible to provide additional training to this group of workers to make them feel more comfortable with the system.

Client Service

How often is expedited service difficult to achieve?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.3
Rarely	37	86.0
Sometimes	3	7.0
Often	2	4.7

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents (%)
Rarely	40	93.0
Sometimes	3	7.0

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	6	15.0
About the same	6	15.0
Easier	28	70.0

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 (%)
Worse	2	5.0
About the same	21	52.5
Fewer	17	42.5

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 (%)
Worse	4	10.0
About the same	20	50.0
Better	16	40.0

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

	Number of Respondents	Percentage of Respondents (%)
About the same	11	27.5
Less	29	72.5

Under the new (current) system, how would you rate the number of different places a client must go in order to obtain benefits?

	Number of Respondents	Percentage of Respondents (%)
About the same	26	65.0
Better	14	35.0

The eligibility workers think the client receives better service with the new system than with the old system. Expedited service is rarely difficult to provide and the burden on the client is lessened.

Fraud and Errors

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	9	22.5
More Difficult	1	2.5
About the same	19	47.5
Easier	11	27.5

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

	Number of Respondents	Percentage of Respondents (%)
More	6	16.2
About the same	8	21.6
Fewer	23	62.2

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.7
More	5	13.5
About the same	24	64.9
Fewer	7	18.9

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	2.7
More	5	13.5
About the same	18	48.6
Fewer	13	35.1

Most of the eligibility workers think that there is about the same amount of fraud under the new system as under the old, although some think there is less fraud under the new system. However, a vast majority of the workers think there are fewer errors made with the new system than with the old.

ADDITIONAL COMMENTS MADE BY RESPONDENTS ON SURVEYS

Several issues were noted of interest. First, several respondents mention that the notices generated by the system are confusing and sometimes unnecessary. Second, a respondent noted that more training on the system would have been very helpful. Third, one respondent brought up the point that the new system has resulted in layoffs.

The most overwhelming impression gotten from these comments, however, is that the workers are very happy with the current system and feel that it helps them and makes their jobs easier, both in terms of their job burden (paperwork, caseload, etc.) and in terms of the service they can provide to the client.

APPENDIX C

STATE OF TENNESSEE

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results to 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 Tennessee. In other words, these responses do not necessarily represent a "true" description of the situation in Tennessee. For example, the results presented regarding the response time of the system reflect the workers' perception about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The survey was sent to 30 local office supervisors. The following table summarizes the potential population size, and the final size of the sample who responded.

Number of Supervisors in Tennessee	Number Selected to Receive Survey	Percentage Selected
316	30	9.5%
	Number Responding to Survey	Response Rate
	14	46.7%

Although the proportion of supervisors selected to receive the survey is small, they were selected randomly so their perceptions should be representative of the population of supervisors in Tennessee. However, the response rate of 47 percent is low, producing a small sample whose responses may not be representative of supervisors in Mississippi.

Summary of Findings

Most of the supervisors think the system is very good and helps them in their jobs. They report that their own personal job satisfaction and efficiency has increased, and that their ability to carry out their management tasks also has increased. In addition, most believe the service received by the client is at least as good under the current system as under the old, and many think client service is better under the current system.

However, there is a small group of supervisors who do not like the

system, finding that it increases their stress levels and makes their jobs more difficult. A few even believe that client service has been hurt. It is not clear whether these supervisors have legitimate, useful complaints about the system or whether they are just more uncomfortable using a computer system and simply need more training or experience on the system to become more comfortable.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents (%)
Poor	1	7.1
Good	12	85.7
Excellent	1	7.1

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	7.1
Poor	4	28.6
Good	9	64.3

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents (%)
Rarely	2	14.3
Sometimes	9	64.3
Often	3	21.4

The supervisors who responded think the system's response time is

generally good, although a substantial proportion (29 percent) think the peak response time is poor. Most respondents think the system response time is too slow sometimes, with the number who think it is rarely too slow balancing the number who think it is often too slow.

Availability

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

	Number of Respondents	Percentage of Respondents (%)
Sometimes	1	7.1
Often	13	92.9

How often is the system down?

	Number of Respondents	Percentage of Respondents (%)
Rarely	3	21.4
Sometimes	10	71.4
Often	1	7.1

The supervisors who responded think the system is generally available, with only 1 thinking it is often down.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents (%)
Poor	2	14.3
Good	9	64.3
Excellent	3	21.4

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	14.3
Easier	12	85.7

The supervisors who responded generally find the information and algorithms of the system to be accurate. Almost all of them think it is easier to calculate benefit levels accurately with the new system and almost all 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	3	21.4
Sometimes	11	78.6

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	6	42.9
Sometimes	7	50.0
Often	1	7.1

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	10	76.9
Rarely	2	15.4
Sometimes	1	7.7

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	13	92.9
Sometimes	1	7.1

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	64.3
Sometimes	5	35.7

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	3	21.4
Rarely	6	42.9
Sometimes	5	35.7

How often do you have difficulty determining monthly reporting status ?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	10	76.9
Rarely	2	15.4
Sometimes	1	7.7

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents (%)
Rarely	11	78.6
Sometimes	2	14.3
Often	1	7.1

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

	Number of Respondents	Percentage of Respondents (%)
About the same	3	21.4
Easier	11	78.6

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	13	92.9
Easier	1	7.1

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

	Number of Respondents	Percentage of Respondents (%)
About the same	3	21.4
Easier	11	78.6

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	4	28.6
More Difficult	1	7.1
About the same	1	7.1
Easier	8	57.1

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	13	92.9
About the same	1	7.1

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

	Number of Respondents	Percentage of Respondents (%)
More Difficult	1	7.7
About the same	3	23.1
Easier	9	69.2

The supervisors think the system is easy to use, although some functions seem to be easier to use than others. For example, almost all have rare difficulties terminating and restoring benefits, although most (79 percent) have some difficulties obtaining necessary information from the system. In addition, although only one supervisor reports often having difficulties in learning to use the system, half reporting having difficulties sometimes. Almost everyone feels the new system to be easier to use than the old one.

FSP NEEDS

Supervisor Satisfaction Levels

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

	Number of Respondents	Percentage of Respondents (%)
Sometimes	3	21.4
Often	11	78.6

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	4	28.6
Sometimes	6	42.9
Often	4	28.6

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

	Number of Respondents	Percentage of Respondents (%)
Less	3	21.4
About the same	3	21.4
More	8	57.1

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

	Number of Respondents	Percentage of Respondents (%)
Less	2	14.3
About the same	5	35.7
More	7	50.0

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

	Number of Respondents	Percentage of Respondents (%)
Less	2	14.3
About the same	6	42.9
More	6	42.9

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

	Number of Respondents	Percentage of Respondents (%)
Less	2	14.3
About the same	3	21.4
More	9	64.3

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

	Number of Respondents	Percentage of Respondents (%)
Less	1	7.1
About the same	5	35.7
More	8	57.1

How would you rate the current system in comparison to the previous system?

	Number of Respondents	Percentage of Respondents (%)
Worse	1	7.1
About the same	2	14.3
Better	11	78.6

Most of the supervisors who responded think that the current system is better than the old one, making their work more pleasant and satisfying, and making them more productive and efficient. However, most also feel that the system adds stress to their jobs at least sometimes, with a substantial proportion (29 percent) thinking it adds stress often and 43 percent thinking the current system makes their job more stressful than using the old system.

Management Needs

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	7.1
Poor	4	28.6
Good	8	57.1
Excellent	1	7.1

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

	Number of Respondents	Percentage of Respondents (%)
Poor	1	7.1
Good	6	42.9
Excellent	7	50.0

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	7	50.0
Rarely	4	28.6
Sometimes	3	21.4

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	6	42.9
Rarely	5	35.7
Sometimes	3	21.4

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

	Number of Respondents	Percentage of Respondents (%)
Less	1	7.1
About the same	5	35.7
More	8	57.1

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	6	42.9
Easier	8	57.1

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

	Number of Respondents	Percentage of Respondents (%)
More Difficult	4	28.6
About the same	3	21.4
Easier	7	50.0

Most of the supervisors responding think the system helps them in their management tasks, with 64 percent thinking the reports produced by the system are good or excellent. However, there is a

difficult: 29 percent think the reports produced by the system are poor quality and it is more difficult to evaluate local office efficiency. Almost everyone thinks the support provided by the technical staff is good or excellent.

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 (%)
About the same	5	35.7
Easier	9	64.3

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

	Number of Respondents	Percentage of Respondents (%)
Worse	2	14.3
About the same	3	21.4
Better	9	64.3

Most of the supervisors think the client is being served at least as well with the current system as with the old, and many think the client is being served better. However, two respondents apparently think the client is hurt by the current system.

Fraud and Errors

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	4	28.6
More Difficult	2	14.3
About the same	6	42.9
Easier	2	14.3

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

	Number of Respondents	Percentage of Respondents (%)
Worse	4	28.6
About the same	3	21.4
Better	7	50.0

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	7.1
Worse	2	14.3
About the same	7	50.0
Better	4	28.6

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

	Number of Respondents	Percentage of Respondents (%)
Not Applicable	1	7.1
Worse	1	7.1
About the same	9	64.3
Better	3	21.4

Most of the supervisors think the current system does no better than the old system in fraud detection, although it does better in error detection. Once again, there is a substantial subset of supervisors who think the system does worse in both fraud and error detection.

ADDITIONAL COMMENTS MADE BY RESPONDENTS ON SURVEYS

All of the additional comments are positive in tone, with the respondents feeling that the system improves client service and helps the workers they supervise do their jobs better. Several specific items might be useful: (1) Medicaid has caused most of the problems because it's computations are very complex, (2) cases are identified numerically in the system, rather than alphabetically, which can make caseload distribution more difficult, (3) appointment notices are not being mailed in a timely manner, and (4) the system helps workers who are better at client interaction than paperwork.