

STATE AUTOMATION SYSTEMS STUDY

SITE VISIT: AUGUST 9 - 11, 1993

WEST VIRGINIA STATE REPORT

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FINAL

Prepared for:

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STATE PROFILE

System Name: C-219, M-219, Recipient Automated Payment and Information Data System (RAPIDS)

Start Date: 1969 (C-219, M-219)

Completion Date: 1970 (C-219, M-219)

Contractor: Deloitte Touche (RAPIDS)

Transfer From: Florida (RAPIDS)

Cost:

Actual: Unknown

Projected: Unknown

FSP Share: Unknown

FSP %: Unknown

Number of Users: 708 (C-219, M-219)

Basic Architecture (C-219, M-219):

Mainframe: IBM 3090-500S

Workstations: 3270 type terminals

Telecommunications

Network: T1 lines, 19.2 BSP

System Profile:

Programs: Food Stamp, Aid to Families with Dependent Children, Medicaid

1.0 STATE OPERATING ENVIRONMENT

The Food Stamp Program (FSP) is State administered by the West Virginia State Department of Health and Human Resources (DHHR) Office of Income Maintenance (OIM). DHHR is a cabinet-level agency subdivided into three major bureaus which in turn are subdivided into

The level of unemployment in West Virginia has dropped from a high of 18 percent in 1983 to 8.3 percent in 1990. The unemployment rate began to increase again in 1991 when it rose to 10.5 percent

The annual report, *The Fiscal Survey of States*, published in October 1992, provides the following information as compiled by the National Association of State Budget Officers:

- West Virginia's nominal expenditure growth for Fiscal Year (FY) 1993 was between 5.0 and 9.9 percent, more than the national average of 2.4 percent.
- West Virginia made budget cuts of \$33.6 million by reducing expenditures on a selective basis.
- State government employment levels decreased by 0.38 percent between 1992 and 1993. Levels had decreased by 1.52 percent between 1990 and 1991.
- Additional revenue of \$32.9 million was generated by the State sales tax and a tax on tobacco products.
- The regional outlook is not promising for the Southeast region of the country as growth is slow and the recovery is still uneven.

2.0 FOOD STAMP PROGRAM OPERATIONS

The Food Stamp Program is decentralized within Economic Services and Income Maintenance within the Bureau of Human Resources.

2.1 Food Stamp Program Participation

AFDC participation has steadily increased over the last five years, with an increase of about 1,000 cases each year, until 1992, when the increase was nearly 2,000 cases. Food stamp participation increases have been much greater. Between 1988 and 1992 there was an increase of about 25,000 cases. West Virginia provided figures for 1993 (not shown in the table below) indicating an increase of 9,000 cases. Medicaid has increased by 43,000 individuals between 1988 and 1992 with another large increase in 1993 from 234,000 to 250,000 individuals. This is the result of expanded Medicaid Programs and help for pregnant women.

Table 2.1 Average Monthly Public Assistance Participation

PROGRAM	1992	1991	1990	1989	1988
AFDC					
Cases	40,132	37,987	36,049	35,749	35,475
Individuals	117,290	113,046	108,115	108,827	109,204
Foster Care	N/A	N/A	N/A	N/A	N/A
GA					
Cases	N/A	N/A	N/A	N/A	N/A
Individuals	N/A	N/A	N/A	N/A	N/A
FSP					
Households	118,858	107,282	97,540	95,511	93,720
Individuals	312,753	284,590	261,821	260,903	262,311
Medicaid	234,643	214,170	191,878	N/A	N/A

2.2 FSP Benefits Issued Versus FSP Administrative Costs

The ratio of benefits issued to FSP administrative costs has increased in this period, from 28.3:1 in 1988 to 40.3:1 in 1992.

West Virginia's average monthly benefit issuance per household over the last five years, as provided in Table 2.2, has increased since 1988.¹

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	\$181.39	\$175.73	\$166.01	\$150.04	\$148.14

2.3 FSP Administrative Costs

West Virginia's Food Stamp Program administrative costs for the past five years are provided in Table 2.3.² Total cost shows a general upward trend over the period while average cost per household has fluctuated.

¹ The number of households and benefit amounts are reported in the FNS *State Activity Reports* for each year.

² The number of households and FSP Federal administrative costs are reported in the FNS *State Activity Reports* for each year.

Table 2.3 FSP Federal Administrative Costs

	1992	1991	1990	1989	1988
Total FSP Federal Admin. Cost	\$6,235,253	\$6,324,423	\$6,065,146	\$4,948,997	\$5,828,685
Avg. Federal Admin. Cost Per Household Per Month	\$4.43	\$5.04	\$5.23	\$4.38	\$5.24

2.4 System Impacts on Program Performance

The existing automated systems have been in place for 20 years and are based on the preparation of paper input documents from which data is keyed into the system by data entry personnel. Although there is an inquiry capability for caseworkers, this capability is not consistently employed due to lack of access to terminals as well as a casework overload. The very low level of automation does little to improve the effectiveness and efficiency of program administration as demonstrated below. However, the increases in caseloads without concomitant increases in field staff must also be considered when examining the efficiency and effectiveness of program administration.

2.4.1 Staffing

Currently there are 408 eligibility workers (EW), 47 eligibility worker supervisors, 15 economic service coordinators, four regional administrators, and approximately 300 clerical staff. This staff is supported by 300 3270-type dumb terminals. There are approximately 2.36 eligibility workers and clerks for each terminal.

The current average caseload per worker is 500 cases, with some workers, such as those in Kanahwa County, handling caseloads of 800 (an unduplicated count for a case that receives AFDC, FS, and Medicaid benefits). The State feels this is a factor that contributes to West Virginia's high error rates. Most errors are due to the failure of the worker to take a necessary action, probably due to lack of time. Eventually, DHHR hopes to establish a caseload standard of 325 cases per worker.

One potential impact of the existing antiquated automated systems on the staffing levels in West Virginia may be reflected in the high worker turnover rates in the county offices. Another potential impact will take the form of staff reductions. Although there is no hiring freeze yet in West Virginia, the DHHR has committed to reducing staff by three percent over the next three years. This reduction will take place at the field level as well as at the headquarters level.

2.4.2 Responsiveness to Regulatory Changes

Of the 14 regulatory provisions shown in the Exhibit A-2.1 Appendix A, six were not implemented on time. These were:

- PA and Supplemental Security Income (SSI) exemption in a mixed household (CFR 273.8(e)(17)). The State did not implement this provision on time, but, when it did implement the provision, the change was made retroactive and restored any lost benefits. Local staff had to make the necessary changes based on the case file. Only a small number of cases were affected.
- Standard estimate of shelter expense for households with homeless members (CFR 273.9(d)(5)(i)). This provision was a low priority since West Virginia has a relatively small homeless population. When the provision was implemented it was made retroactive.
- Combined initial allotment (CFR 274.1(b)(2)) and combined initial allotment under expedited service (CFR 274.2(b)(3)). The State had difficulty implementing these changes in the computer system.
- Exclusion of job stream migrant vendor payments (CFR 273.9(c)(1)(ii)) and migrant initial month proration (CFR 273.10(a)(1)(ii)). The implementation of this change was a low priority due to the relatively small number of migrants in the State.

Of the six provisions described above, three required computer changes.

2.4.3 Combined Official Payment Error Rate

West Virginia error rates are very high, due mostly to the worker's failure to take the necessary actions. The automated system provides little support to the worker, either in the form of information or availability of computer terminals to access the system.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	10.64	11.72	11.27	11.50	10.38

2.4.4 Claims Collection

While the total number of claims established has decreased slightly since 1988, the total value of the collected claims increased significantly in 1989 and more gradually thereafter.

The State expects claims collected will improve with the new system and that the number of claims to be collected will be reduced through error reduction.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	\$2,298,195	\$2,119,369	\$2,324,597	\$2,596,243	\$2,399,190
Total Claims Collected	\$1,158,835	\$1,057,886	\$1,119,985	\$1,035,549	\$769,932
As a % of Total Claims Established	50.4%	49.9%	48.2%	39.9%	32.1%

2.4.5 Certification/Reviews

The existing system is not FAMIS certified.

3.0 OVERVIEW OF THE SYSTEM

In West Virginia, there are two major systems that support public assistance. The C-219 system serves AFDC and food stamps and the M-219 system handles Medicaid cases.

There are 300 terminals located in 38 of the 54 local offices. These are used by data entry personnel to enter application information and input changes and by caseworkers to query the database. In those counties with no computer terminals, the application information and changes are phoned into other offices for input to the system. Data entry personnel perform all data entry and change functions to the system with one exception. Supervisors in one large county have been given the capability to make address changes in the case record. Eligibility workers and supervisors who have access to a terminal are able to make inquiries to the system.

Caseworkers have been generic since 1975.

3.1 System Functionality

From a caseworker perspective there is a very low level of automation. Clerical workers are the primary interface to the system.

The State utilizes two month retrospective budgeting (i.e., March benefits are based on January income).

- **Registration.** Clients are not registered on the system before the actual application is keyed. The caseworker has the option to perform the following activities normally used to process an application, but these activities are not required and a case may be processed and entered into the system without performing any of these.
 - **Check for duplicate participation.** The EW can enter the first three letters of an individual's last name or the Social Security Number (SSN) to determine whether an individual is currently a member of a case and if so, the type of case, case number, address, and zip code for active or closed cases that have been active within the last three years. The case that is maintained in the system is the latest case information only, as no case history maintained in the system. Detailed historical information is maintained in the case file. The worker must make a note of the information presented on the screen to make the inquiry to the C-219 system. In very large offices, this inquiry may be made by clerical staff. The search can be conducted for each individual in the case. This function is optional. If the worker does perform this activity and finds an entry for an individual and if the case is still in the system, the same case number can be used and only the changes would need to be coded for entry into the system. The system does not automatically check for duplicate participation nor does the system automatically check for duplicate SSNs. If the caseworker does not do this, it is possible to create a duplicate record in the system.
 - **Department of Motor Vehicles (DMV) .** Workers have the capability to make inquiries against the DMV file but few workers know how to perform this on-line inquiry. The same is true for other on-line inquiries.
- **Eligibility Determination.** There are currently two types of applications being used in West Virginia. One form is designed to be completed by the worker during the interview, with the data entry codes to be completed later by the caseworker for entry by clerical staff. This form is currently being used throughout the State. The second form is one that was designed at the request of the Secretary of the Department of Health and Human Resources of West Virginia. This form is designed to be completed by the client. Data entry code sheets are prepared separately by the caseworker for use by the data entry person. The second form is being pilot tested in two counties.

If retroactive changes must be made to a case, such as those necessary when new legislation is implemented retroactively, the caseworker must calculate the changes based on the case file information and prepare a data entry log for entry of any

changes by the data entry staff. This is because the C-219 system does not maintain case histories.

Caseworkers are responsible for determining eligibility. After eligibility has been determined for the new applicant, the application is entered into the system.

- **Benefit Calculation.** The system calculates the amount of the benefits, based on the gross income information and other information. The worker does not verify the benefit amounts once they are calculated by the system. If there is a combined issuance month, the worker must calculate the initial month's benefit amount and, if it is prior to cut off for the second month, the system will calculate the next month's benefits and combine the two amounts. If, however, it is after the cutoff for the second month, the worker must calculate both. The system can identify cases that are above the net income limit and will reject these cases before the benefits are issued. The system does not apply the gross income test.
- **Benefit Issuance.** West Virginia has 100 percent mail issuance from the central office. The system determines the coupon books to be sent and creates a file that is used to automatically pick the correct coupon books and stuff them into envelopes for mailing.

If coupons are undelivered, the client completes two affidavits. One is mailed to the central office. The other is transmitted with an issuance code that is used to link the replacement to the original document number.

Expedited issuance is generally possible within the 5-day time frame, although there have had some problems in some counties. The delays may be due to the need to phone in the expedited issuance to another county office or be related to the information that needs to be transmitted.

- **Notices.** Combined notices are sent for FSP and AFDC and are generated by the central office. Notices are sent reflecting eligibility results, warnings that monthly reports have not been received, benefit increases or reductions, and notices of adverse action or closure. The type of notice to be sent is determined by the system based on a code that is provided by the EW for entry into the system. The only notices that are sent out by the workers are those indicating that incomplete information was provided in the monthly reports.

Each notice provides a citation of the policy manual as well as a computation sheet with every change in the case. The information, as well as the format for the presentation of the information, has been determined by a court order. For instance, the notice must provide full text as to the change. Check boxes cannot be used.

- **Claims System.** The claims collection system, the Automated Repayment and Tracking System (ARTS), is a separate system. This system is accessed through

the mainframe. The EW enters information into a form indicating the cause of the overpayment or underpayment and whether fraud is suspected. The form is input by the repayments officers (who are the same classification as eligibility worker supervisors). Repayments officers are located in most offices although some offices have more than one officer who serves multiple counties. These staff members are supervised by the Investigations and Fraud Unit which falls within the Inspector General's Office.

The claim system appears to be awkward to use. There are four screens in which information for multiple claims can be entered. Before moving to the next screen, the first screen must be cleared and the same repayment number must be reentered into each screen to enter the claim information. ARTS computes the amount subtracted each month and the remaining balance.

Caseworkers enter a repayment code into the case that is entered on the C-219 system. The C-219 system triggers the amount of the recoupment and registers the payment against ARTS.

- **Computer Matching.** Once cases have been certified, the caseworker receives weekly updates and one consolidated monthly printout that provides Income and Eligibility Verification System (IEVS) compensation matches. Before certification, the worker can obtain a wage history and unemployment compensation information. The Internal Revenue Service (IRS), Benefit Earnings Exchanges System (BEERS), DMV, and Beneficiary Data Exchange (BENDEX) are not used effectively in West Virginia. The State reported that workers do not employ the on-line inquiry capabilities of the system to the extent available. This is due to the lack of access to a terminal, familiarity with the inquiry procedures for the on-line databases, time availability.

For SSI benefits that are provided to the aged, blind, and disabled, the Department has a joint application process with the Social Security Administration (SSA). SSA takes the application and sends it to the Department to process. When it shows up on the State Data Exchange (SDX), the worker must then open a case for input to the M-219 system for the issuance of a medical card.

After certification, the worker relies, for the most part, on monthly reporting.

Most discrepancies in matching are related to incorrect SSNs or incorrect names, either due to input errors or because the client is not using the same name that is in the file. Whenever there is a discrepancy that appears on the printout, the worker enters a code into the case change form only if there is a change made to the case. The system does not require that each discrepancy be checked. Any monitoring of the printouts and tracking of match resolutions is performed by the supervisor based on manually completed reports developed from a review of the printouts.

Whenever a code is entered for a change of address, the system automatically sends a letter to the client requesting the client to provide information on his or her new utility, heating, and cooling costs.

- **Alerts.** The system has no on-line alerts for workers.
- **Monthly Reporting.** All monthly reporting forms are sent to clients by the central office. The EW determines whether monthly reporting is required for a client and enters a code into the change request form. The monthly reports are returned to the local office. The information from the monthly report is entered into the system by either the caseworker or a specialized worker. If no form is received, based on the code provided by the EW, the system sends a notice to the client. The worker makes changes to the case information by entering the change information onto a printout listing all case information for all cases (referred to as a "dump sheet"). The EW makes the changes on the sheet for entry into the system by data entry staff. This listing is used by supervisors to show what has been done. The listings are turned into supervisors at the end of each month. They are then reviewed by the coordinator and the information is reported to the regional administrators. The actual monthly report goes into the case file.

If incomplete monthly report information has been received, the EW prepares a handwritten notice with the specific missing information and mails this to the client.

West Virginia utilizes two-month retrospective budgeting based on information contained in the monthly reports. Currently, State staff do not plan to drop monthly reporting or two-month retrospective budgeting when a new system is implemented.

A monthly report for January must be received by February 2 for March processing. The State is under a court order to provide a notice of adverse action, based on the failure to receive a monthly report, to the client 13 days before the end of the month, since March benefits are based on January income. The court order mandated the 13-day time frame as compared to the FSP required 10-day notice.

- **Report Generation.** The system provides the following reports to local staff:
 - Payroll Report -- shows every case, the certification numbers, the net Food Stamp income, the coupon allotment, and the warrant amount and document number.
 - Case Statistics -- provides the number of food stamp only cases, public assistance food stamp cases, medical assistance-only cases, etc.
 - Review listings -- shows cases that are due for review that month.

- Dump sheet for reviews.
- Monthly report listings.
- Printouts of mass changes.

Central office users are satisfied with the reports they receive from the system and feel that MIS is responsive to their needs for ad hoc reports, which, depending on their complexity, can be produced within days or weeks of request. Printouts and reports are sent to the local offices by the central office. Delays in the receipt of printouts sometimes occurs, a problem which has been attributed to the report distribution method.

- ***Program Management and Administration.*** The automated systems provide no other program management and administrative support.
- ***Verifications.*** The only automated verification that is performed by the system is the validation of SSNs, but the system does not check for duplicate SSNs in the system.

The need for an outstanding verification is indicated in the paper case file.

3.2 Level of Integration/Complexity

There is a very low level of system integration/complexity. There are two factors that add to the system maintenance problems that the State encounters. One is the multiple systems that support the programs, requiring complex interfaces. The other is the technical architecture of the system which is out of date, making the State very dependent upon the MIS staff who developed the systems years ago.

From a program and organizational perspective, however, there is a moderate amount of integration. Caseworkers are generic and assistance programs and Medicaid are located with the same organization.

3.3 Workstation/Caseworker Ratio

Caseworkers are permitted to make inquiries to the system, but not to perform data entry. Caseworkers must leave their work areas to locate a terminal that they can access. Four or more caseworkers share terminals, depending upon the office. In some offices, there are no terminals. There are only 300 terminals for all staff and most of these are provided to clerical staff (300) responsible for data entry.

3.4 Current Automation Issues

All program staff want to replace their existing systems with a new system. Deloitte Touche is the implementation contractor for the transfer of the FLORIDA system to West Virginia.

4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

The State is planning to transfer a currently operational (certified or nearly so) system, with modifications performed by a contractor to adapt the system to West Virginia's requirements. Minimum adaptation of the transferred software is the State goal.

4.1 Overview of the Current System

The current West Virginia PA system was developed by in-house staff in 1969 and implemented in 1970 and is highly modular. Currently there are two systems, M-219 for Medicaid and C-219 for AFDC and FSP. The systems are maintained entirely by in-house staff. The PA system is largely written in Assembler and uses a direct access retrieval methodology.

The current PA system consists of a manual process for eligibility determination with automation support for issuing benefits, producing reports, maintaining historical information and interfacing with a variety of other agencies and systems. The M-219 and C-219 systems are on-line systems that maintain data on all active and certain inactive cases and support inquiry, reporting, and benefit calculation and issuance. The systems support inquiry and input from approximately 300 3270-type terminals located in 38 locations throughout the State and at the central office. Data input into these systems originates with the local office economic service workers who encode the data on paper forms. Data from the paper forms is entered into the system(s) by local data entry operators. If a client needs expedited service, the data is phoned into a central site to have a case number assigned.

Statewide, both the C-219 and M-219 systems process an average of over 200,000 input forms monthly to establish new clients, update the status of eligible clients, and cancel ineligible clients. Terminal inquiries, input of one-time payments, notifications to hold or redirect checks, and electronic messages account for another 550,000 transactions monthly.

The deficiencies of the current environment fall into two major categories:

- Deficiencies resulting from the limitations of the functionality, such as lack of a registration function, and lack of automation.
- Deficiencies resulting from inefficient/ineffective interfaces with other systems and programs.

4.2 Justification for the New System

West Virginia expects to achieve the following benefits from a new automated system:

- Payment error reduction in the AFDC, Food Stamp, and Medicaid Programs.
- Improved worker efficiency through on-line entry and access to case data and the elimination of time consuming paperwork; the use of system edits, alerts, and notices will improve worker efficiency.
- Elimination of manual preparation of forms and entry of the data into the present system by data entry operators.
- More consistent application of program policy, with workers supported by an on-line policy manual which provides more efficient policy dissemination.
- Increased food stamp recoupment and recovery activity through increased error detection capabilities and automated recoupments.
- Improved interface between public assistance systems and the Child Support Enforcement personnel, resulting in increased collections.
- Improved data availability to program managers.
- Rapid policy implementation.
- Improved service to clients.
- Improved work environment and morale.

RAPIDS will be an integrated, on-line, statewide automated system that consolidates support for the AFDC, Food Stamp, and Medicaid Programs with the capability to add other programs in the future.

4.3 Development and Implementation Activities

West Virginia formed a project team of MIS and user management and staff in 1991. This group submitted a planning APD in September 1991. A planning contractor was approved in May 1992. The contractor conducted a feasibility study, capacity study, and alternatives analysis, and submitted an IAPD and a request for proposals (RFP). These were approved and the project was on track until the selection of a vendor as a result of the RFP.

One of the few constraints on the development effort was an aversion to distributed

feeling that technology may be too new for a FAMIS system, the lack of MIS control after implementation, and the desire for a "tried and true approach" to a new system which would maximize opportunity for success.

Another development concern is the condition of the remote sites. The project will pay for all upgrades to the sites, establish a one-to-one terminal to worker ratio, and construct interview booths.

The staff will have to be trained in computers. Some of them have begun taking keyboard training now.

The contractor is on a 36 month contract; 24 months for development and implementation and another 12 months of support. Maximus is the contractor for APDs, technical advice, and contract monitoring for development. The State did not feel it had enough expertise in large MIS/ADP projects to proceed without a contractor.

4.4 Conversion Approach

West Virginia will require the contractor to develop software to convert all M-219 (Medicaid) and C-219 PA cases to the RAPIDS format. The State plans to issue benefits from this integrated file until recertification time. At recertification, the worker will be responsible for filling in all outstanding information to complete the RAPIDS data requirements. The State does not plan any manual intervention on the part of the worker prior to RAPIDS implementation.

Currently 127,000 food stamp cases, affecting close to 400,000 individuals in the State, are distributed among 408 workers. Additionally, over 120,000 AFDC individuals and 250,000 Medicaid individuals are assigned to the same 408 workers.

To ensure that the conversion of the current data is accurate and consistent, DHHR has begun to develop methods for organizing the current files. During the design and development phases of the project, 40 conversion specialists will be hired to support the manual efforts required to convert the current files in each local office. These conversion specialists will also be trained as eligibility workers during this period to temporarily fill the positions of state staff during training.

In addition, the conversion specialists will be utilized during acceptance and pilot testing to assist state personnel in validating conversion results. Once this support is no longer required at the end of the statewide implementation phase, these contractual positions will be eliminated.

An automated conversion of the current C-219/M-219 eligibility files will be made prior to pilot and throughout statewide implementation. During the design phase, the transfer agent and the State project team will develop conversion specifications for each file and identify the requirements for integration of the files. Decisions will be made regarding edit criteria, default values, and error exceptions. Data will be converted to the maximum

extent possible realizing, however, that the current files do not contain all the data that will be required by RAPIDS. The conversion programs will be designed to ensure that accurate and adequate data is converted to issue benefits from RAPIDS until the individual cases are fully updated by the worker.

Cases for the pilot counties will be converted prior to the pilot test. Cases for all other counties will be converted prior to the statewide implementation. During the pilot and the six months of statewide implementation, as workers make a change to a case or conduct a redetermination, recertification, or review of the case, they will be required to enter all additional data required by RAPIDS. It is anticipated that all cases will be fully converted to RAPIDS within the statewide implementation phase.

After three months of user acceptance testing and three months of pilot testing, RAPIDS will be implemented statewide in the remainder of the counties on a phased schedule.

4.5 Project Management

The Project Manager has a program background but more recently was assigned to the department administrative functions. His knowledge of the State processes is critical to the success of the project and his ability to work with contractors is also crucial. He reports directly to the Secretary of DHHS.

The State believes that the key to a successful effort is to build a core staff whose background and experience complement each other. The Project Manager has an assistant that is detail oriented, a Program Manager that has years of field experience, a technical advisor with years of experience with these types of projects, and training staff that will work with the vendor. There are also 18 to 20 other staff members representing Program Quality Control; Medicaid; Fraud; field operations; Medicaid Management Information System (MMIS); finance; AFDC; and FSP, and Maximus contract staff. The key staff met daily when defining the requirements. There was a small group involved in contract negotiations. Maximus did the Implementation APD, but all changes and times were presented to the group of 18 key individuals.

4.6 FSP Participation

The Food Stamp Program is integrated with other public assistance programs within the Office of Income Maintenance. Program staff have participated in the RAPIDS planning and procurement. Maximus was the State planning contractor and it met with representatives of county offices, both as a group and individually. Meetings were held in local offices as well as in the central office. Maximus was responsible for the preparation of the Implementation APD, for the preparation of the RFP (released in July 1992), and for the evaluation of proposals (November 6, 1992). Maximus was also responsible for monitoring the resultant contract. Users evaluated proposals and the committee selected the successful bidder, choosing the lowest bidder, Deloitte Touche, for the transfer of the FLORIDA system.

The eight people on the team that reviewed alternative systems included MIS and IS&C staff; policy, field, and district level representatives; and project management staff.

Once development has begun, more user participation will be needed for training and conversion.

4.7 MIS Participation

There is a representative from MIS on the 18 member key project team. MIS management and staff have expressed concern that MIS resources may be inadequate to support the new development. There is also concern that the support for the current system will suffer since State staff should be an integral part of the development effort with the contractor.

For the new system, a contractor will do the analysis, programming, and testing with State MIS participation. Project management has new positions allocated for additional MIS staff but is currently reluctant to hire until the court case is settled. The number, level, and technical background for each of these new staff will be determined by MIS and project management.

4.8 Problems Encountered During Development and Implementation

RAPIDS development is starting a year later than originally planned, at rates that are in the second year schedule. It is also a concern that the level of contractor experience and expertise may suffer because of the delays.

The State became more aware of the conflict between Federal agency requirements during its requirements definition. The State indicated that the system would be much easier to transfer, develop, and implement if Federal agency requirements were more consistent.

5.0 TRANSFERABILITY

West Virginia visited Florida, Connecticut, and Rhode Island to consider transfer candidates and it is monitoring the Maryland, Michigan, and Washington development efforts to guide the development process. The State was influenced in its selection of States to study by the APD and the monitoring contractor, MAXIMUS.

West Virginia believes that it could have developed a system in-house at less cost than a transfer system. However, it is cognizant of the advantages of concept transfer and are looking for a transfer to insure success. West Virginia has limited its candidates to mainframe-based systems with dumb terminals because it feels that these systems are proven and give the State its best chance at success.

West Virginia identified twelve areas for analysis:

- System controlled eligibility.
- On-line interactive interview.
- System generated application.
- Programs included in the automated system (at a minimum, AFDC, food stamps, and Medical Assistance will be required in West Virginia).
- Degree of automation of the prospective/retrospective eligibility determination and benefit calculation.
- Capability to perform historical recalculations without overlaying past calculations.
- Handling of accounts receivable for recoupment and recovery processing.
- Ad hoc reporting capabilities.
- Degree of automation of notices.
- System architecture features supporting ease and cost effectiveness of maintenance and operation.
- System architecture features supporting compliance with performance requirements in the areas of response time, availability, error and disaster recovery, and the like.
 - Innovative approaches to project management and system implementation.

In addition to these requirements, West Virginia elected to review only systems that were scheduled to be in at least the pilot stage of development prior to September 1991.

Considering these factors, an initial analysis of seven systems was conducted through documentation reviews and telephone calls to the States. Based on this review, the following four jurisdictions were selected for site visits and further detailed analysis:

- Rhode Island
- Connecticut
- Kentucky
- Merced County, California

Rhode Island, Connecticut, and Kentucky were selected for their functional and technical fit to West Virginia's functional requirements and compatible technical environment. Merced County was selected to assess the feasibility of utilizing expert system technology for an eligibility system.

West Virginia obtained detailed information on system architecture, functionality, performance and resource utilization from each of the four jurisdictions under review. In addition, site visits were conducted to validate key aspects of the information supplied by current users and to assess the user interface of each system first hand. The following conclusions were reached as a result of this review:

- Relational database technology is a feasible alternative for RAPIDS and should be considered, if bid. A number of desirable features in terms of ongoing operations and maintenance of the system would result from the use of relational database technology.

- Initial capacity estimates indicate that 20 to 30 millions of instructions per second (MIPs) of mainframe capacity will be required to support West Virginia's caseload.
- Distributed processing architecture would probably not provide West Virginia with sufficient advantages to warrant the cost, time, and risk of converting from the current centralized environment.
- RAPIDS and West Virginia's Child Support Enforcement System (OSCAR) will be implemented independently, with the required interfaces established. Full integration of these two systems will not be an objective of either of the projects.

The winner of the RAPIDS implementation contract, Deloitte Touche, submitted a proposal to transfer the Florida system, FLORIDA, to West Virginia. Since West Virginia personnel had visited Florida to examine the system and had determined that the system met the requirements listed above, this proposal was accepted.

6.0 SYSTEM OPERATIONS

The following section provides a description of the West Virginia C-219 and M-219 systems. The description includes a profile of system hardware and a discussion of the operating environment.

6.1 System Profile

- Mainframe IBM 3090-500S, 85 MIPS, 64 multiplexor channels, 512 MEG memory
- Disc 3880/3890 Controller units (2/3)
3380 Disk Storage Units (30)
- Tape STK 4410 silo (3)
STK 4674 (2)
Track tape drives (9)
- Printers IBM 3800 Laser (1)
STK 5000 Impact Printers (2)
IBM 3262 Impact Printer (1)
- Front Ends 3725 Communication Processors (3)
- Workstations IBM 3279 terminals, being replaced by DOS compatible in anticipation of RAPIDS
- Telecommunications Network Backbone of T1 lines (5)

6.2 Description of Operating Environment

The operating environment of the food stamp system (C-219) consists of several components. This section describes these components, which include the current operating system, maintenance environment, telecommunications, performance, response time, and downtime. This section also discusses the future of the system.

6.2.1 Operating Environment

The on-line system is available from 7 a.m. to 7 p.m. The batch window typically is open from 11 p.m. to 7 a.m. Since the implementation of the cartridge tapes, the batch cycle is usually less than five hours and the monthly cycle is five to eight hours.

The IBM 500 has 5 central processing units (CPUs) operating at 85 MIPS, averaging 85 percent capacity (closer to 99 percent at month-end).

The 4440 STK silos work from a cartridge tape library of 28,000 cartridges, with a range of retrieval times from 20 seconds to 5 minutes. The latter is only necessary if the tape cartridge is not in the current silo.

The State currently uses IBM's MVS/ESA operating system with an IMS database. IMS development is currently frozen. All development will be in DB2 as the State found that DB2 was easier to develop and maintain. Approximately 1 million IMS transactions are processed daily along with some DB2 and VSAM transactions. Each DB2 transaction generates 20 DB input/outputs (I/Os) -- a non DB2 transaction will generate 8 to 9 I/Os and an average throughput of 900 I/Os per second.

Disaster recovery is planned for with a hot and cold site. The hot site is being tested in October 1993 via an initial program load. The ability of the hot site to handle OSCAR is the current concern. Security is provided through RACF and the data is secured to the file level. All transactions are tracked by user, signer, transaction, and record accessed for audit purposes.

An inventory of State hardware is included in Appendix A.

6.2.2 State Operations and Maintenance

The Statewide help desk is available from 7 a.m. to 7 p.m., six days a week. The State is implementing an auto scheduler and auto operations function that will cut the operations staff complement and provide additional support to the help desk. The system is monitored both by DHHS MIS and the State Data Center.

Program staff are able to retrieve reports using SAS from a VSAM database. This off-line reports file is refreshed monthly. There is also the capability to retrieve data from the weekly backup tape. MIS codes all repeating reports in COBOL. MIS also retrieves SAS reports for management and program staff. The on-line system is coded in

Assembler and the batch programs are in COBOL. There are 10 programming staff that support C-219 and 2 other DHHR systems. Assembler programmers are difficult to find, train, and keep. There are only two on board including the manager. One factor that helps retain staff is the level of security that State employment, as opposed to private industry, offers. In addition, the State offers good fringe benefits, adequate salary levels, and some opportunity for advancement.

System documentation for the old C-219 system is almost nonexistent. It was lost during a move. The new system is well documented but there are a few programs without source code. The Assembler system is very modular with only two programs exceeding 4K in size. There are currently 45 to 50 requests on backlog.

The C-219 system uses direct access retrieval. This makes the on-line very fast and efficient. The system is highly modular and elegant in its simplicity. This keeps maintenance cost to a minimum and facilitates changes when they occur. MIS uses SAS to get ad hoc reports and utilizes a screen generator.

There are severe hardware shortages in MIS. The equipment consists mainly of used pieces from other departments. Personal computers (PCs) are used infrequently and only two have access to the mainframe via IRMA boards.

There is no formal change control committee. Each program area has its own liaison with MIS. There are two analysts in MIS who are also managers. Written requests for changes come from program areas. Priority is assigned by on an ad hoc basis. All changes go through a change process with a test database and preprogrammed test cases. MIS and the requesting department both sign off on test results.

6.2.3 Telecommunications

West Virginia has a backbone network consisting of five T1 lines. In 1993 the State will implement T3 lines to consolidate some of the current T1 backbone. The entire system is digital with the slowest line operating at 19.2 BPS. There is a fiber optic capability around the capital complex and in several locations throughout the State. There are 13 phone companies around the State but the telecommunication lines are completely digital.

The State data center monitors the network using hardware monitors and NPM. They utilize NSI and OSCAR to benchmark the system. More than 85 percent of all transactions are under 2 seconds.

The front end consists of three 3725s and one 3745 in Morgantown. The Morgantown hub serves 117 sites, the Charleston center 190 sites. Nodal equipment is Memorex-Telex, including multiplexors. The State is moving away from the 3276 compatible because of the 9.6KB local lines.

West Virginia processes an average of 1 million transactions per day from 5,000 devices on the system. Growth has been at a 20 percent rate, historically. Approximately 70,000

transactions per day were added when the absent parent enhancement was implemented. There are approximately 1 million IMS transactions per day and a few DB2 inquiries.

6.2.4 System Performance

The IBM 500 has 5 CPU processors operating at 85 MIPS and averages 85 percent capacity (closer to 99 percent during month end). This is in an uncontrolled environment. The State tested the new system in Raleigh in April 1993 and it tested out to 25 percent growth in an uncontrolled environment. The State feels it could grow another 25 percent in a controlled environment, but it would have some impact on turnaround time. When RAPIDS is implemented, the State anticipates going to an IBM 9000.

The State system processes approximately 1 million transactions daily; 55,000 of these are food stamp related. Each transaction generates 8 to 9 IMS I/Os on the average.

6.2.5 System Response

The State is able to track "end to end" response times through its diagnostic tools. The planned performance is three to five seconds. The actual performance is one to two seconds. Some transactions during peak times may extend to five seconds for normal transactions. An SSN search during peak time may extend to 10 minutes, though it is usually 5 to 10 seconds. It takes two to three days to implement a mass change in the West Virginia system. The database is purged annually of records that have been closed over 3 years.

The SSN search retrieves all names that are similar to the name being queried from across the State. The worker must choose those that are applicable. This contributes to the long response time. Both MIS and FSP users are satisfied with this response time.

6.2.6 System Downtime

The system is down several times a month. This is primarily due to local phone problems in a section of the State. This is one of the factors that led the state to implement a digital network. Workers are looking forward to RAPIDS so that they will not be dependent on phone line reliability to get their work done.

6.2.7 Current Activities and Future Plans

Last year West Virginia selected Deloitte Touche to redevelop/re-engineer their PA systems. RAPIDS will be a redevelopment of the West Virginia PA system. The database will be DB2, SQL will be used to retrieve information from the database. The users will utilize an expert system front end for eligibility and benefit calculation. The State considered requirements changes and worker productivity to be the primary reasons for redevelopment. Workers are currently expected to handle 500 to 800 cases per worker. The State's error rate is around 14 percent and the chief reason for error is worker failure to follow-up on information because of the high case load. The State

hopes an expert system front end with additional automated interfaces will alleviate a major portion of these errors and prompt removal of sanctions against the State.

7.0 COSTS AND COST ALLOCATION

This section of the report presents projected and actual development costs for RAPIDS. The detailed cost information was extracted from the most recent APDU. Actual development costs provided in this section represents planning costs associated with the RAPIDS development. Actual automated data processing (ADP) operational expenditures presented in Section 7.3 represent the costs associated with the current operation of the C-219 and M-219 on-line data systems.

Also presented in this section is a summary analysis of the current cost allocation (CA) methodology used to allocate ADP development and operational costs.

7.1 RAPIDS Development Costs

Actual development costs reported between FY 1991 and the third quarter of FY 1993 are as follows:

Table 7.1 Actual Development Costs

FY	TOTAL DEVELOPMENT COSTS	FSP SHARE (37.8%)
1991	\$99,487	\$37,606
1992	\$530,432	\$200,503
1993 (3 quarters)	\$386,084	\$145,940

Total projected development and implementation cost for RAPIDS is \$26,944,322. Table 7.2, developed from the 12/17/91 APDU, provides the detail cost components which comprise this total. The amount allocated to FSP at 37.8 percent and approved by FNS was \$10,184,954, before Federal financial participation (FFP). FNS' share of this amount at 63 percent and 50 percent funding levels was \$6,110,037.³

7.1.1 RAPIDS Development Costs by Fiscal Year

Table 7.3 presents RAPIDS projected development cost for FSP by FY. It should be noted that although projections were established beginning with FY 1992, most of these costs have not yet been incurred. (See actual development costs above.)

³ Source: Approval letter from FNS Mid-Atlantic Regional Office (MARO), 12/17/91.

TABLE 7.2 RAPIDS Projected Development and Implementation Costs

COST CATEGORY	DEVELOPMENT COSTS (MONTHS 1-18)	IMPLEMENTATION COSTS (MONTHS 19-24)	TOTAL
Direct Personnel Costs	\$ 2,609,960	\$ 487,299	\$ 3,097,259
Contractor ADP Services	8,331,800	2,982,192	11,313,992
Purchase/Lease of Hardware	1,667,035 ⁴	1,668,991	3,336,026
Purchase/Lease of Software	802,975	33,906	836,881
ADP Supplies	91,225	300,900	392,125
Miscellaneous ADP Expenses	6,942,610 ⁵	185,340	7,127,950
Training Costs	567,813	150,776	718,589
Indirect costs	99,056	22,444	121,500
TOTAL	\$21,112,474	5,831,848	\$26,944,322

TABLE 7.3 RAPIDS Development Costs Allocated to the FSP by FY

FUNDING SOURCE	FY 1992	FY 1993	FY 1994	TOTAL ⁶
FNS SHARE	\$1,012,279	\$3,717,836	\$1,379,984	\$6,110,100 (63% and 50% FFP)
STATE'S SHARE	\$619,381	\$2,631,117	\$824,456	\$4,074,954
TOTAL ALLOCATED TO THE FSP (37.8%)	\$1,631,660	\$6,348,953	\$2,204,440	\$10,185,054

7.1.2 RAPIDS Development Costs Allocation Methodology

Whenever feasible, RAPIDS development costs will be directly charged to a program. Those costs which are jointly shared by the programs are allocated using percentages

⁴ Purchased equipment is capitalized and depreciated on a straight line schedule for five years. Amount includes depreciation, hardware maintenance, and line charges.

⁵ Category includes costs related to supplies, telephone charges, and telephone installation charges for project staff, State staff travel costs, and site preparation.

⁶ Source: Memo faxed by DHHR on 9/8/93; amounts differ slightly from amounts in FNS approval letter.

based on weighted non-duplicated case counts.⁷ The percentages for AFDC, FSP, and Medicaid are 51.9, 37.8, and 10.3 percent, respectively. These percentages are currently used to allocate planning costs associated with RAPIDS and will be used to allocate all system transfer and implementation costs.

7.2 ADP Operational Costs

ADP operational costs are tracked for both manual and automated functions which support AFDC, FSP, and Medicaid. The current PA system consists of a manual process for eligibility determination and automation support for issuing benefits, producing reports, maintaining historical information, and interfacing with several other systems. The automated functions are supported by the M-219 and C-219 on-line data systems.

The majority of ADP operational costs consists of the allocated computer charges extracted from the IS&C bill. Prior to a department wide reorganization in 1992, ADP personnel costs were being allocated to FSP and added to the IS&C charges for total ADP operational cost. These costs are now being allocated through other cost centers. ADP operational costs are summarized in Table 7.4.

TABLE 7.4 ADP Operational Costs

ADP OPERATIONAL COST COMPONENT	1991	1992	1993 (to date) ⁸
MIS Personnel Charges	\$531,019	\$437,623	-
IS&C Charges	\$2,054,288	\$1,939,120	\$2,331,909
Total Operational Cost	\$2,585,307	\$2,376,743	\$2,331,909
MIS Personnel Charges - FSP	\$51,416 (average allocation % = 9.68%)	\$38,992 (average allocation % = 8.91%)	N/A
IS&C Charges - FSP	\$198,996 (average allocation % = 9.68%)	\$177,749 (average allocation % = 9.17%)	\$150,952 (average allocation % = 6.47%)
Total Operational Cost - FSP	\$250,412	\$216,742	\$150,952

7.2.1 Cost Per Case

Based on 1992 FSP operating costs of \$216,742, monthly operating costs averaged \$18,061 in 1992. The average number of FSP cases monthly was 118,858 households.

⁷ Source: RAPIDS APDU, 12/17/91.

⁸ Source: SF-269 files. Amounts cover through 6/93.

The cost per case -- the monthly operational costs divided by the number of monthly cases -- was \$0.15.

7.2.2 ADP Operational Cost Control Measures and Practices

ADP operational costs are initially entered into the accounting system for accumulation and tracking. The Accounting Division uses various reports from this system to assist in cost allocation and facilitate the preparation of Federal reports.

For example, the *STRIPS Expenditure and Budget Report* is used to extract direct and allocated costs for the Federal programs which are then entered into a time study program. The *Report on Economic Services Activities (RESA)* summarizes Random Moment Sampling percentages which are used with the time study program for cost allocation. A summary of the time study provides direct and allocated costs for each Federal program. (See Section 7.3 below for more detail on allocated costs.)

7.3 West Virginia Cost Allocation Methodologies

This section addresses the cost allocation methodologies employed for allocating ADP operational costs for the on-line data systems which support AFDC, FS, and Medicaid.

7.3.1 Cost Allocation Methodology

DHHR employs a five-step allocation methodology to allocate costs to each of its separate offices. An allocation percentage based on personnel expenditures is computed for all divisions within an office. The percentage is determined by taking each division's total salary expenditures and dividing by the total of all unallocated salaries. Each division within an office is associated with a cost center whereby costs are accumulated. The salary percentage is multiplied by the total cost accumulated in the cost center. The following steps explain the step-down allocation process.

- 1) The *STRIPS Expenditure and Budget Report* is used to extract amounts to be allocated. These amounts are entered into spreadsheets by cost center. The first allocation is performed by allocating total costs of the Secretary's office, Office of Legal Services, and Office of Communications to the offices beneath it on the organization chart.
- 2) Total costs of the Commissioners Office in the Bureau of Administration and Finance are allocated to all offices beneath it, the Bureau of Public Health and the Bureau of Human Resources and the offices beneath it; direct costs and most costs allocated to FSP fall under the Bureau of Human Resources.
- 3) Certain costs for offices under the Bureau of Administration and Finance where the costs are jointly shared (i.e., personnel, support services, financial services, MIS, budget, legislation, and regulation) are allocated. These costs are also allocated to the Office of Health Facility and Licensure and the Office of Medical

Services. The total costs of the above offices less direct computer charges and revenue management charges are allocated in this step.

4) Costs accumulated for the Division of Public Health are allocated. These costs are

Therefore, the amount appearing on the SF-269 may not represent a full quarter of operational cost.

3. a) Calculate ADP development cost by multiplying the FSP share (currently 37.8 percent) by each component of cost center, *FAMIS 567-13*. The components under this cost center include:
 - Personal Services
 - Current Expense
 - Employee Benefits
 - Equipment
 - Repairs and Benefits
 - Allocated Costs
- b) Multiply 37.8 percent times each cost component under *Joint Functions - FAMIS*. These are costs which have been allocated to the FAMIS cost center.
- c) For both steps 3(a) and 3(b), review supporting documentation for the cost to determine FFP (i.e., either 63 or 50 percent) if necessary.
- d) The total of step 3(a) plus step 3(b) equals total ADP development cost before applying FFP.
4. Obtain totals for other SF-269 columns by calculating the total cost from a particular cost center(s) on the time study.
5. After the analysis has been completed on the spreadsheets, the totals for each column are typed on a blank SF-269 form, approved, and submitted to FNS.

APPENDIX A

STATE OF WEST VIRGINIA

EXHIBITS

THE ORKAND CORPORATION

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

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to HHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91	Y	N	N
2.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(5)(i)(F)	8/1/91	Y	N	N
1.3	1: Mickey Leland Memorial Domestic Hunger Relief Act	3: Excludes as resource for Food Stamp purposes, household resources exempt by public assistance (PA) and SSI in mixed household. 273.8(e)(17)	2/1/92 *	N	N	N
1.4	1: Mickey Leland Memorial Domestic Hunger Relief Act	4: State agency shall use a standard estimate of shelter expense for households with homeless members. 273.9(d)(5)(i)	2/1/92 *	N	N	N
2.1	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(e)(5),etc.	7/1/89	N	N	N
2.2	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	2: Combined initial allotment under normal time frames. 274.2(b)(2)	1/1/90	N	Y	N
2.3	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	3: Combined initial allotment under expedited service time frames. 274.2(b)(3)	1/1/90	N	Y	N

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

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

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

**Exhibit A-6.1
State of West Virginia
Hardware Inventory**

Component	Make	Acquisition Method	Number/ Features
CPU			
3090-500S	IBM	Purchase	64 channels, 512 MB main storage,
DISK			
3390/3380	IBM	Purchase	Controllers - 5 Drives - 3380 (30)
TAPE			
Reel Tape Drives	STK	Purchase	4673 (2)
Tape Control Unit	STK	Purchase	4670 (1)
PRINTERS			
Impact	STK	Purchase	5000 (2)
Impact	IBM	Purchase	3262 (1)
Laser	IBM	Purchase	3800 (1)
FRONT ENDS			
FEPs	IBM	Purchase	3725 (3)
REMOTE EQUIPMENT			
Workstations	IBM	Purchase	3270 (300)

APPENDIX B

STATE OF WEST VIRGINIA

ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS

OVERVIEW

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

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

Description of the Sample

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

Number of EWs in West Virginia	Number Selected to Receive Survey	Percentage Selected
408	63	15.4%
	Number Responding to Survey	Response Rate
	41	65.1%

The eligibility workers selected to receive the survey were selected randomly so their perceptions should be representative of eligibility workers in West Virginia. The response rate of 65 percent is acceptable and should produce a sample whose responses are representative of eligibility workers in West Virginia.

Summary of Findings

Most of the eligibility workers are somewhat satisfied with the computer system in West Virginia. There is, however, significant disagreement with these views, with around one third of the workers reporting problems accomplishing specific tasks or difficulty using the system. About two thirds of the respondents think the computer system helps them do their jobs.

Since the current West Virginia system has been operational since 1970, comparisons between the current and previous systems would be of limited value. Responses to comparative questions, therefore, are not solicited for systems that were implemented more than five years ago.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents (%)
Poor	6	14.6
Good	33	80.5
Excellent	2	4.9

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

	Number of Respondents	Percentage of Respondents (%)
Poor	18	43.9
Good	22	53.7
Excellent	1	2.4

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	19.5
Sometimes	31	75.6
Often	2	4.9

A large majority of the eligibility workers who responded agree that the system's response time is usually good or excellent but an equal majority (81 percent) also agree that response time is sometimes or often slow.

Availability

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	2	4.9
Sometimes	20	48.8
Often	19	46.3

How often is the system down?

	Number of Respondents	Percentage of Respondents (%)
Rarely	11	26.8
Sometimes	21	51.2
Often	9	22.0

A minority (46 percent) of the eligibility workers who responded thinks the system is often available and a majority (73 percent) agrees that it is sometimes or often down.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents (%)
Poor	9	22.5
Good	28	70.0
Excellent	3	7.5

How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents (%)
Rarely	28	70.0
Sometimes	11	27.5
Often	1	2.5

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents (%)
Rarely	29	72.5
Sometimes	10	25.0
Often	1	2.5

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	14	35.9
Sometimes	17	43.6
Often	8	20.5

The eligibility workers who responded generally feel that the operations of the system are accurate. Most (78 percent) 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	11	26.8
Sometimes	25	61.0
Often	5	12.2

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	26	63.4
Sometimes	14	34.1
Often	1	2.4

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	26.7
Sometimes	10	33.3
Often	12	40.0

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	20	60.6
Sometimes	9	27.3
Often	4	12.1

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	25.0
Sometimes	13	40.6
Often	11	34.4

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	13	39.4
Sometimes	9	27.3
Often	11	33.3

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents (%)
Rarely	20	55.6
Sometimes	8	22.2
Often	8	22.2

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents (%)
Rarely	19	55.9
Sometimes	11	32.4
Often	4	11.8

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	18	48.6
Sometimes	14	37.8
Often	5	13.5

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	21	60.0
Sometimes	11	31.4
Often	3	8.6

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	23	67.6
Sometimes	9	26.5
Often	2	5.9

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	23	65.7
Sometimes	8	22.9
Often	4	11.4

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	6	30.0
Sometimes	6	30.0
Often	8	40.0

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents (%)
Rarely	4	16.7
Sometimes	8	33.3
Often	12	50.0

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	32.3
Sometimes	11	35.5
Often	10	32.3

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	19	63.3
Sometimes	8	26.7
Often	3	10.0

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	18	52.9
Sometimes	10	29.4
Often	6	17.6

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	31.0
Sometimes	12	41.4
Often	8	27.6

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	28.6
Sometimes	8	28.6
Often	12	42.9

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents (%)
Rarely	25	75.8
Sometimes	7	21.2
Often	1	3.0

On average, only 46 percent of the eligibility workers responding do not have difficulty performing the system-specific tasks such as assigning new case numbers or generating adverse action notices and an unusually high percentage, 32 percent, report that they sometimes have difficulty performing these tasks. This indicates a system that is not performing effectively.

FOOD STAMP PROGRAM NEEDS

Worker Satisfaction Levels

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	1	2.4
Sometimes	15	36.6
Often	25	61.0

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	19	46.3
Sometimes	18	43.9
Often	4	9.8

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

	Number of Respondents	Percentage of Respondents (%)
Rarely	28	70.0
Sometimes	11	27.5
Often	1	2.5

Most of the eligibility workers who responded think that the current system is a great help to them in their work (61 percent) and only 10 percent report that it adds stress to their jobs.

Client Service

How often is expedited service difficult to achieve?

	Number of Respondents	Percentage of Respondents (%)
Rarely	22	55.0
Sometimes	13	32.5
Often	5	12.5

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents (%)
Rarely	20	55.6
Sometimes	14	38.9
Often	2	5.6

A majority of the eligibility workers who responded agree that expedited service is rarely difficult to provide.

Fraud and Errors

No data are available to address fraud and errors because all the questions in this category compare the current and previous systems. Since West Virginia's system was implemented more than five years ago, comparative questions are not applicable.

APPENDIX C

STATE OF WEST VIRGINIA

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

OVERVIEW

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

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

Description of the Sample

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

Number of Supervisors in West Virginia	Number Selected to Receive Survey	Percentage Selected
47	30	63.8
	Number Responding to Survey	Response Rate
	25	83.3%

The supervisors selected to receive the survey were selected randomly so their perceptions should be representative of the population of supervisors in West Virginia. The total number of respondents is good, producing a sample whose responses should be representative of this random selection.

Summary of Findings

The supervisors generally think the system is good and that it helps them in their jobs, but significant percentages report sometimes having difficulty with various aspects of system operations.

Since West Virginia's current system has been operational since 1970, comparisons between the current and previous systems would be of limited value. Responses to comparative questions, therefore, are not solicited for systems that were implemented more than five years ago.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Poor	5	20.0
Good	18	72.0
Excellent	2	8.0

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

	Number of Respondents	Percentage of Respondents
Poor	10	40.0
Good	14	56.0
Excellent	1	4.0

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents
Rarely	5	20.0
Sometimes	18	72.0
Often	2	8.0

The supervisors who responded generally agree that the system's response time is good or excellent although the same number also feel that the system response time is sometimes too slow.

Availability

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

	Number of Respondents	Percentage of Respondents
Sometimes	6	24.0
Often	19	76.0

How often is the system down?

	Number of Respondents	Percentage of Respondents
Rarely	8	32.0
Sometimes	15	60.0
Often	2	8.0

Three quarters of the supervisors who responded think the system is generally available.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Poor	10	40.0
Good	14	56.0
Excellent	1	4.0

The supervisors who responded generally find that the information in the system is either good or excellent although a significant minority, 40 percent, think it is poor.

Ease of Use

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

	Number of Respondents	Percentage of Respondents
Rarely	9	36.0
Sometimes	13	52.0
Often	3	12.0

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

	Number of Respondents	Percentage of Respondents
Rarely	17	70.8
Sometimes	7	29.2

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

	Number of Respondents	Percentage of Respondents
Rarely	6	37.5
Sometimes	1	6.3
Often	9	56.3

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

	Number of Respondents	Percentage of Respondents
Rarely	13	54.2
Sometimes	7	29.2
Often	4	16.7

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	11	45.8
Sometimes	8	33.3
Often	5	20.8

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	12	57.1
Sometimes	5	23.8
Often	4	19.1

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents
Rarely	12	54.5
Sometimes	6	27.3
Often	4	18.2

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	12	52.2
Sometimes	10	43.5
Often	1	4.3

Most of the supervisors responding do not often have difficulty obtaining information, learning the system, or performing specific tasks but unusually high percentages report sometimes having difficulty with these functions.

FOOD STAMP PROGRAM NEEDS

Supervisor Satisfaction Levels

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

	Number of Respondents	Percentage of Respondents
Rarely	1	4.0
Sometimes	5	20.0
Often	19	76.0

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

	Number of Respondents	Percentage of Respondents
Rarely	16	64.0
Sometimes	5	20.0
Often	4	16.0

Most of the supervisors who responded (76 percent) think that the current system is a great help to them in their work.

Management Needs

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

	Number of Respondents	Percentage of Respondents
Poor	9	39.1
Good	13	56.5
Excellent	1	4.3

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

	Number of Respondents	Percentage of Respondents
Poor	7	29.2
Good	12	50.0
Excellent	5	20.8

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

	Number of Respondents	Percentage of Respondents
Rarely	6	37.5
Sometimes	5	31.3
Often	5	31.3

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	7	41.2
Sometimes	8	47.1
Often	2	11.8

Only about a third of the supervisors responding report rarely having difficulty with their management tasks; again an unusually high percentage reported sometimes having difficulty. A majority feels that the reports produced by the system and the support provided by the technical staff is good.

Client Service

questions in this category compare the current and previous