

Measuring Productivity In Accounting And Finance Offices



Joint Financial Management Improvement Program

WHAT IS JFMIP ?

The Joint Financial Management Improvement Program (JFMIP) is a joint and cooperative undertaking of the Office of Management and Budget, the General Accounting Office, the Department of the Treasury, and the Office of Personnel Management, working in cooperation with each other and with operating agencies to improve financial management practices. The Program was initiated in 1948 by the Secretary of the Treasury, the Director of the Bureau of the Budget, and the Comptroller General, and was given statutory authorization in the Budget and Accounting Procedures Act of 1950.

The overall objective of JFMIP is to improve and coordinate financial management policies and practices throughout the Government so that they will contribute significantly to the effective and efficient planning and operation of governmental programs. Activities aimed at achieving this objective include:

- Reviewing and coordinating central agencies' activities and policy promulgations to avoid possible conflict, inconsistency, duplication and confusion.
- Acting as a clearinghouse for sharing and disseminating financial management information about good financial management techniques and technologies.
- Reviewing the financial management efforts of the operating agencies and serving as a catalyst for further improvements.
- Undertaking special projects of a Government-wide nature to resolve specific problems.
- Providing advisory services in dealing with specific financial management problems.

The JFMIP plays a key role in mobilizing resources and coordinating cooperative efforts in the improvement of financial management practices, and relies on the active participation of Federal agencies to be successful.

MEASURING PRODUCTIVITY IN
ACCOUNTING AND FINANCE OFFICES

September 1981

The Joint Financial Management Improvement Program

FOREWORD

As part of a continuing effort to improve financial management in the Federal Government, the Joint Financial Management Improvement Program has actively participated in promoting productivity improvements and the use of productivity measurement systems in finance and accounting operations for some time. We have conducted workshops and issued publications on these subjects. We also have participated in the design and implementation of a productivity measurement system at the Department of Commerce.

The Federal financial management community should be rightfully proud that its productivity increased at an average rate of 2.5 percent per year between fiscal years 1966 and 1979, while the rest of the Government was struggling at an annual rate of 1.4 percent. However, Federal financial managers should not be complacent about this past achievement. They should continue to emphasize the importance of productivity and strive for greater achievements.

Productivity improvement will continue to command our interest and attention as Federal agencies operate with austere budgets. Agencies will be asked to do more with less resources. To do this, agencies need good productivity measurement systems. Yet productivity improvement is not just productivity measurement. Productivity improvement requires measurement, but more importantly, it must use measurement data to evaluate and improve operations so agencies can operate more efficiently and effectively.

This booklet describes four productivity systems--their design, implementation and use. Although these productivity measurement systems apply primarily to finance and accounting operations, the principles apply to any operations. We hope that this booklet will sufficiently stimulate financial managers to design, develop and implement productivity systems not only in finance and accounting operations but also in operating and mission activities.

In publishing this booklet, we pay tribute to the many who have pioneered and enhanced productivity improvement programs in the Government. We also acknowledge and thank the many officials in the agencies who assisted us in the preparation of the booklet. Readers of this publication are invited to comment or provide suggestions on its usefulness.

In addition, those who are aware of other meaningful and useful productivity measurement systems that could be beneficial to financial managers are encouraged to contact us. Comments and requests for copies of this publication should be sent to the Joint Financial Management Improvement Program.

Susumu Uyeda
Executive Director
September 1981

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INTRODUCTION

The declining rate of productivity growth--both in the public and the private sectors--has been blamed for many national problems such as inflation and unemployment. Moreover, in today's environment of tighter budgets, Federal managers are faced with the difficult challenge of getting the job done with less resources. To help improve productivity, managers must know how efficient and effective their organizations are performing. With good productivity measurement systems, managers can assess and improve the performance of their organizations and justify budget and resource allocations.

The Bureau of Labor Statistics annually collects productivity data for the Federal agencies through its Federal Productivity Measurement System. Organizational and agency indices are developed by the system and reported to each organization submitting the data. The Bureau, in conjunction with the Office of Personnel Management, publishes the overall measures for the Federal Government.

In fiscal year 1979, the Bureau reported that the productivity of the Federal civilian workforce increased only .5 percent. In fact, Government's productivity has only increased an average of 1.4 percent annually over the past thirteen years. This information is based on input from 50 Federal agencies representing two-thirds of the Federal civilian workforce.

Under the Bureau of Labor Statistics' system productivity and related measures are also reported for 28 functional categories which are comprised of organizations performing similar activities. One functional category is the finance and accounting area, in which the Bureau stated that productivity increased 2.6 percent in fiscal year 1979 with an average annual increase of 2.5 percent over the past 13 years. This information is based on input from 14 Federal agencies covering 20,000 employees in finance and accounting operations. This in itself is a good record, but the financial management community can do better. Also, the financial management community needs to design and apply productivity measurement systems to cover a larger portion of its workforce.

While the Bureau of Labor Statistics provides composite or aggregate productivity indices on an annual basis, managers in the agencies need a more detailed productivity measurement system to manage their day-to-day operations. Accordingly, a number of agencies have developed and

implemented productivity measurement systems. While the systems vary in approaches and techniques, managers are finding them to be indispensable tools. Some common lessons learned from the successful implementation of the productivity measurement systems include:

- Obtain top level management support and commitment before the development of the system.
- Keep employees informed about what the system will do and how they will become involved.
- Obtain participation of all involved. Participation of employees and unions will greatly aid in gaining acceptance of the system.
- Explain how the system will be used. An explanation of the purpose of the system and how management will use the data should be given to employees during system development.
- Use a top down approach. It is easier to begin with gross measures at the aggregate level and then refine these measures to yield more accurate data and to gain greater management visibility.
- Tailor the productivity measures to the system, not the system to the measures.
- Use existing systems as much as possible rather than trying to create an entirely new system. When defining measures, use data presently available in the management information system or data which can be generated easily.
- Be cost effective. In determining the magnitude of the measurement system, consider the costs involved in data collection and system development work, and weigh the costs and benefits of a sophisticated measurement system versus those for a simple measurement system.
- Keep the system as simple as possible. Use a system that is practical and easy to use. Causes for changes in productivity should be identified through the use of the measurement system.
- Design a flexible system that will enable future expansion or refinement.

--Be realistic about the system capabilities. Identify the system's shortcomings and be prepared to deal with criticism.

To share some of the success stories with you, we summarized several systems for measuring productivity in accounting and finance operations in this booklet. The National Institutes of Health's Accounts Payable Productivity Measurement provides productivity data at organizational and individual levels. Standards are set by assigning different "equivalent units" to each type of work in accordance with the difficulty in performing them. Managers use the reports generated in conjunction with employee performance evaluations.

The Resource Management System at Farmers Home Administration measures the productivity of an organizational level rather than individual productivity. Its standards are developed through direct observation of program activities in field offices. The system uses standards, workload counts, productivity computations and computer-generated reports to inform managers on the productivity of their organizational units.

The system at the Department of Commerce also measures the productivity at the organizational unit. The major functional areas identified and measured are (1) payroll processing, (2) operational accounting, (3) control accounting, and (4) general administration. This system utilizes a work sampling technique to collect labor input data.

The Social Security Administration uses a Goal and Performance Measurement System to monitor the productivity, quality and effectiveness of its operations at the organizational level. It also uses a work sampling technique to collect labor input measure data and collects output measure data through other systems.

Managers can use these systems for making key decisions to reallocate staff resources, to analyze operations and determine corrective actions and to formulate and justify executive budgets. The major emphasis in using these systems is to improve the productivity of the organization. Although these systems were developed for finance and accounting operations, the same principles can be applied to other operational areas.

ACCOUNTS PAYABLE PRODUCTIVITY MEASUREMENT SYSTEM
NATIONAL INSTITUTES OF HEALTH

BACKGROUND

The National Institutes of Health (NIH) conducts and supports biomedical research into the causes, prevention and cure of diseases; supports research training and the development of research resources; and makes use of modern methods to communicate biomedical information. The NIH is a component of the Public Health Service of the Department of Health and Human Services and has 10 Institutes (e.g., National Cancer Institute, National Heart, Lung and Blood Institute and National Institute of Aging), 2 Centers and a National Library of Medicine.

The finance and accounting services are centralized at NIH in the Division of Financial Management and organized as shown in Illustration No. 1 (page 9). The NIH's productivity measurement system is used in the Accounts Payable Section. The Accounts Payable Section is organized as a unit of the Operations Accounting Branch of NIH, reporting to the Assistant Director for Finance under the Director of Financial Management. There are 4 subsections within the Accounts Payable Section with about 10 persons in each subsection. The section examines approximately 30,000 payment vouchers monthly handling a variety of transactions (e.g., transportation requests, Government bills of lading and contracts) and a variety of documents for payment purposes (e.g., purchase orders, receiving reports, invoices, etc.).

ACCOUNTS PAYABLE PRODUCTIVITY MEASUREMENT SYSTEM

The voucher examiners of NIH process different types of vouchers in varying proportions. The types of vouchers processed vary in complexity, knowledge required, extent of examination, and consequently the time required to complete the voucher examination. Therefore, the comparison of the total numbers of vouchers processed among employees, teams, or subsections is meaningless. A more meaningful method is needed to measure and compare the work of the voucher examiners.

To do this, NIH employs the concept of measurement by "equivalent units." In order to establish "equivalent units," standard processing time for each type of voucher was first established based on engineering or time-and-motion

studies. Standard processing time is a specified amount of time necessary for an average examiner to process a voucher for payment following designated procedures and working at a normal pace.

After the standard processing time was established for all types of vouchers handled, a relationship needed to be established among them. This was accomplished by assigning different "equivalent units" to each type of voucher in accordance with the difficulty, (i.e., standard time) in processing them.

At NIH, the task of processing a single transportation request for payment was considered equal to producing one "equivalent unit" of work. The standard processing time to process a transportation request was established as 7.37 minutes. Equivalent units for all other types of vouchers were then established in relation to the transportation request by expressing their standard processing times in multiples of 7.37 minutes. For example, a travel order without advance payment has a standard processing time of 19.73 minutes, and consequently its "equivalent unit" is 2.7 ($19.73 \div 7.37$). This means that for work measurement purposes, processing 2.7 transportation requests is comparable to processing one travel order without advance payment. Illustration No. 2 (page 10) shows the standard processing times and equivalent units for all types of vouchers processed by NIH.

With the equivalent units assigned to all types of vouchers, individual employee's work performance can be measured. The first step is to count and report the quantity of each type of voucher processed by the employee. Then the equivalent unit factor is applied to each voucher type to compute the total equivalent units. The total equivalent units produced for all types of vouchers are then added to determine the total equivalent units produced by the employee in a given period. These steps are shown on the left side of Illustration No. 3 (page 11).

Next, the employee's total productive hours are determined, and the average equivalent units produced per productive hour are computed. The average equivalent units per productive hour are compared with the standard. The standard equivalent units, to be produced by an average employee working at a normal pace following designated procedures, is 8.14 ($60 \text{ minutes} \div 7.37$). Therefore, an employee must process 8.14 equivalent units per productive hour to receive a 100 percent performance rating. Greater

production, of course, would receive a commensurately higher rating and vice versa. These steps are depicted on the right side of Illustration No. 3 (page 11). Note also that the number of errors chargeable to the individual is also shown.

Once the above information is available for all voucher examiners, comparisons among individuals, teams and units are made. Illustration No. 4 (page 12) is an example report that compares individual team performance of a unit containing three teams and 19 voucher examiners. By using this report, one can readily spot individuals and teams that are performing above or below the standard level of performance. In the Illustration, only the current month's performance is shown. Actually, NIH produces this report with performance data for "first prior month," "second prior month," and "three month average." With these additional data, managers can detect favorable and unfavorable trends and take necessary action as appropriate.

NIH also uses the performance measurement system in conjunction with employee performance evaluations. For example, for quantitative performance, the following criteria are applied to employee ratings:

<u>Length of Service</u>	<u>Relation to Standard Performance</u>	<u>Applicable Time Period</u>	<u>Rating</u>
Over 1 year	over 100%	Six Successive Months	Outstanding
Over 1 year	93% - 100%	Six Successive Months	Above Average
Over 1 year	over 92%	Consistently	Satisfactory
6 months to 1 year	75% - 90%	Consistently	Satisfactory
Less than 6 months	50% - 75%	Consistently	Satisfactory

Also, qualitative performance requirements are established and used in employee ratings as follow:

<u>Length of Service</u>	<u>Percent of Errors</u>	<u>Applicable Time Period</u>	<u>Rating</u>
Over 1 year	Less than 1.0%	Six Successive Months	Outstanding
Over 1 year	1.0% - 2.9%	Six Successive Months	Above Average
Over 1 year	Less than 3%	Consistently	Satisfactory
6 months to 1 year	Less than 5%	Consistently	Satisfactory
Less than 6 months	Less than 10%	Consistently	Satisfactory

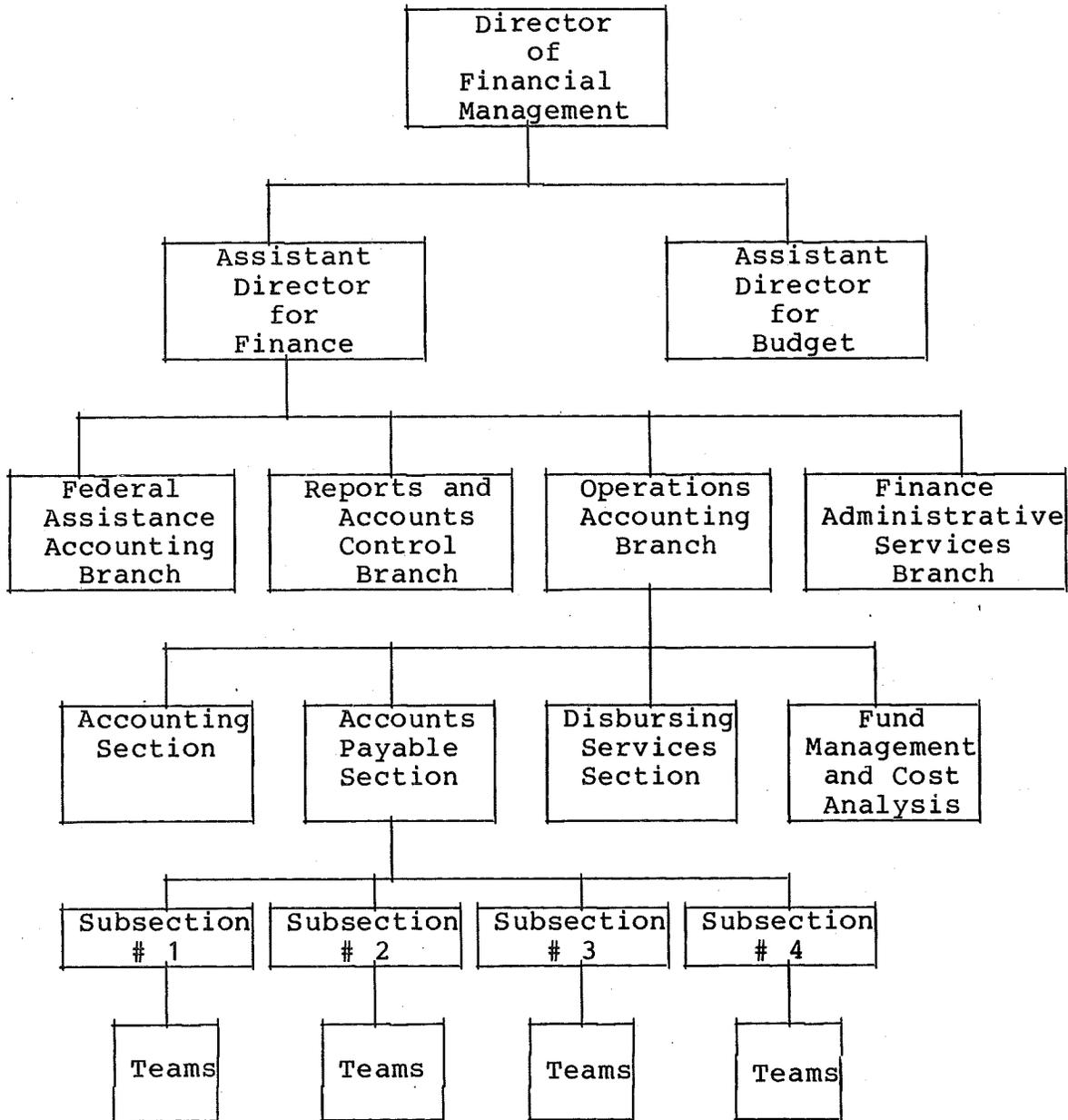
NIH procedures further provide that all files which are maintained by an examiner must be neat, and documents are to be properly filed according to current procedures with little or no misfiling. Each examiner must use the "first-in/first-out" basis for processing voucher invoices. Problem invoices are to be brought to the attention of the examiner's supervisor. No invoice should be in the files for more than 30 days without the employee taking action according to established procedures. The voucher examiner must maintain the invoices so that 90 percent or more of all invoices are processed within 30 days. If an examiner exceeds the 90 percent standard by more than 5 percent, performance is considered above average. If the standard is exceeded by 7 percent, performance is considered outstanding.

If an employee has achieved an outstanding category, consideration must be given to rewards such as cash awards, quality step increases, and commendation. NIH categorizes substandard performance into "below average, but not to a great degree" and "below average to a great degree."

When an employee is rated "below average, but not to a great degree," the individual is counseled by his immediate supervisor and specific action is recommended to a higher authority. When an employee is rated "below average to a great degree," the individual is counseled by his immediate supervisor and provided with a written summary of the counseling interview. If the individual does not improve, specific recommendations are made, in writing, to a higher authority, which could include dismissal.

NIH's productivity measurement system has not only helped increase the productivity of the accounts payable section, but also pinpointed areas in which improvements can be made. The NIH is currently automating its payment process, and will revise its productivity measurement system accordingly. The changes will include using the latest technological advances to increase the productivity of the section even further. The changes will be implemented during the summer of 1981.

NATIONAL INSTITUTES OF HEALTH
ORGANIZATION CHART
DIVISION OF FINANCIAL MANAGEMENT



<u>TYPE OF VOUCHER</u>	<u>STANDARD PROCESSING TIME (IN MINUTES)</u>	<u>EQUIVALENT UNIT</u>
Transportation Request	7.37	1.0
Cashier	8.11	1.1
Telephone Charge Order	8.91	1.2
Government Bill of Lading (Freight)	9.36	1.3
Cashier (With No Advance Payment)	9.74	1.3
Travel Advance	10.66	1.4
Contract (With Social Security Number)	10.66	1.4
Cashier (With Advance Payment)	12.96	1.8
Book Order	14.59	2.0
Purchase Order (No Record of Call)	15.65	2.1
Contract (With Employee ID Number)	16.36	2.2
Purchase Order (With Record of Call)	16.68	2.3
Travel Voucher (No Advance Payment)	19.73	2.7
Travel Voucher (Advance Payment)	20.98	2.8
Government Bill of Lading (With Household Goods)	59.00	8.0

STATISTICAL ANALYSIS BY INDIVIDUAL

NAME Team 02 EMPLOYEE F

WORKSTATION 15

PERIOD REPORTED JUNE 2 TO JUNE 28, 1980

<u>TYPE OF VOUCHERS PROCESSED</u>	<u>EQUIV UNITS</u>	<u>INVOICES QUANTITY</u>	<u>PROCESSED EQUIV. UNITS</u>	<u>TOTAL AVAILABLE HOURS</u>	<u>HOURS</u>
TELEPHONE CHARGE ORDER	1.20	170	204.00		160
PURCHASE ORDER - NO ROC	2.10	197	413.70	LESS ANNUAL LEAVE	
PURCHASE ORDER - ROC	2.30	237	545.10	LESS SICK LEAVE	8
RESEARCH CONTRACT	2.80	2	5.60	LESS OTHERS	
CONTRACT - ROC	2.30	341	784.30	TOTAL REGULAR HOURS	152
CONTRACT - NO ROC	2.20	51	112.20	PLUS OVERTIME HOURS	40
LIBRARY MOD	2.10	47	98.70	TOTAL HOURS WORKED	192
				LESS NONPRODUCTIVE HOURS	<u>67 *</u>
TOTAL INVOICES PROCESSED		<u>1,045</u>	<u>2,163.60</u>	TOTAL PRODUCTIVE HOURS	<u>125</u>

EQUIVALENT UNITS PRODUCED
PER PRODUCTIVE HOUR

17.31

PERFORMANCE RATING (17.31 ÷ 8.14)

213%

*This is a senior level employee who spends quite a bit of time training others which is reported as non-productive hours.

TOTAL TREASURY REJECTIONS
CHARGED TO THE INDIVIDUAL

2

STATISTICAL ANALYSIS BY UNIT

UNIT 01PERIOD REPORTED JUNE 1980

<u>NAME</u>	<u>QUANTITY</u>	<u>EQUIVALENT UNITS</u>	<u>EQUIVALENT UNITS PRODUCED PER PRODUCTIVE HOUR</u>
A	638	1,294.30	9.75
B	227	435.80	3.69
C	585	1,125.80	10.14
D	940	1,727.20	8.93
E	<u>424</u>	<u>784.60</u>	<u>4.90</u>
Team 01 TOTALS	<u>2,814</u>	<u>5,367.70</u>	<u>7.52</u>
F	1,045	2,163.60	17.31
G	561	1,050.20	6.35
H	756	1,559.90	7.88
I	564	1,162.00	6.05
J	<u>652</u>	<u>1,358.50</u>	<u>8.25</u>
Team 02 TOTALS	<u>3,578</u>	<u>7,294.20</u>	<u>8.63</u>
K			
L			
M	564	1,085.50	7.15
N			
O			
P			
Q			
R	124	245.10	8.53
S	<u>85</u>	<u>200.20</u>	<u> </u>
Team 03 TOTALS	<u>773</u>	<u>1,530.80</u>	<u>4.74</u>
UNIT 01 TOTALS	<u>7,165</u>	<u>14,192.70</u>	<u>7.54</u>

RESOURCE MANAGEMENT SYSTEM
FARMERS HOME ADMINISTRATION

BACKGROUND

The Farmers Home Administration (FmHA) was established in 1946 as the successor to agencies set up during the 1930's --the Resettlement Administration and the Farm Security Administration--to make loans to depression-stricken farm families. For a number of years, FmHA was concerned primarily with its original mission as a supervised credit agency for low-income farmers, with loan volumes of about \$300 million per year. During the 1960's and 1970's, however, many new programs were added, and FmHA became a diversified credit institution for rural development. The growth has been particularly rapid during the last 10 years. The current annual loan volume is about \$13 billion, but reductions have been proposed for Fiscal Year 1982.

FmHA manages more than 30 loan programs grouped in the following major types: Farmer Loans, Rural Housing Loans, Community Loans, and Business and Industrial Loans. Most of the loans are insured loans that are originated, made, and serviced by FmHA personnel. Notes are sold to investors, backed by the full faith and credit of the Federal Government, and the investors' money replenishes a revolving loan fund. Interest rates to borrowers for most programs are determined by the current cost of Federal borrowing, but some rates are established by statute.

There also are several guaranteed loan programs in which loans are made and serviced by private lenders. On such loans FmHA guarantees to limit any loss to a specified percentage. Interest rates are established between borrower and lender unless the rate is established by law. FmHA loans are intended to be a supplemental source of credit to augment the efforts of private lenders rather than compete with them. Most FmHA programs require that a borrower "graduate" to commercial credit when able to do so.

FmHA is headed by an Administrator, who reports to the Assistant Secretary for Rural Development, U.S. Department of Agriculture. In addition to the National Office in Washington, D.C., there are 46 State Offices covering all but two of the 50 States, 300 District Offices, and about 2,000 County Offices in all 50 States. FmHA also has a Finance Office in St. Louis, Missouri, and maintains close working relationships with the USDA National Finance Center in New Orleans, Louisiana. FmHA has about 8,500 permanent employees, of whom about 6,000 are at the District and County

Office levels. There also are about 3,000 temporary or part-time employees, mostly in clerical positions in the County Offices.

Most loans are made and serviced in District and County Offices. Generally County Offices are responsible for administering loan programs aimed at individual borrowers; whereas, District Offices are responsible for administering loan programs to associations, corporations and local communities.

THE RESOURCE MANAGEMENT SYSTEM

The Resource Management System was developed under a contract to replace the Work Measurement System used by the Farmers Home Administration during fiscal years 1976, 1977, and 1978. Operation of the System was started for Counties in October 1979, for Districts in April 1980, and for States in October 1980. A revised system which combines County and District Office reporting was implemented in April 1981.

The Resource Management System provides useful management information, not only for the National Office, but also for State, District and County Offices, to be used for:

- Budget formulation and fund allocation,
- Personnel projections and allocations,
- Decisions on opening, closing and staffing of field offices,
- Identification of opportunities for operational improvements, and
- Measurement of performance against objectives and standards.

The Resource Management System uses work measurement standards, workload counts, productivity computations and computer-generated reports to serve these management purposes. Major components of the System are:

- Work measurement standards developed through direct observation of program activities in District and County Offices,
- Monthly operating reports on workload counts or program output from all District and County Offices,

- Computer-generated monthly reports on program accomplishments and productivity of the District or County Offices, and
- Summary reports and special management analyses.

Work Measurement Standards. Standards have been developed for the major functions within each of the major programs carried on in District and County Offices. Each standard reflects the time required for an average experienced employee, working with reasonable skill and effort under normal conditions, to perform one unit or cycle at an acceptable quality level following prescribed procedures. The normal working conditions found in FmHA offices include minor interruptions such as telephone calls and inquiries. The time values do not represent optimum working conditions or abnormal working speeds. The standards are agency-wide and represent the time spent performing the work; they do not include travel time and are used for all locations.

The process of developing standards started with the review of available data from prior systems, analyses of the work flow using flow charts developed previously, and the definition and analysis of the work steps or elements of the major functions for each program. Trained analysts then visited a number of field offices for direct observation of the work performed. Results were reviewed with employees and supervisors. Key indicators were identified and composite standards were developed. The direct observations at various locations and the judgement of knowledgeable National Office and field personnel were used in establishing and revising the representative times or standards. There will be continuing monitoring of work processes to ensure that standards are representative of the work being performed.

The standard for a function is a composite of the time required for several activities. For example, a "loan making" function consists of the following activities: "preapplications received," "applications received," "eligibility determinations," "loans processed", "loans closed," and "construction inspection." Each of these activities require several steps. For example "applications received" activity requires the following steps: "applicant picks up application," "explanation of program," "assist applicant with application" and "initial interview." Time values and frequencies are determined for each step, and standards are established for each step and activity. This process is illustrated below by using the steps involved in the "application received" activity:

<u>ACTIVITY--APPLICATIONS RECEIVED</u>	<u>TIME IN MINUTES</u>	<u>AVERAGE* FREQUENCY FOR EACH APPLICATION</u>	<u>ADJUSTED TIME IN MINUTES</u>
Steps in the Activity:			
1. Applicant Picks Up Application	5	1.00	5
2. Explanation of Program	30	4.75	143
3. Assist Applicant with Application	20	0.75	15
4. Initial Interview	30	1.00	<u>30</u>
STANDARD TIME FOR ACTIVITY			<u>193</u>

*This factor is used to adjust for the average frequency of each step to process one work unit; i.e., an application in this example. In another words, "1.00" means the step is taken only once for each application, "4.75" means that the step is taken on an average of 4.75 times for each application, etc.

Operating Reports. Each County or District Office is required to submit a one-page Operating Report on the last working day of each month, (Illustration No. 1, page 20). This is used to report work performed by function and activity during the month for each major FmHA program. The report also includes the status of unprocessed items on hand as of the end of the month, e.g., loans and grants outstanding.

With respect to the employee working hours, the Operating Report does not require reporting the time spent on each program, function or activity. Rather, the report shows the grand total hours worked (productive hours) in each County or District Office, hours spent in formal training and hours spent on travel. The entry for total hours worked relates to the entire staff. It includes regular time, paid overtime, uncompensated voluntary time by exempt employees, and time worked by employees detailed from other FmHA offices. It excludes all annual, sick and other leave.

The Operating Reports are submitted by the County and District Offices to the Management Systems and Organization Planning Division in the National Office for review and computer processing.

Reports on Accomplishments and Productivity. Two basic output reports are generated by computer in the National Office on a time schedule geared to distributing reports back to each County or District Office before the next monthly Operating Reports are submitted.

The County/District Office Accomplishment Report (Illustration No. 2, page 21) recapitulates, for each program, function and activity, the information on quantity of work accomplished during the month and month-end status of work to be accomplished. Information is shown for the current month and the fiscal year-to-date. This report is prepared for the County and District Offices and submitted to the National Office.

The County/District Productivity Report (Illustration No. 3, page 22) provides the computation of earned time for each County or District Office (page 1 of Illustration No. 3) and compares current performance against standards (page 2 of Illustration No. 3). Earned time is defined as the time required for the work performed when employees work at the standard rate. With the work performed data that were reported in the County/District Operating Report (Illustration No. 1) the computer applies the standard time against the work performed data for each program, function or activity and computes the earned time for each program, function and activity for a County or District Office. The earned time for each program, function and activity is then printed with the total earned time for the Office or District on page 1 of the County/ District Productivity Report (Illustration No. 3). A percentage distribution of earned time against major loan programs as well as functions is also provided.

On page 2 of the County/District Productivity Report (Illustration No. 3), computations of productivity and performance factors are performed. Under the FmHA system, productivity is measured at a composite County or District Office level and not at the program, function or activity level. Computation of productivity for each County or District Office starts with the total hours worked as reported by the County or District Office. The time spent in travel, the time in training and an allowance for time spent on administrative and general activities are then subtracted from the total hours worked to determine the net program (direct) time worked. The percent of program hours earned is then calculated to see how efficient each County or District had been by using the following formula:

$$\text{Percent of Program Hours Earned} = \frac{\text{Total Earned Time}}{\text{Net Program Hours}}$$

100 percent means that the County or District had performed at par with the standards; above 100 percent means better than standard performance and vice versa.

The resulting percentage numbers have been grouped into six performance categories as shown below:

<u>FACTOR CATEGORIES</u>	<u>PERCENT OF PROGRAM HOURS EARNED</u>
PF 1	above 110
PF 2	101-110
PF 3	91-100
PF 4	81-90
PF 5	71-80
PF 6	70 or less

Each month, a County or District Office is rated by the performance factor category, and the monthly ratings are printed on page 2 of Illustration No. 3.

Summary Reports and Special Analyses. The system generates a series of summary reports on a monthly or quarterly basis. These reports compare summaries of accomplishments and productivity at the District and State levels, accomplishments by program at the State and National levels, accomplishments of all programs for each State Office and national totals, and productivity for each State Office and national totals.

The State Quarterly Analysis Report aids State and National Office managers in reviewing the performance of each State and the offices within the State. This quarterly report uses a Composite Performance Factor which represents the hours worked by all employees in a State (including County, District and State Offices) per each hour of direct earned time (the sum of earned time totals for County and District Offices).

USE OF RMS FOR BUDGET AND PERSONNEL MANAGEMENT

Projections of personnel requirements by program can be made by developing budget work factors based on the basic work standards and applying these factors to caseload estimates. The results are useful for budget preparation, allocation of staff within approved budgets, and staffing analyses throughout the year.

The detailed work standards can be aggregated into two broad budget work factors which can be used to project a major portion of overall workload requirements. For example, loan making workload for the Multi-Family Housing Program can be computed by multiplying the caseload by a budget work factor consisting of the following activities:

- Preapplications Received,
- Applications Received,
- Eligibility Determination,
- Loans Processed,
- Loans Closed,
- Construction Inspections, and
- Construction Related Activities

Computation of the budget work factor for loan making starts with the basic work standards for direct program effort for each activity. A frequency factor is then applied to each step and the resulting products are added to obtain direct program time for loan making. An appropriate overhead factor can then be added.

Similarly, a single budget work factor can be used for the loan servicing functions for all programs. The budget work factors are multiplied by caseload to obtain total workload in terms of hours. These numbers can then be converted to staff years and to numbers of people at different grade levels.

Also, this approach can be used to allocate staff to field offices after the budget has been approved and funds appropriated. In the allocation process, however, there may be problems in applying standard budget work factors for all field offices. It usually is necessary to take into account a number of special factors. The budget work factors could be adjusted for some locations to take into account such special factors as recent productivity experience, targets for productivity improvement, and unusual circumstances which may warrant deviation from a "normal" pattern.

FARMERS HOME ADMINISTRATION RESOURCE MANAGEMENT SYSTEM
 COUNTY/DISTRICT OFFICE ACCOMPLISHMENT REPORT

STATE: X DISTRICT: 07 OFFICE: A MONTH: APRIL YEAR: 1981

WORK PERFORMED DURING MONTH	HOUSING 502		HOUSING REPAIR		FARM OWNER.		FARM OPER.		/IL & BIOMASS		/WATER ENERGY		TOTAL	
	CUR*	CUM**	CUR	CUM	CUR	CUM	CUR	CUM	CUR	CUM	CUR	CUM	CUR	CUM
<u>LOAN MAKING</u>														
Preapplications received	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Applications received	10	10	2	2	2	0	2	2	0	0	0	0	0	15
Eligibility Determinations	14	14	1	1	2	2	4	4	1	1	0	0	0	25
Loans Processed	11	11	3	3	0	0	9	9	0	0	0	0	0	23
Loans Closed	3	3	0	0	0	0	47	47	0	0	0	0	0	53
Construction Inspections	8	8	1	1	0	0	0	0	0	0	0	0	0	9
<u>LOAN SERVICING</u>														
Security Services	3	3	0	0	1	1	13	13	0	0	0	0	0	18
Supervisory Conferences	14	14	1	1	1	1	53	53	1	1	0	0	0	73
Banking Services	42	42	0	0	13	13	328	328	0	0	0	0	0	408
Delinquent Accounts Served	54	54	1	1	0	0	6	6	0	0	0	0	0	61
Payment Agreements	4	4	0	0	0	0	0	0	0	0	0	0	0	4
Reports Evaluation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loans Settled	3	3	2	2	2	2	2	2	0	0	0	0	0	8
<u>OTHER</u>														
Properties Acquired	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Properties Disposed Of	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Appeals Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Rural Devel. Mtgs.	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<u>STATUS AT END OF MONTH:</u>														
Loans and Grants Outstanding	575	575	32	32	29	29	302	302	3	3	0	0	0	971
Delinquent Loans Outstanding	112	112	7	7	20	20	52	52	2	2	0	0	0	204
Delinquency Rate	19	19	26	26	69	69	17	17	67	67	0	0	0	21
Preapplications on Hand	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Applications on Hand	26	26	4	4	5	5	8	8	1	1	0	0	0	47
Properties in Inventory	12	12	0	0	0	0	0	0	0	0	0	0	0	12

* Current Month
 ** Cumulative For Fiscal Year

FARMERS HOME ADMINISTRATION RESOURCE MANAGEMENT SYSTEM
COUNTY/DISTRICT OFFICE PRODUCTIVITY REPORT
EARNED TIME REPORT

STATE: X DISTRICT: 07 OFFICE: A MONTH: APRIL YEAR: 1981

LOAN MAKING WORK ITEMS	PROGRAMS											TOTAL % DISTRI- BUTION
	RH	HR	FO	OL	EM	S&W	BIO- MASS	M-F HOUS	CP W&F	COM FAC	B&I OTHER	
Preapplications Received	0	0	0	0	0	0	0	0	0	0	0	0
Applications Received	25	4	0	0	6	0	0	0	0	0	9	44
Eligibility Determinations	67	4	26	22	38	11	0	0	0	0	0	168
Loans Processed	53	9	0	0	22	0	0	0	0	0	0	84
Loans Closed	8	0	0	6	133	0	0	0	0	0	8	155
Construction Inspections	4	1	0	0	0	0	0	0	0	0	0	5
Construction Related Act.	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL LOAN MAKING	157	18	26	28	199	11	0	0	0	0	17	456
LOAN SERVICING												58
Security Services	5	0	4	2	37	0	0	0	0	0	0	48
Supervisory Conferences	14	1	2	5	101	2	0	0	0	0	3	128
Banking Services	11	0	3	6	82	0	0	0	0	0	0	102
Delinquent Accounts Served	16	0	0	0	2	0	0	0	0	0	0	18
Payment Agreements	4	0	0	0	0	0	0	0	0	0	0	4
Reports Evaluation	0	0	0	0	0	0	0	0	0	0	0	0
Loans Settled	4	2	0	2	4	0	0	0	0	0	0	12
TOTAL LOAN SERVICE	54	3	9	15	226	2	0	0	0	0	3	312
PROPERTY												40
Properties Acquired	0	0	0	0	0	0	0	0	0	0	0	0
Properties Mgt. Services	7	0	0	0	0	0	0	0	0	0	0	7
Properties Disposed of	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL PROP. MGMT.	7	0	0	0	0	0	0	0	0	0	0	7
OTHER												1
Appeals Cases	0	0	0	0	0	0	0	0	0	0	4	4
Rural Devel. Mtgs.	0	0	0	0	0	0	0	0	0	0	6	6
TOTAL OTHER	0	0	0	0	0	0	0	0	0	0	10	10
TOTAL EARNED TIME	218	21	35	43	425	13	0	0	0	0	30	785
% Earned Time By Program	28	3	4	5	54	2	0	0	0	0	4	100

FARMERS HOME ADMINISTRATION RESOURCE MANAGEMENT SYSTEM
COUNTY/DISTRICT OFFICE ACCOMPLISHMENT REPORT

STATE: X DISTRICT: 07 OFFICE: A MONTH: APRIL YEAR: 1981

COMPUTATION OF PERFORMANCE FACTOR

	CURRENT	%	FY-TO-DATE	%
TOTAL HOURS WORKED	938	100	7118	100
TRAVEL, TRAINING AND ADMINISTRATION				
TRAVEL HOURS	27	3	198	3
TRAINING HOURS	0	0	0	0
ALLOWANCE FOR ADMINISTRATION	141	15	1002	17
TOTAL NON-PROGRAM HOURS	168	18	1200	20
NET PROGRAM HOURS	770	82	5918	80
TOTAL EARNED TIME	785	84	6280	88
% OF PROGRAM HOURS EARNED		102		110
PERFORMANCE FACTOR	2*		2	

PERFORMANCE FACTOR TRENDS

<u>MONTH</u>	<u>PF CATEGORIES</u>
SEP 80	3
OCT 80	3
NOV 80	2
DEC 80	2
JAN 81	3
FEB 81	1
MAR 81	2
APR 81	2*

PRODUCTIVITY MEASUREMENT SYSTEM
DEPARTMENT OF COMMERCE

BACKGROUND

The Department of Commerce provides a wide variety of programs that encourage, serve and promote the Nation's economic health. The Department is decentralized with the Office of the Secretary and 13 operating units performing such functions as offering assistance and information to domestic and international business, providing social and economic statistics and analyses for business and government planners, and assisting in the development and operation of the U.S. Merchant Marines.

Three entities within the Department, along with the Joint Financial Management Improvement Program and the Office of Personnel Management, developed a productivity measurement system for finance and accounting operations.

The diversity of functions within the three organizations in Commerce helped to insure that most functions within a typical Federal finance and accounting office would be reviewed and covered in the new system. Some of these activities are described in the following paragraphs.

The Office of the Secretary performs accounting and payroll processing for itself and six operating units in the Department. Its system accounts for administrative funds. The Office maintains a revolving fund and receives reimbursements for the accounting and payroll services it provides to its "customers." This Office also is responsible for preparing consolidated accounting statements and reports required of the Department.

The Economic Development Administration maintains an accounting system for its program funds. A significant number of loan and grant activities are serviced through the system. The Administration also administers several thousand letters of credit for its grant programs. However, it does not maintain its own payroll system, but relies on the central payroll services provided by the Office of the Secretary.

The Maritime Administration performs payroll processing and accounting services for its administrative and program funds. It administers a large number of interagency agreements and procurement contracts.

PRODUCTIVITY MEASUREMENT SYSTEM

To develop a productivity measurement system, the first step was to analyze the functions, activities and sub-activities of finance and accounting operations. The major functional areas identified were: payroll processing, operation accounting, control accounting and general administration. These functional areas were further broken down into activities and subactivities. For example, "operation accounting" was further identified as including the following activities: disbursement transactions, cash advance monitoring, receipt transactions, other accounting transactions, technical assistance, and other. The activity, "disbursement transactions" consisted of seven subactivities: reservation of funds, travel voucher examination, grant and contract voucher examination, purchase order voucher examination, loan and loan guarantee voucher examination, other voucher examination, and disbursements and drawdowns.

Since there were many interpretations, understandings, and conceptions of what each activity and subactivity under the functional areas entailed, the task of defining the activity using uniform terminology was very time consuming. However, this process of defining each activity had to be completed so that there would be a common basis for measurement and comparative analysis. The complete set of definitions of the activities is provided in Illustration No. 1 (page 28).

The system utilizes output and input measures to generate the necessary productivity data required by management. Output measures were identified for each activity and subactivity. Examples of output measures are "number of employees paid" for biweekly payroll and the "number of vouchers" for voucher examination. The system, to a large extent, was designed to use much of the output data that were already being produced; however, modifications were made to accommodate the functional and activity structures. All output measures for the Commerce system are listed in Illustration No. 2 (page 35).

A system to collect input data had to be developed. For the present, only labor time is measured for input. The accounting and finance offices must furnish the total labor costs for allocation to the activities and subactivities. Other inputs, such as automatic data processing costs, can be readily included in the future. The system is flexible and conducive to future expansion and enhancement.

Labor input measures are either direct or indirect. Direct labor is defined as all employee time, professional and clerical, used to directly produce the output in a functional area. It is the "hands-on" time directly spent on producing the output and has been defined under the functional and activity categories. Indirect labor is defined as time spent in general management, supervision, administration and clerical support, and nonproductive time such as leave, travel and training. The categories of indirect labor and their definitions are provided in Illustration No. 3 (page 36).

The system for collecting the labor input data uses a random work sampling procedure that was originally developed by the Office of Personnel Management for personnel offices. This system was selected because it caused minimal work disruption, was accurate, ensured confidentiality and was easy to administer. It uses random sampling procedures for making observations of what employees are doing. Based on the aggregate observations, a determination is made as to the percent of time employees spend on various functions and activities.

The sampling procedure was formulated to make a sufficient number of observations to insure a confidence level of 95 percent and a precision level of plus or minus 5 percent. The times for random sampling observations are computer generated and are based on the work schedule of the organization. When a designated control person(s) announces the time of a sampling observation, each employee places a mark on the survey sheet opposite the appropriate activity or subactivity he or she is performing at that time. The survey sheet is shown in Illustration No. 4 (page 37). The observation and recording are conducted five times a day for a sufficient number of days to meet the above statistical criteria.

At the end of the observation period, the survey sheets are spot checked by supervisors and sent to the Office of Personnel Management for processing. The computer then computes the percent of time spent for each activity and subactivity based on the total number of observations. The number of labor hours attributable to each activity or subactivity is computed by applying the percentage to the total number of hours available. Similarly, the labor cost of each activity or subactivity is computed by applying the percentage to the total payroll costs.

The Office of Personnel Management has a standard program that generates productivity reports for agency management. These reports include:

1. Labor hour distribution by activity and subactivity,
2. Productivity indices or total output/total labor input,
3. Labor cost by activity or subactivity,
4. Unit labor cost for each quantifiable output, and
5. Interoffice comparisons and trend analyses.

This system is open-ended for future enhancements. The survey sheet can be changed to add other activities when needed. Other benefits of using this system include: minimal employee disruption and training, flexibility to accommodate changes in office structure, and easy transferability to other offices within the Department.

The participants learned important lessons for successfully implementing any productivity measurement system.

It is important and critical to:

- Have top level management support and commitment on developing and using the system,
- Keep employees informed from the early stages on what the system means to them and their participation in it,
- Have outsiders participate in the development of the system, since they can arbitrate "deadlocks" on definitions of activities and other matters,
- Have individuals with enough expertise develop the overall system,
- Use existing data collection systems as much as possible, instead of "reinventing the wheel,"
- Strive for a single system that can be readily understood by all who are involved, and
- Develop a flexible system that can accommodate future changes and expansion.

PRODUCTIVITY MEASUREMENT SYSTEM
MAJOR FUNCTIONAL AREAS AND CATEGORIES

I. PAYROLL PROCESSING TRANSACTIONS

This area includes all professional, technical and directly related clerical staff time spent in processing the biweekly payroll, including retroactive or supplemental pay, maintenance of ancillary pay records; preparation of employee close-out records; preparation and issuance of payroll related reports; assisting "customers," and answering payroll related questions. Time devoted to designing and reviewing the payroll systems should also be included.

A. Biweekly Payroll - All staff time spent in processing employees' biweekly payroll, including changes in deductions (e.g., bond and allotment deductions, and tax levies), special pay, (e.g., night differential duty, hazardous duty and holiday pay, etc.), supplemental and retroactive pay, leave earned or used; balancing payroll to control totals; and maintaining time and attendance records, and changes on employee pay files.

B. Payroll Reports and Records - All staff time spent in preparing and reviewing reports on employee pay and deductions from gross pay (e.g., Federal, State and local taxes, FICA, Federal retirement, life insurance, and health benefits); retirement records; geographical distribution of employee pay; consultants; reemployed annuitants and other similar items including full time equivalency.

C. Close-Outs - All staff time spent in assembling, calculating and preparing final close-out documents for employees who have terminated their employment by separation, retirement, or by death.

D. Management and Technical Assistance - All staff time spent in rendering assistance to employees and ex-employees, other Government agencies, and others regarding payroll matters. This should include special analysis as well as answering routine inquiries.

E. Other - All staff time spent in payroll processing that was not defined in the above categories. When used, please specify the activity on the survey form.

II. OPERATION ACCOUNTING

This functional area includes all professional, technical, and directly related clerical staff time spent by the accounting office in the processing of routine accounting transactions related to: fund authorizations, reservation of funds, voucher examination, processing of disbursements, letter of credit drawdowns, accounts receivable, collections, property, preparation of letters of credit, and system reviews of designs related to processing of all routine accounting functions. Key punching and filing activities should be recorded under the associated functional category (i.e., filing pay vouchers recorded under disbursements). Each category is defined in more detail below.

A. Disbursement Transactions

1. Reservation of Funds - All staff time spent in processing, recording, and inputting individual commitments; "contingent liabilities;" obligations; simultaneous transactions for commitments, obligations, accounts payable, and disbursements; accounts payable documents and changes thereto.

The recording of individual documents on a day-to-day basis includes time spent via the terminal receiving, reviewing and notifying each regional office on reservations of funds, memo entries such as "contingent liabilities," and changes to the amount and scope of the project. This also includes changes in obligations reported by the recipient agencies of nonexpenditure transfers to and from other agencies. However, recording reservations, obligations and accounts payable, based on either actual documents or estimates available at the end of the reporting period, will be considered closing entries and reported under "Control Accounting."

2. Voucher Examination - All staff time spent in examining and processing the following vouchers:

- Travel vouchers (e.g., local, standard per diem rates, actual expense, permanent change of station, international and other travel).
- Grant/contract vouchers (e.g., program activities involving contracts, grants, interagency agreements, and loan and bond agreements).

- Purchase order vouchers (e.g., matching purchase orders, vendor invoices and receiving reports). This activity also includes verifying the accuracy of amounts billed and vouchered, contract payments (progress payments and final voucher), consultants, interagency invoices, working fund invoices, and similar vouchering activities.
- Loan guarantee transactions as reported by banks or trustees.
- Other voucher examination functions not described above.

3. Disbursements and Letter-of-Credit Drawdowns - All staff time spent processing, recording and inputting disbursements involving a prior reservation of funds including grants, loans, contracts, travel, working capital or other revolving funds, interagency transfers of funds utilizing SF-1080 and SF-1081, commercial invoices, and others. The recording or processing of letter-of-credit drawdowns, electronic transfers of funds, check issue dates, check delivery dates, and similar disbursement transactions, including time spent on cancelled, returned or lost Government issued checks. Periodic recording of changes in disbursements reported by recipient agencies of nonexpenditure transfers to and from other agencies will also be reported in this category. Any disbursement transaction preceded by an accounts payable transaction should be reported in this category as a disbursement, and not as a reservation of funds. The disbursement process starts after the voucher examiner has completed a review of the document for payment. This is true even if the same person performs both functions.

B. Cash Advance Monitoring - All staff time spent in monitoring and controlling recipient drawdown practices and balances of Federal funds advanced by either Treasury check or letter of credit, exclusive of the recording and processing of letter-of-credit drawdowns and the preparation of the letter of credit itself. This includes identifying recipients with advance funding, processing and controlling reports on Federal Cash Transactions, reviewing and inputting Federal dollars on hand from drawdown vouchers, recovering

excessive drawdowns or interest earned by recipients exclusive of audit or receipt transactions, providing information on recipients with balances of Federal funds to program officials and overall statistical reporting. This also includes actions taken in connection with commercial banks holding or slowing down the drawdown process. The recording and processing of letter-of-credit drawdowns is included under Part II, item A3, "Disbursement and Letter-of-Credit Drawdowns," and the maintenance of the letter of credit is included under Part II, item D2, "Preparation of Letter of Credit."

C. Receipt Transactions

1. Accounts Receivable - All staff time spent in processing, recording and inputting individual amounts owed to the agency by employees, "other agencies' control funds," private citizens, commercial firms, State and local governments, and others. Included are receivables arising from grants, loans, loan billings, contracts, purchased interest, participation loans, reimbursable services performed, and fees. When processing individual documents on a day-to-day basis, this category should include safekeeping of notes and loans receivable, recording of memo entries related to the closeout procedure (e.g., setting up a dollar amount to identify "subject to audit," amounts questioned, accounts receivable, nonfinancial transactions, and write offs), and reversing any of the above entries.

The recording of other receivables, based on group documents or estimates at the end of the reporting period will be considered closing entries and will not be counted under this category.

2. Collections - All staff time spent in preparing Deposit Tickets; processing, recording and inputting cash receipts; and collection of amounts due the agency resulting from all types of overpayments, loan collections, advances, fee repayment agreements, miscellaneous income; and any analyses performed concerning the collection of receipts. This also includes the followup on open accounts receivable and collections made by other Federal agencies on the agency's behalf. Collection transactions preceded by an accounts receivable transaction for measurement purposes will only be counted under this category, and not in the accounts receivable category.

D. Other Accounting Transactions

1. Property - All staff time spent in processing, recording, inputting transactions affecting the property owned by the agency or acquired by the agency through a loan default or write off, including property loaned to or received from others, sold, under construction, purchased, acquired through a no-fund transfer, or acquired by the defaulted loan made by the agency.
2. Preparation of Letter of Credit - All staff time spent in setting up, controlling, maintaining, revoking, and amending letters of credit, including the maintenance of the signature cards required for the drawdowns.
3. Management and Technical Assistance - This includes all staff time spent in answering inquiries and assisting others concerning the operation accounting area.

III. CONTROL ACCOUNTING

This functional area includes all professional, technical, and directly related clerical staff time spent performing accounting and control activities involving the resolution of errors and corrections of routine accounting transactions; preparation and control of closing, special and general journal entries; reconciliation of control accounts to subsidiary accounts and related supporting documents; preparation and review of both internal and external accounting and special financial reports issued; and system analyses work.

A. Fund Authorization - All staff time spent in processing and recording in the formal books of account; initial entries only for appropriation warrants, apportionments and reapportionments, allotments, and other budget limitation documents or operation plans; and the initial entry from nonexpenditure transfers to and from other agencies (SF-1151). All subsequent entries, such as periodic recording of changes in obligations and disbursements are not reported in this subcategory.

B. Reconciliations - All staff time spent to research, direct, process, record and input entries into the accounting records to correct transactions that were erroneously entered into the accounting system. This includes preparation of

correcting entries needed to effect such corrections, and reconciliations of control accounts to related subsidiary accounts, including reconciliations of letters of credit with the Federal Reserve Board and the Department of the Treasury. It also includes preparation of supporting documentation associated with preliminary closing procedures, accounting controls, and system reviews.

C. Reporting - All staff time spent in preparing, reviewing and issuing both internal and external periodic and special reports to management, the Congress, and other Federal Government agencies, State and local governments, and others (i.e., audit requests by CPA firms and certified statements of account). This includes activities associated with comparing "in-house" reports with those reports prepared externally, analyzing the differences, processing corrections when internal records are in error, and informing external reporting sources of corrections needed in their records. This category excludes the time spent in the preparation of administrative nonfinancial reports (e.g., EEO, special studies, and other administrative reports).

IV. GENERAL ADMINISTRATION AND OTHER

This category includes all time spent by management and clerical personnel in the overall management of the accounting office which cannot be directly identified or associated with any defined functional area. It also includes planning, special assignments and tasks, overall cross-functional accounting design and review activities, and accounting program evaluations and reviews.

A. Planning - All staff time spent planning for accounting personnel resources, organizational changes, and budget preparation activities.

B. General Supervision - All staff time spent in general management of the accounting office and accounting system which cannot be identified within a specific functional area.

C. Special Emphasis Program - All staff time spent working on a program which is unrelated to, or cannot be identified with, a program in a specific functional area (e.g., Equal Employment Opportunity Programs).

D. System Analysis - All staff time spent in review and design of the overall financial management system that affects one or more functional area.

E. Management and/or Technical Assistance - All staff time spent to assist constituents on matters not currently being processed elsewhere in the accounting office.

F. Other - This category is provided for the accounting office staff to record that nonspecific time which cannot be accounted for in any of the above categories. Please write in the specific activity in which you were engaged when the sampling time was announced.

FINANCE AND ACCOUNTING PRODUCTIVITY
MEASUREMENT SYSTEM'S OUTPUT MEASURES

<u>Activity</u>	<u>Output Measure</u>
Biweekly Payroll	No. of Employees Paid
Payroll Reports & Records	No. of Reports Issued
Closeout	No. of Closeouts
Operation Accounting	
Disbursement Transactions	
Reservation of Funds	No. of Transactions
Travel Voucher Examinations	No. of Vouchers
Grant/Contract Voucher Exam.	No. of Vouchers
Purchase Order Voucher Exam.	No. of Vouchers
Loans & Guarantee Voucher Exam.	No. of Vouchers
Other Voucher Exam.	No. of Vouchers
Disbursement and Drawdown	No. of Treasury Checks and Letter-of-Credit Drawdowns
Receipt Transactions	
Accounts Receivable	No. of Transactions
Collections	No. of Transactions
Other Accounting Transactions	
Property	No. of Transactions
Preparation of Letter of Credit	No. of Letters of Credit
Cash Advance Monitoring	None
<u>Control Accounting</u>	
Fund Authorization	No. of Transactions
Reconciliations	None
Reporting	No. of Reports Issued

CATEGORIES FOR INDIRECT LABOR

Supervision - refers to those job functions and responsibilities that supervisors and managers perform as an inherent part of their jobs.

General Administration - refers to that time an employee spends in nonproduction work (e.g., getting office supplies, attending general agency meetings, professional reading, etc.).

Clerical - includes typing, mail distribution, filing, and other administrative tasks.

Leave - includes all types of paid leave time (e.g., annual, sick, military, court, and administrative leave).

Training - refers to specific training courses or seminars that an employee attends outside the office, as well as on-the-job training.

Travel - includes times in transit to and from an installation where work in a functional area is being done.

Personal Time - refers to that time required by the employee for personal matters (e.g., rest breaks).

Nonfinancial Reports - refers to those nonfinancial reports that must be prepared and sent to other offices and agencies (e.g., EEO reports).

FINANCE AND ACCOUNTING PRODUCTIVITY MEASUREMENT SURVEY Grade _____

		RANDOM TIMES					TOTAL (Do Not Use)
		DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	
DIRECT LABOR	PAYROLL PROCESSING TRANSACTIONS						
	BIWEEKLY PAYROLL						
	PAYROLL REPORTS & RECORDS						
	CLOSEOUTS						
	MGT/TECH ASSISTANCE						
	OTHER (Specify) _____						
INDIRECT LABOR	ADMINISTRATIVE/CLERICAL						
	SUPERVISORY						
	GENERAL ADMINISTRATION						
	CLERICAL						
	LEAVE						
	TRAINING						
	PERSONAL TIME						
DIRECT LABOR	OPERATION ACCOUNTING TRANSACTIONS						
	DISBURSEMENT TRANSACTIONS						
	-RESERVATION OF FUNDS						
	-TRAVEL VOUCHER EXAMINATION						
	-GRANT/CONTRACT VOUCHER EXAMINATION						
	-PURCHASE ORDERS VOUCHER EXAMINATION						
	-LOAN & GUARANTEE VOUCHER EXAMINATION						
	-OTHER VOUCHER EXAMINATION						
	-DISBURSEMENTS & DRAWDOWNS						
		CASH ADVANCES					
DIRECT LABOR	RECEIPT TRANSACTIONS						
	-ACCOUNTS RECEIVABLE						
	-COLLECTIONS						
INDIRECT LABOR	OTHER ACCOUNTING TRANSACTIONS						
	-PROPERTY						
	-PREPARATION OF LETTER OF CREDIT						
	MGT/TECH ASSISTANCE						
	OTHER (Specify) _____						
INDIRECT LABOR	ADMINISTRATIVE/CLERICAL						
	SUPERVISORY						
	GENERAL ADMINISTRATIVE						
	CLERICAL						
	LEAVE						
	TRAINING						
	PERSONAL TIME						
DIRECT LABOR	CONTROL ACCOUNTING						
	FUNDS AUTHORIZATION						
	RECONCILIATIONS						
	REPORTING						
	MGT/TECH ASSISTANCE						
	OTHER (Specify) _____						
INDIRECT LABOR	ADMINISTRATIVE/CLERICAL						
	SUPERVISORY						
	GENERAL ADMINISTRATIVE						
	CLERICAL						
	LEAVE						
	TRAINING						
	TRAVEL						
	PERSONAL TIME						
DIRECT LABOR	GENERAL ADMINISTRATIVE						
	PLANNING						
	GENERAL SUPERVISORY						
	SPECIAL EMPHASIS PROGRAMS						
	SYSTEMS ANALYSIS						
	MGT/TECH ASSISTANCE						
	OTHER (Specify) _____						
INDIRECT LABOR	ADMINISTRATIVE/CLERICAL						
	SUPERVISORY						
	GENERAL ADMINISTRATIVE						
	CLERICAL						
	LEAVE						
	TRAINING						
	TRAVEL						
	REPORTS (Nonfinancial)						
	PERSONAL TIME						
LUNCH							
TOTAL							

M & A

WORK MEASUREMENT SYSTEM
SOCIAL SECURITY ADMINISTRATION

BACKGROUND

The Social Security Administration administers a national program of contributory social insurance for most American workers and manages all aspects of programs involving retirement, survivor's and disability insurance and supplemental security income. Accounting for these transactions and for administrative areas is handled by a central Division of Finance in its headquarters office. The Division handles administrative payments for the agency but does not make the benefit payments.

The Division of Finance has three branches. The Accounting Operations Branch, with four sections, is responsible for the transaction processing and reporting operations. The Administrative Payments and Recovery Branch, with five operating sections, is responsible for the auditing and filing relating to administrative payments, the preparation and submission of schedule of payments to Treasury, the processing of travel documents, the collection of monies owed to the Administration, and the payroll operations. The Accounting Policy and Systems Branch is responsible for developing and monitoring policies and systems in the Division of Finance.

The Division utilizes a Goal and Performance Measurement System to monitor the productivity, quality and effectiveness of its operations. The System is used for budget formulation, justification and execution. It is also used by management in making key decisions in the following areas: allocation of staff resources; analysis of operations and determination of corrective action; formulation and execution of personnel ceiling, overtime and training plans; management of projects; and decisions on merit pay. The Goal and Performance Measurement System has many components that provide different information to management. The remaining paragraphs will discuss in detail the Work Measurement System, a major segment of the Goal and Performance Measurement System.

WORK MEASUREMENT SYSTEM

The Work Measurement System provides information on how staff resources are used, and the type, complexity and flow of work processed in two of the branches (the Accounting Operations Branch and the Administrative Payments and Recovery Branch) in the Division of Finance. Approximately 75

percent of the 200 employees in the Division is monitored by the System. The System does not cover professional, supervisory and some clerical support personnel.

To provide the basic framework for the System, the functions, activities and subactivities within the two branches were identified and defined. The System has two categories of workload--direct operations and indirect operations. Direct operations cover the work that is processed in the Division that results in measurable outputs. Indirect operations include those activities that are not directly related to processing work, such as: training, leave, meetings and breaks.

Direct operations functions and activities that were identified in the two operational branches covered by the Work Measurement System are listed in Illustration No. 1 (page 41). Illustration No. 2 (page 43) provides examples of the definitions of each activity and subactivity for the Travel Operations Section of the Review and Certification Branch.

The Work Measurement System utilizes a random work sampling technique to estimate the amount of labor expended in each of the functions, activities and subactivities identified. The work sampling is conducted once each quarter for a period of one month. Five observations are made each day. The times of the observations are randomly selected and developed by a fiscal operations analyst who is in charge of the Work Measurement System in the Division of Finance. Supervisors and unit leaders act as observers for work sampling, and record what each employee is doing at the moment an observation is made. Observations are recorded on a survey sheet like the one shown in Illustration No. 3 (page 46).

The observers summarize and review the weekly totals and forward them to the fiscal operations analyst who develops ratios or percentages on the number of observations made for each work activity to the total number of the observations. These ratios then are applied to the total staff hours for the period to distribute the staff hours among the various activities and subactivities. At the end of a quarter, totals are computed and summarized in a report that shows staff time consumed in each function, activity and subactivity. In the same report, the current year data are compared with those of the previous fiscal year and the next budget year. Also, the report, as shown in Illustration No. 4 (page 47), shows the percentage of total staff time utilized for each activity and subactivity.

Significant variances on percentage of time spent on each type of workload are pointed out to management. A narrative report explaining why variances exist and other factors that affect the changes in productivity must be made for management review. For this purpose, the system generates other reports to keep managers informed of the productivity of their operations. These include:

- Workload trend reports graphically depicting the workload received and processed during the past three months;
- Workload reports showing the actual amount of workload or output for each subactivity;
- Productivity reports comparing actual staff time, workload and productivity statistics with budgeted figures (Illustration No. 5, page 48); and
- Productivity indices reports showing graphically the trend of manpower, workload and productivity indices for each operation during the fiscal year (Illustration No. 6, page 49).

Management at the Social Security Administration can use this information to justify budget estimates for staffing requirements, allocate staff resources within the Division of Finance, forecast workloads, formulate and execute personnel ceilings, make overtime and training plans, as well as to make merit pay decisions.

DIRECT OPERATIONS MEASURED

I. Accounting Operations Branch

A. Receipt and Control of Documents

1. Open and Distribute Mail
2. Batch and Control Documents
3. Association and Filing
4. Microfilming Operations

B. Auditing Operations

C. Transaction Operations

1. Payroll
2. Fedstrip
3. All Other
4. Reviewing and Correction

D. Reports

1. Preparation
2. Reconciliation and Correction
3. Distribution

II. Administrative Payments and Recovery Branch

A. Receipt and Control of Documents

B. Payroll Operations

1. Timekeeper Control
2. Time and Attendance Operations--Field
3. Time and Attendance Operations--Central Office
4. Check and Bond Distribution
5. Timekeeper Training

C. Disbursing Operations

1. Certifying Officer Control
2. Imprest Fund Operations
3. Travel Advance Authorization

II. Administrative Payments and Recovery Branch (Continued)

D. Collection Operations

1. Reimbursable Agreements Operations
2. Collection and Deposit Operations
3. Travel Advance Application Operations

E. Reports

F. Audit Operations

1. Voucher Operations
2. Schedule Operations
3. Payment/Cashier Status Inquiries
4. Cashier Payment Operations
5. Cashier Maintenance Operations

G. Travel Voucher Operations

H. Travel Schedule Operations

I. Travel Training

J. Travel Services

1. Travel Orders
2. Teleticket Operations
3. Transportation Requests
4. Travel Assistance

K. Travel Assistance

L. Specialized Activities

ADMINISTRATIVE PAYMENTS AND RECOVERY BRANCH
TRAVEL OPERATIONS SECTION
WORKLOAD DEFINITIONS

I. VOUCHER OPERATIONS

This workload includes all activities related to the audit of travel vouchers, passenger bills and local travel. Subsidiary workloads are listed and defined below.

A. Voucher Examination - Time spent to review travel vouchers and passenger bills for conformity with authorization documents and regulations; verify amounts on vouchers including re-computing amounts; correct errors and calculate adjustments; review extended per diem requests and actual and necessary expense requests; review change of station reimbursements for taxable income; compute income taxes to be withheld; notify employees of amounts reportable as taxable income and tax withheld; record and obtain common accounting numbers and subobject classes to be recorded on vouchers; enter/underline data to be shown on vendor's check; xerox related documents as needed; and certify and assemble documents for scheduling.

B. Payment and Control Record Maintenance - Time spent to establish and maintain payment records, including establishing and maintaining folders on travelers; maintain Transportation Request (TR) files; and open and distribute mail.

C. Exception Search and Query Activity - Time spent to contact Social Security Administration (SSA) and non-SSA components for missing data; prepare and review correspondence on resolution of disputed claims, disallowance made, etc.; and perform related typing and clerical activity.

D. Review - Time spent to review other voucher examiners' work.

II. SCHEDULE OPERATIONS

A. Pre-Schedule Activity - Time spent to alphabetically sort vouchers by category and appropriation; batch vouchers; prepare tape by appropriation totals; and affix schedule and bureau voucher numbers on invoices.

B. Typing Activity - Time spent to type schedules to be forwarded to Treasury for check issuance.

C. Proof and Verify - Time spent to proof schedules and to verify schedule totals.

D. Post/Schedule Activity - Time spent to certify payment to Treasury, sort and distribute completed work to Treasury and other Finance Division components; post control logs of schedule and bureau voucher number; file schedules; and xerox additional schedules needed.

III. TRAVEL TRAINING

Time spent to develop and conduct training courses; compile required material; prepare and issue certificates; maintain statistical records for training.

IV. TRAVEL SERVICES

A. Travel Orders - Time spent to review change of station and other travel orders including advance of fund applications for all Office of Management, Budget and Personnel (OMB) components. This includes determining costs, the number of trips to be taken, assigning travel order number, insuring all necessary forms are attached to the travel order such as the Notification of Personnel Action (SF-50), Authorization of Moving and Related Travel Expenses, and the Employee Agreement for change of station orders; forwarding travel orders to OMB components and the application for advance of funds to the Collection and Payroll Section. Also it includes the review of all other travel orders for central office personnel and the contacting of appropriate personnel to resolve errors or request additional information; and related typing and clerical activities.

B. Teleticket Operations - Includes preparation of teleticket billing for processing the payment including verifying ticket number, passenger name, travel order number, amount, accounting data, dates of travel and contractor airline code.

C. Transportation Requests - Time spent to screen incoming TR's for those needing followup action; account for all TR's issued to headquarters employees; maintain a daily inventory of all Transportation Requests (TR's) received, issued, used

and returned; compute refunds due for unused TR's or partially unused TR's; make inquiries and prepare correspondence in order to maintain control of TR's, and perform related typing and clerical activities.

D. Travel Assistance - Time spent to secure and schedule transportation accommodations for travelers including referring to various modes of transportation schedules, contacting airline, railway, hotel personnel, etc.; secure tickets over the teleticket system, verify tickets received for accuracy; affix the airline or AMTRAK validation stamp on all tickets; prepare itineraries, arrange for delivery of tickets and contact travelers upon receipt of tickets; assist government/nongovernment personnel with the preparation of travel orders, travel vouchers and other related documents; and perform related typing and clerical activity.

V. SPECIALIZED ACTIVITIES - Time spent in reviewing and writing administrative issuances, such as ADS guides, Travel Handbook, etc., for management officials; and advising other employees including management officials in connection with travel regulations and prescribed procedures.

VI. REPORTS - Includes activities related to the collection and reconciliation of report data; preparation of reports; distribution and filing of reports. Examples are preparation of daily and monthly workload reports, Transportation Inventory Reports, W-2's for change of station travel, and the Fuel Conservation Report.

ADMINISTRATIVE PAYMENTS AND RECOVERY BRANCH
TRAVEL OPERATIONS SECTION
MONTHLY WORK MEASUREMENT SUMMARY REPORT

MONTH _____ OBSERVATIONS PERCENTAGES

OBSERVATION CATEGORY	TOTAL	1	2	3	4	5
I. DIRECT OPERATIONS						
A. Voucher Operations						
1. Voucher Examination						
2. Record Maintenance						
3. Search and Query						
4. Review						
B. Schedule Operations						
1. Pre-Schedule Activity						
2. Typing Activity						
3. Proof and Verify						
4. Post/Schedule Activity						
C. Travel Training						
D. Travel Services						
1. Travel Orders						
2. Teleticket Operations						
3. Transportation Requests						
4. Travel Assistance						
E. Specialized Activities						
F. Reports						
II. INDIRECT OPERATIONS						
A. Training						
B. Leave						
C. Meetings and Miscellaneous						
D. Breaks and Other Non-Productive Time						
TOTAL						

TRAVEL OPERATIONS
UTILIZATION OF DIRECT OPERATIONS STAFF MONTHS FOR 1980
COMPARED WITH PRIOR FISCAL YEAR AND NEXT FISCAL YEAR BUDGET

OBSERVATION CATEGORY	MANPOWER UTILIZED						PERCENT OF TOTAL		
	STAFF MONTHS			NEXT FY (BUDGET)			PRIOR FY	CURRENT FY	NEXT FY
	PRIOR FY	CURRENT FY	NEXT FY	STAFF MONTHS	% VARIANCE	STAFF MONTHS			
<u>DIRECT OPERATIONS</u>	9.2	9.1	10.3	-0.1	-1.1%	-1.2	74.8%	68.4%	73.3%
<u>A. Voucher Operations</u>	5.1	4.9	5.3	-0.2	-3.9	-0.4	41.5	36.8	37.5
1. Voucher Examination	3.1	3.5	3.5	+0.4	+12.9	0.0	25.2	26.3	25.0
2. Record Maintenance	0.6	0.6	0.7	0.0	0.0	-0.1	4.9	4.5	5.0
3. Search and Query	0.3	0.2	0.3	-0.1	-33.3	-0.1	2.4	1.5	1.7
4. Review	1.1	0.6	0.8	-0.5	-45.5	-0.2	9.0	4.5	5.8
<u>B. Schedule Operations</u>	0.8	0.8	0.9	0.0	0.0	-0.1	6.5	6.0	6.7
<u>C. Travel Training</u>	0.0	0.2	0.5	+0.2	<+100.0	-0.3	0.0	1.5	3.3
<u>D. Travel Services</u>	3.3	3.1	3.6	-0.2	-6.1	-0.5	26.8	23.3	25.8
1. Travel Orders	0.8	0.8	0.9	0.0	0.0	-0.1	6.5	6.0	6.7
2. Teleticket Operations	0.1	0.1	0.1	0.0	0.0	0.0	0.8	0.8	0.8
3. Transportation Requests	0.4	0.4	0.4	0.0	0.0	0.0	3.2	3.0	2.5
4. Travel Assistance	2.0	1.8	2.2	-0.2	-10.0	-0.4	16.3	13.5	15.8
<u>E. Specialized Activities</u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>F. Reports</u>	0.0	0.1	0.0	+0.1	<+100.0	+0.1	0.0	0.8	0.0
<u>INDIRECT OPERATIONS</u>	3.1	4.2	3.7	+1.1	+35.5	+0.5	25.2	31.6	26.7
A. Training	0.4	0.7	0.5	+0.3	+75.0	+0.2	3.3	5.3	3.3
B. Leave	1.6	2.2	2.0	+0.6	+37.5	+0.2	13.0	16.5	14.2
C. Meetings and Miscellaneous	0.1	0.1	0.1	0.0	0.0	0.0	0.8	0.8	0.8
D. Breaks and Other Non-Productive Time	1.0	1.2	1.1	+0.2	+20.0	+0.1	8.1	9.0	8.4
TOTAL STAFF MONTHS UTILIZED	12.3	13.2	14.0	+1.0	+8.1%	-0.7	100.0%	100.0%	100.0%

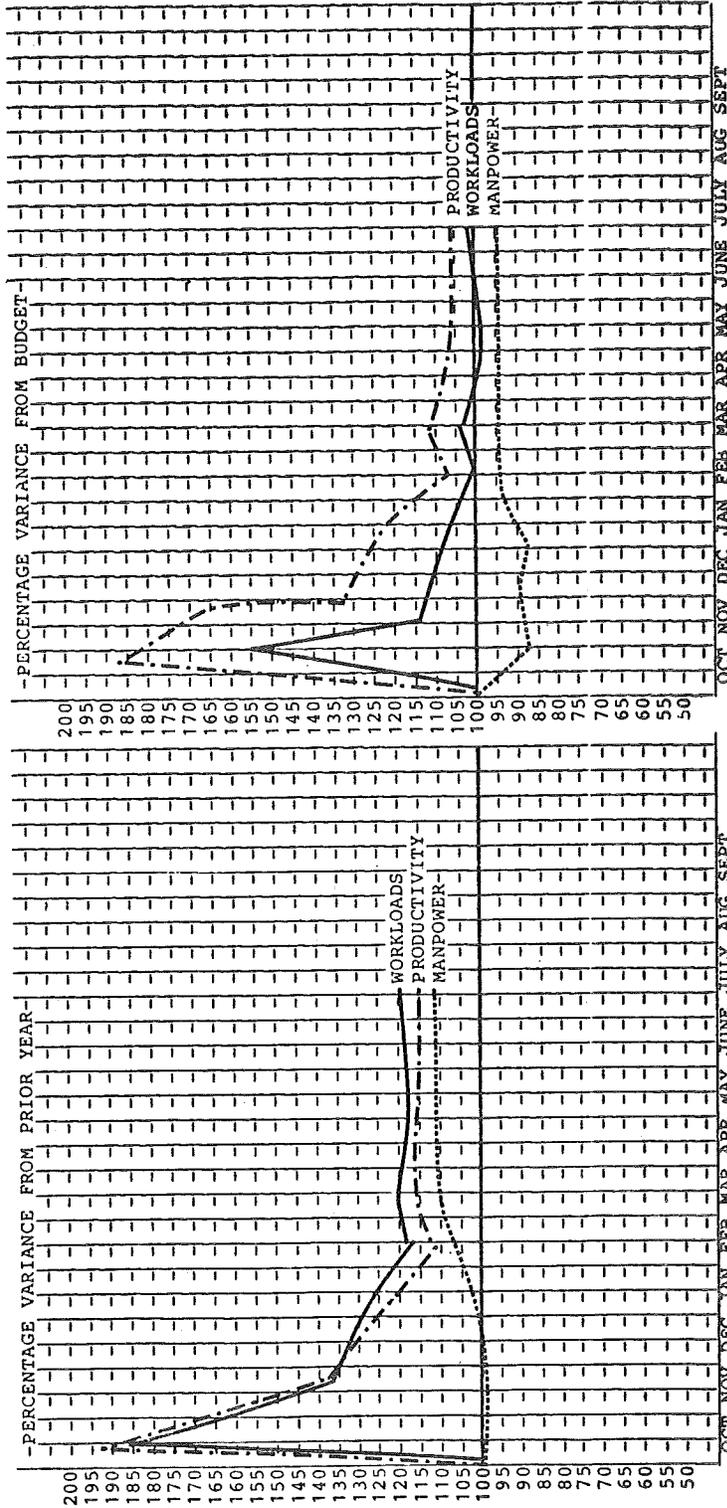
MONTHLY PRODUCTIVITY REPORT (EXCERPT)
 DIVISION OF FINANCE, OFM, OMA
 FISCAL YEAR 1979 THROUGH JUNE 1979

	AVERAGE STAFF MONTH YEAR TO DATE	AVERAGE WORKLOAD YEAR TO DATE	PRODUCTIVITY (2) - (1)
Current FY	13.3	3,843	289
Prior FY	12.3	3,263	265
Variance	108.1%	117.8%	109.1%
Current FY	13.3	3,843	289
Next FY (Budget)	14.0	3,848	275
Variance	95.0%	99.9%	105.1%

TRAVEL OPERATIONS

Current FY	13.3	3,843	289
Prior FY	12.3	3,263	265
Variance	108.1%	117.8%	109.1%
Current FY	13.3	3,843	289
Next FY (Budget)	14.0	3,848	275
Variance	95.0%	99.9%	105.1%

MONTHLY PRODUCTIVITY INDICES REPORT
TRAVEL OPERATIONS
FISCAL YEAR 1979 THROUGH JUNE 1979



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