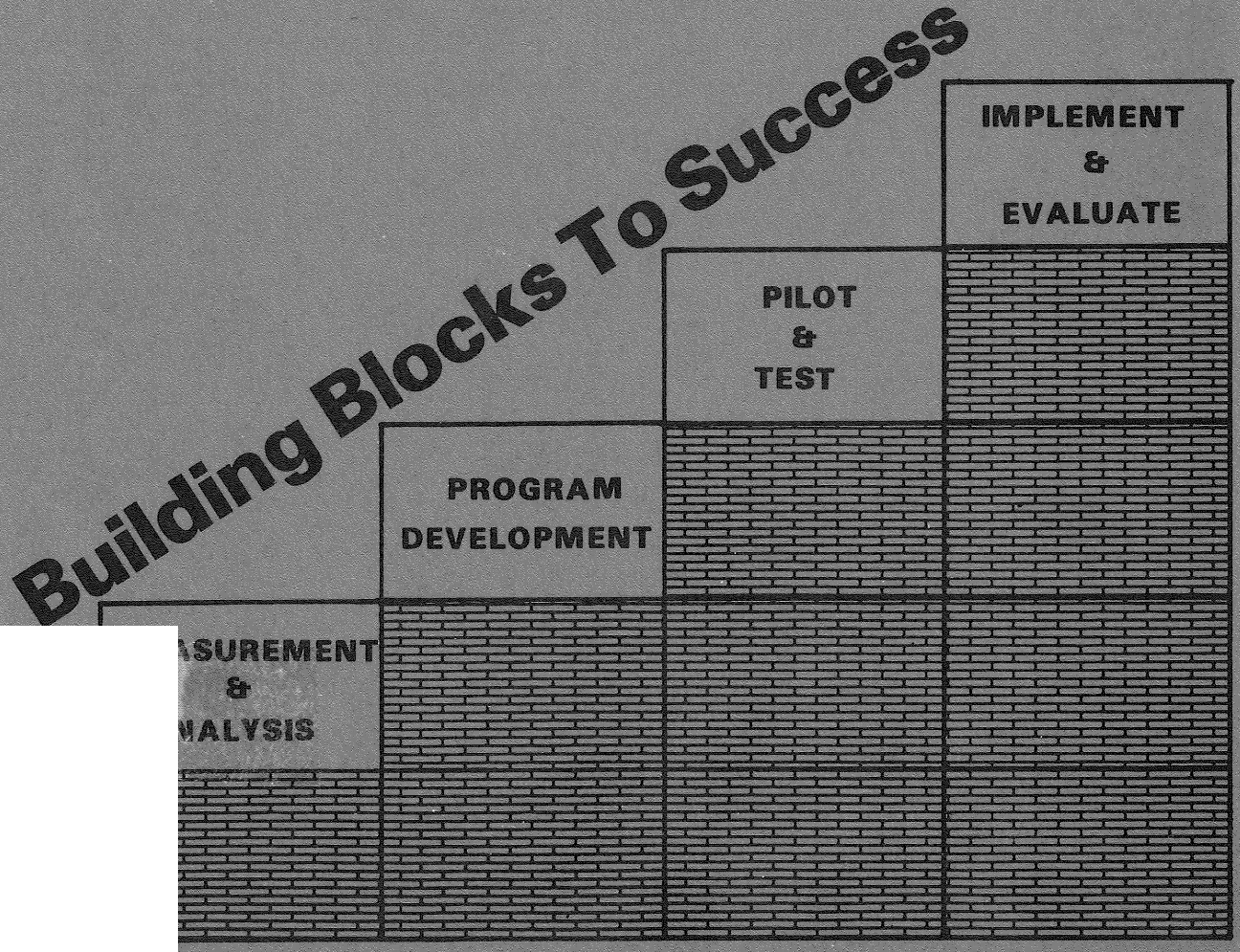
Proceedings of the Workshop on Improving Productivity in Accounting and Finance Operations

September 4-5, 1980



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.

PROCEEDINGS OF THE WORKSHOP

ON

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FOREWORD

In a continuing effort to improve financial management in the Federal Government, the Office of Personnel Management and the Joint Financial Management Improvement Program cosponsored a two-day workshop on "Improving Productivity in Accounting and Finance Operations." We have prepared these proceedings to share the experiences and information that these financial managers discussed on productivity measurement systems, improved productivity techniques and procedures utilizing computers, and the effective use of incentives to motivate employees thereby improving productivity.

We would like to express our appreciation to all the speakers, both in the general and technical sessions, for sharing with us their profound thoughts, experience, and knowledge on this important subject. We are also grateful to the staff members of the Office of Personnel Management and the Joint Financial Management Improvement Program for making this workshop possible. In particular, we thank Mr. Blair Ewing, OPM, who successfully and professionally moderated the sessions and Ms. Doris Chew, JFMIP, whose leadership resulted in a well planned and organized workshop.

We hope that the techniques and methodologies that were presented will be considered and implemented by the readers. Perhaps, the topics discussed in these proceedings will inspire financial managers to undertake new and effective innovations and trigger other productivity improvements. We wish success in all endeavors to improve productivity in accounting and finance operations.

Susumu Uyeda
Executive Director
October 1980

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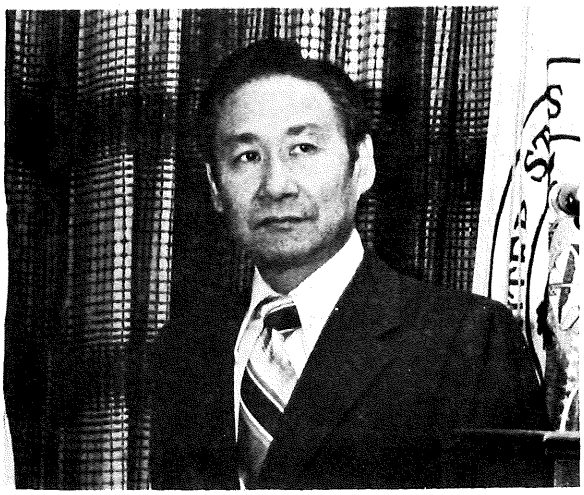


SUSUMU UYEDA

Executive Director
Joint Financial
Management Improve-
ment Program

I would like to welcome you to this productivity workshop cosponsored by the Office of Personnel Management and the Joint Financial Management Improvement Program.

As you know, the declining productivity growth in the United States is at the heart of many issues facing this country today, including both inflation and unemployment. Public concern over the economic health of this nation is reflected in the increasing pressure to improve Government productivity, since Government expenditures now comprise about one-third of the Gross National Product. The productivity of the Federal Government has only increased an average of 1.4 percent annually between FY 1967 and 1979. With Federal civilian employee compensation and benefits around $55 billion, this limited productivity growth is a concern to the President, the Congress and the general public.

The current national economic situation has caused the public to look very critically at Government employment levels in relation to the services provided. It is not unusual for the public to demand more Federal programs and overall reductions at the same time. In every attempt to cut "overhead", financial management and administrative services are prime candidates. With more work and less people, we have to develop and implement more efficient and effective ways to perform our duties.

What can we do about improving productivity? That is the question to be addressed today. As Federal managers, you were invited to participate in this workshop and I encourage you to share your experiences because none of us has all the answers.

Our program speakers will discuss Government productivity programs, the use of productivity data in the budget, proven techniques to improve productivity in accounting and finance centers, management networking and productivity measurement systems. There will also be three technical sessions:

--The first one will cover how productivity measurement systems have been developed and used in various agencies, and will describe some good productivity indicators.

--The second workshop on "Improving Productivity Techniques and Procedures in Accounting and Finance Operations", will address some recent innovations through automation, improved methods, goals and techniques. The follow up action on the recommendations made in a recently issued General Accounting Office report, "Improving the Productivity of Federal Payment Centers Could Save Millions" will also be discussed.

--The third workshop is on "The Effective Use of Incentives" and how you as managers can effectively motivate your staff to increase productivity in your organization.

JFMIP has had a continuing interest in improving management and efficiency of the Federal workforce. The Office of Personnel Management now has a leadership role in monitoring Federal productivity. We are both very much interested in making greater and faster progress in this area.

We hope that during the next two days, you will gain some new insights from our speakers, and will also share some of your own with us. More importantly, when you return to your office, we hope you will make a concerted effort to use the ideas and techniques discussed at this workshop and implement productivity improvements. The opportunity is there and we wish you success.

MANAGING FOR PRODUCTIVITY IMPROVEMENTS

James M. H. Gregg

Associate Director
Workforce Effectiveness
and Development Group

Office of Personnel
Management

The bad news is productivity in the United States is declining on all fronts. The good news is through our efforts and the efforts of our colleagues in Government, we can help turn the bad news into good news. I am not going to dwell on the bad news, but I had better mention it. In the public sector, the Federal Government's productivity has increased only 18 percent since 1967--or an average rate of increase of only 1.4 percent per year. In the last three years, our Federal sector productivity has gone from a 2.9 percent increase in 1977 to an increase of only 0.5 of 1 percent in 1979.

The situation is even worse in the private sector. In the last year we have had no productivity increase at all, in fact, we are experiencing a decline in productivity. All of this is showing up in increased inflation and lower standards of living for many Americans.

It is also appearing up in peoples' attitudes toward their institutions, both private and public. Attitudes of the public toward Government have become particularly negative--with some polls showing less than 15 percent of the people expressing confidence in the Federal Government's ability to do its job.

We cannot govern effectively with that degree of public mistrust and lack of confidence and it is not just a public relations issue. To restore trust we must improve the services and productivity of Government and improve our performance.

We need a strategy for increasing the productivity of the Federal work force and a need to work on it together and build consensus around it. We need to start that process now.

First, we need to ask, "What is productivity?" It can be defined in many ways, but for our purposes, improving productivity simply means getting more performance from our resources. This broad concept of productivity includes: effectiveness--getting the desired results from the work we undertake; and efficiency--getting more output per employee or more output per total investment of our resources.

Also for public sector activities, the concept of productivity includes responsiveness to the needs of the citizens. For instance, we should be delivering products or services that the public wants and delivering them promptly, evenhandedly, and courteously.

Finally, let me say that productivity does not mean measurement, but it does require measurement. We can and should measure each of the components of productivity. We should have measures for effectiveness, efficiency, and responsiveness.

We not only have to specify what we mean by productivity but we also have to say who we think is responsible for it. Just as some people erroneously think that productivity is measurement (rather than something that should be measured), others think that productivity is a program, it is not. We can and do have programs to promote productivity improvement. However it is not an OPM, OMB, GAO, or JFMIP program. Productivity is performance and it involves every single person in the work force.

Every agency in Government is responsible for productivity improvement. Every manager, supervisor, and individual is responsible for productivity improvement. The will to work more effectively, efficiently and more responsibly has to stem from the personal commitment of each individual, whether that person is the head of the agency or the most junior file clerk or messenger. So personal commitment and personal responsibility are the most basic factors for a productive enterprise.

There are additional needs and considerations for the executive and manager who have the motivation to manage for productivity improvement.

There are seven key components of a productivity strategy:

(1) The need to maintain and renew the resources of Government;

(2) The need to specify more precisely the results that Government is expected to accomplish;

(3) The need for executives, managers and supervisors in Government to know how to manage for productivity improvements;

(4) The need to effectively utilize technology in managing for productivity improvements;

(5) The need to remove or change policies that constrain productivity improvements in Government;

(6) A need for more research in the area of public administration and public management; and

(7) A need for public managers to communicate with each other and assist each other in getting our jobs done.

With respect to the first need--the need to maintain and renew the resource stock of Government, we must recognize the key components of that resource stock. It consists of people, facilities, equipment, and knowledge. We have to be concerned about the maintenance and renewal of each of these components in our agencies and organizations.

Since our work is labor intensive, our foremost concern must be people: to recruit the people we need; to develop them throughout their careers; to appreciate and utilize their dedication and creativity; to recognize their individual differences and build on each individual's unique strengths. While people are our foremost concern, we must provide decent and safe work facilities. We must give them the equipment they need to do their jobs productively, and we must acquire knowledge about the most effective ways to carry out our operations and create an environment that permits our employees to apply that knowledge. It is no easy task to maintain all these critical resources. Some, like adequate facilities, seem almost beyond our control.

However, it is a principal job of management and executive leadership to do it, despite the difficulties involved.

Our future production of results depends on maintaining and renewing these resources. Getting immediate results cannot be given such overriding importance that the resource base is depleted and the future sacrificed to the present. It is the job of the Federal executive and manager to protect and renew the resource base, so that it can continue to produce results year after year.

It is the job of the Federal executive to be sure that the resource provider--whether it is the Congress, or OMB, or the Department, understands the need to maintain the stock of qualified people, adequate facilities, needed equipment and a knowledge base to support the productive accomplishment of the agencies' missions. We must have an adequate resource base and yet that is not enough. We must know what we want to do with the resources we control. There is often nothing more difficult than knowing precisely what needs to be done.

In organizational life (in personal life), it is very difficult to precisely define what one wants to do and accomplish. This is so because real objective setting means making hard choices among worthwhile alternatives. It means deciding what not to do as well as what to do, as well as setting priorities and a willingness to apply the organizations' resources to the objectives and priorities. The first and essential step in productivity management involves the setting of real objectives. It is not an easy step in any environment--it is especially difficult in the political environment in which we operate. It takes hard work and courage.

But if it is not done, the organization will flounder--it will be confused and it will devote resources to purposes which are no longer relevant or useful. To manage for productivity improvement every organization must: know and define its mission, must know and define its objectives and priorities, and must align its resources with the objectives and priorities. Finally the organization must be able to measure performance with respect to the objectives.

It is generally a good test of an objective setting process, that once the objectives are determined performance against them can readily be measured. It has always impressed me that the principles of good management are so simple and their application so difficult. If we are to increase our productivity, we must have executives, managers, and supervisors who not only know the principles of managing for productivity, but who have the skills and courage to apply them.

Let me discuss the principles and concepts of productivity management in more details. Please keep in mind that these principles and concepts are worthless unless we have managers with the skill and guts to apply them. Any system of management has to deal with at least four key elements:

(1) The nature of accountability,

(2) The nature of the reward and punishment system,

(3) Processes for managing and developing programs, and

(4) The environment or context in which the organization operates.

We must deal with two basic sets of accountabilities. One set involves accountability for program accomplishments, program results and service delivery to the public while the other involves accountability for the processes by which we manage such as: how we hire people, how we procure goods and services, and how we report our activities. Both kinds of accountability are important, but they must be kept in balance. If we are concerned about productivity, we must assure that the second form of accountability does not overwhelm the first. The Government, after all, exists to provide services to the public.

In regards to the reward and punishment system, we, as managers, are constantly surprised that employees respond always to the real reward system in the organization. They do not respond to what the Congress states the reward system to be, or to what agency policy says the reward system is, or to what you and I say it is. They respond to the real reward system. If a manager is to be effective, he or she had better know what that real reward system is and either work with it or try to change it if it is rewarding the wrong things. Many books and articles have been written on processes of managing and processes for developing programs.

On management process, our early research at OPM is showing that several factors are of key importance in most operations.

(1) People and organizations have clear and rigorous performance standards and performance expectations on the job.

(2) People and organizations get information very frequently about how they are performing.

(3) People have opportunities to express themselves and contribute their ideas about improving their performance and the performance of the organization.

(4) The reward and recognition system is perceived to be fair, even handed, and performance related.

If we are to manage for productivity improvement, Federal managers are going to have to become much more cost conscious in the future than we have been in the past.

I do not think it is inaccurate to say that many, if not most, Federal managers have no idea of the real or total costs of their operations. OMB Circular A-76 policies will be changing that for many of us. But Federal managers, generally, have not been sensitive to costs; have not demanded information on costs or been sufficiently concerned about cutting costs. If we are to manage for productivity improvements, the reward system will have to reward a greater interest in and concern for cost cutting opportunities. Disincentives to cost saving will have to be removed or moderated.

Another way to improve productivity is the use of new technologies. The remarkable thing about technology, in both the private and public sectors, is that there is a great deal more technology available than is being utilized. The "critical path" involved the education and training of our managers to prepare them to apply technology that is already available. Federal managers should: recognize the existence of new technology; adapt it to their operations effectively; budget funds for technology and acquire it; and utilize the technology once it is acquired.

The problem of effectively applying office automation technologies is illustrative. The technology is available now and is becoming better and cheaper all the time, but both public and private sectors are just beginning to appreciate its existence and work on applications. In the use of technology we often face two enemies: excessive fear on the part of managers, and excessive enthusiasm for new technology applications. If I was forced to choose between these two evils, I would choose excessive enthusiasm, since we would learn something from making mistakes, but we do not learn anything from doing nothing.

Another component of a productivity strategy involves removing or changing policies that constrain productivity improvements. We must go back again to the real reward system, which is related to our real value system. We have

to observe that we work in a political-governmental system in which there are many values and these values are often conflicting. It would be quite naive to believe that the productive management of Government is the only value operating in our political system. It would be just as naive to suppose that it is not an important value. But productive implementation of programs must compete with other political values that find their expression in such activity as:

--Dramatic new policy development and reorganization of Federal agencies;

--Demands for quick response to complex problems and quick results;

--Requirements for political equity in the distribution of benefits; and

--Demands for process accountability and the avoidance of error and mistakes.

All these other values are not always consistent with efficient and effective implementation of programs. But within this complex set of contending values--as executives and managers of operations--we must continue to be advocates for productive management and effective implementation of programs and services. We have to be concerned that the total system provides sufficient regards for effective management. If it does not, programs will not be productively delivered and citizens will continue to lose confidence in us.

When we contend that certain policies constrain productivity, we had better be able to support our contentions with more than rhetoric--whether it is the classification system, employment ceilings, lack of GSA delegations, pay caps or any other policy area that concerns us--screaming and yelling in frustration will not help. We are going to have to document with hard facts and figures how these or other policies may be constraining us and how they may be decreasing our ability to produce results.

Finally, in my view many of these issues really involve one basic issue--"Are we going to give Federal executives, managers and supervisors the freedom and flexibility to manage their operations?" The answer to that question will depend upon two things:

(1) The establishment of accountability systems that are effective when Government authority and power

is decentralized and delegated. If we try to decentralize and delegate without effective accountability devices, we invite disaster and ultimately more centralization, regulation and control.

(2) There must be a much greater degree of understanding, communication and trust within the Federal establishment. There is a need for better communication between, the Congressional and Executive Branches of the Government; between the central agencies (OPM, OMB, GSA) and the line agencies; within agencies and their component organizations, and between management and employee organizations.

We do not have a sufficient degree of understanding and trust now. Government will not work well until this changes. We cannot work effectively in an atmosphere of hostility, mistrust and recriminations. Constructive change will not come until we can increase the level of our communication. Our ability to do that depends at least in part on having more convincing evidence concerning our problems.

Research concerning Federal operations and management has been minimal over the years. We are just beginning to develop research agendas and do research that can help us with some of the basic management and productivity issues we face. We have to build our knowledge base and then utilize the knowledge we gain. It is ironic that some of Japan's most successful management techniques were developed in this country. Japan put them to use; we did not. We have many needs now. We need a research program that over time will test all our basic assumptions about what makes our organizations effective or ineffective.

--We need to know what does work and share that information;

--We need to understand the policies and circumstances that constrain productivity;

--We need hard evidence to support our contentions about these matters; and

--We need to work together to solve these problems.

It is our responsibility. No one else is going to do it for us. We have to help and communicate with each other; share ideas and techniques with each other; encourage each other; and form alliances and networks for collaboration and cooperation.

We have begun to move in that direction. With your involvement and commitment we will make it happen.

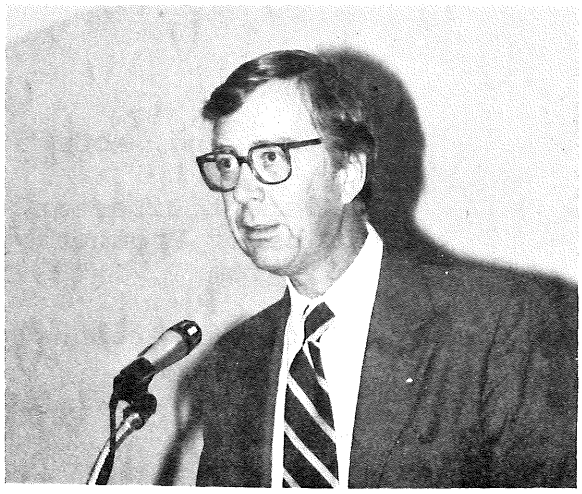
* *

Blair Ewing, Moderator

Assistant Director
Office of Productivity
Program

Office of Personnel
Management

PRODUCTIVITY AND THE BUDGET



WAYNE G. GRANQUIST

Associate Director for
Management and
Regulatory Policy
Office of Management
and Budget

I thank you for the invitation to speak to you on "Productivity and the Budget," a subject that is immediate and relevant. We might begin by stating some obvious "truths" about the Federal budget.

--The budget is not endlessly expandable - there is a finite limit to usable resources.

--We have probably come very close to our theoretical limits of taxation as a source of revenue to expand the budget.

--Demands for Federal services are not diminishing - and are, in fact, potentially unending.

--The public perception of the budget is one of the most visible "flash-points" of public opinion - particularly in terms of limits of growth.

So, we have a public seeking services of at least constant size--and with an unwillingness and inability to expand the resources necessary to pay for these services.

Federal managers, faced with these dilemmas, have some of the toughest jobs in the world. And incidentally, I think one of the best descriptions of that job is contained in a JFMIP booklet - Managers: Are You Looking for More Meaningful Financial Reports? To quote from the booklet, citing a GAO pamphlet: "...The manager's job basically is to achieve

goals at the least practicable cost, to make the best possible use of resources, and to stay within spending and other limitations." That is a tall order in the best of times. Today it seems especially difficult.

I believe that we at OMB have a special responsibility to support Federal managers in their efforts to reduce costs and improve efficiency and economy. This support comes in many forms, including encouraging the use of productivity measures. But it also is much broader than this--it includes a number of Government-wide management improvement efforts.

And make no mistake, if we in the Executive Branch do not take the initiative to improve Government operations, the Congress will become increasingly detailed in telling us how to carry out programs. Congress today is enamored, for example, with the use of the legislative veto as a tool to inhibit what they view as misguided regulatory agencies exceeding their authority. Congress adopts such legislative veto amendments to authorization bills so as to put Congress in the position of being responsible for the day-to-day details of executive administration. The legislative veto is a silly provision for the most part, and a serious threat to efficacy on occasion. The legislative veto is not where Congress should want to be and certainly not where the Constitution intends Congress to be.

And yet the action, and reaction, of the Congress is understandable. They reflect the attitudes of the people and the press that the Government is out of control. Legislative veto is only an example.

There is a powerful feeling that the key to making Government more efficient is to eliminate "waste and fraud."

We are doing the best that we can to turn that force into constructive, not destructive directions. The President worked with the Congress on legislation establishing fifteen Inspectors General. We believe that this new tool, designed to support the needs of the Congress, can also serve the Executive Branch. We, at OMB, have joined with the Justice Department to work in a continuing forum with the Inspectors General. The Deputy Attorney General chairs and the Deputy Director of OMB vice-chairs an Executive Group on Waste and Fraud which we believe will help get the very best out of the IG system--and help assure sound relationships between the IG's and other Federal managers. We respect the independence of the IG's--but we are working hard to ensure they are members of the executive management team.

In the area of regulation, we have in the past three years eliminated unnecessary rules and regulations in agencies which had no previous record of such accomplishments. We have eliminated backlogs of cases which stood for years as evidence to the public that timely action by the Government was a hopeless dream. I would point with pride to the work in those areas done by the Occupational Safety and Health Administration, the Equal Employment Opportunity Commission, the Merit Systems Protection Board, and the Department of Labor's Black Lung Program. I would also point, frankly, to the failures like the delays in revising the HUD minimum property standards regulations.

We have this year organized a new office within OMB to accelerate our work in this area, the Office of Regulatory and Information Policy. That office's charter stems from an Executive Order - 12044 - which requires agencies to: (1) choose the least burdensome way of effectively meeting statutory goals; (2) prune the rule books of unnecessary, obsolete rules; (3) write regulations in plain English; (4) encourage timely and effective public participation; and (5) cut unnecessary delay and red tape.

We have also tried to eliminate unnecessary reporting inside the Executive Branch. We abolished Circulars A-44 and A-113, which had turned into paperwork mills. Instead we issued Circular A-117 on "Management Improvement and the Use of Evaluation in the Executive Branch," which puts the responsibility on Federal agencies for action, not for mere reports to OMB.

We have launched a new effort to promote more effective program evaluation in the agencies. Our OMB examiners and management analysts have identified 12 prospective project areas in various agencies for applying performance measures.

We are developing demonstration projects in these agencies to relate program costs and benefits in the budget review process and to develop valid program performance standards. We are monitoring the Management Improvement and Evaluation programs of about 30 agencies on a continuing basis not only to identify problems, but also to discover and propagate successful management innovations. To get the word out, we are publishing a quarterly "Management Memo."

We are using several mechanisms to assist agencies in solving particular management problems. One of these is the President's Management Improvement Council, co-chaired by the Directors of the Office of Management and Budget and the Office of Personnel Management. The Council's members are

are drawn from industry, labor unions, universities, State and local governments, and Federal agencies. The Council's purpose it to advise the President on specific management improvments that the Federal Government can undertake to improve its operations. Among the Council's activities are a Government-wide project to improve agency debt collection, assistance to the Health Care Financing Administration, and to the Immigration and Naturalization Service in improving program management.

In an area of direct interest to you, OMB and GAO have held a series of meetings with Cabinet Secretaries and Agency Heads to review progress in our Financial Priorities Program. This initiative is related to our efforts to improve basic financial management systems in the Federal Government, with special emphasis on audit follow up, improvement of accounting systems, and internal controls. This effort is understandable to an American public--a public that wants an efficient Government, a Government that accounts for their tax dollars. There will be many individual results from our Financial Priorities Program--like the $75 million one agency collected in unspent grant funds, or the $400 million savings in 1980 by our Cash Management Project. Such examples illustrate the contribution you and your colleagues can make to increasing public confidence in our abilities to manage scarce resources.

In closing, permit me a bit of philosophy.

These are not the best of times for the Federal employee. We bear the burden of the criticism of a frustrated society; frustrated because it is so difficult to solve all the problems it perceives--unemployment in the ghettos; inflation in the market; alienation in the suburbs; red tape in the Government; pollution in the environment; fear of warfare overseas; fear of a lonely, poor old age here at home.

Our citizens hear about our problems--and our failures--all day long on radio news and talk shows and they read about them during breakfast. It is kind of a compliment to all of us as Federal managers, that they place on us a share of the blame. They blame us because they still believe we can help. It is a reflection, in a sense, of a faith of people in their Government. But we know how hard it is to satisfy their hopes and put to rest their fears. We know the incredible difficulties the Government employee faces today in carrying out his or her job.

I simply want to suggest the following thoughts: (1) nobody ever moved forward when sitting in a defensive crouch; (2) nobody is better equipped to know about the problems than you are; and (3) what we need today is a new, smart and major involvement of those responsible for fiscal management--you and me--in an effort to improve the way we go about the public's business.

And what I want to pledge to you is a willingness to participate in that dialogue from OMB. Because no matter who is elected this year, the functioning of Government - The mechanics of how it is done; the productivity of the Federal establishment - will be among the highest domestic priorities. You are the kind of people that must help to answer the questions that will be high on the national agenda.

IMPROVING PRODUCTIVITY IN ACCOUNTING AND FINANCE OPERATIONS

CLYDE McSHAN, III

Deputy Director
National Finance Center
Department of
Agriculture

I will discuss some ways to improve productivity that the Department of Agriculture used in its accounting and finance operations over the last 20 years. First, let me briefly describe USDA so that you can have an appreciation of the magnitude of the job. USDA's programs are very diverse and include domestic and international programs to improve productivity and marketing of U. S. agricultural products. The Department provides a variety of programs such as the program to aid the production and sale of crops, to improve conditions in the rural community, to assist the American consumer, to feed the poor, to develop natural resources and to protect the environment particularly as these relate to various farmlands and forests.

To accomplish this, USDA has about 30 agencies employing approximately 130,000 people. Each of the agencies are very much autonomous in accomplishing the assigned mission. These agencies historically operated on a decentralized basis which extended to all administrative processes such as payroll, voucher payment, billings, collections and accounting.

Centralization and Automation of Payment and Accounting Functions

A Departmental decision in 1961 resulted in the centralization and automation of the entire payroll/personnel process. This step was taken after a study showed that substantial productivity gains could be achieved through the establishment of a Departmental payroll/personnel office, which would require fewer resources than that currently used

by individual payroll offices. In 1963, a single Departmental office was established and began processing payroll.

The next major decision made by the Department concerning administrative activities was to centralize the payment of vouchers. This included all payments to vendors and to other Governmental offices and reimbursements to employees for travel or other similar expenses. Prior to the centralization of these functions, the various USDA agencies were utilizing some 860 staff years of direct time to process administrative vouchers, with 215 offices auditing vouchers and 74 stations preparing disbursement schedules. A study performed in 1971 showed that the more centralized agencies had lower unit costs. Specifically, it revealed that those offices processing less than 1,000 transactions annually had unit costs of $12.23, while those processing over 50,000 transactions had unit costs of $3.56. Following a developmental effort, a centralized payment office began processing travel and transportation payments in January 1973. Since that time, the remaining administrative payments and collections systems have been phased-in by the centralized operation.

A Departmental Accounting System was developed and the separate payroll and voucher payment functions were merged into a National Finance Center (NFC) in April 1973, so that the agency could reduce its costs. The functions of NFC are to: operate the Integrated Centralized Payroll and Personnel Reporting System; develop and operate a Centralized Administrative Payment System; design and operate a Centralized Billings and Collections System; and develop and implement Centralized Accounting Systems for the Department.

The centralization and automation of the functions by USDA have substantially improved productivity in the Department. Such consolidation could not have been accomplished had it not been for the tremendous support given to the centralization by the Secretary of Agriculture and Assistant Secretary for Administration. This is a key ingredient to success, since without such support the Finance Center could not have survived the pressure from managers of various agencies. They felt that centralization was a threat to them through a perceived loss in the amount of control they had over their course of events.

Evidence of success through centralization and automation can be found in the following statistical information. The chart shows a substantial decrease in personnel to accomplish the payment and accounting function when comparing NFC staffing to what the Department needed to continue to function on a decentralized basis.

ESTIMATED
DEPARTMENTAL STAFF SAVINGS
THROUGH CONSOLIDATION

USDA AGENCY STAFFING	PAYROLL 598	ADMINISTRATIVE PAYMENTS 989			BLCL 97	ACCT 105
NFC STAFFING	PAYROLL 284	ADMINISTRATIVE PAYMENTS 480	BLCL 72	ACCT 55	DEVELOP-MENT 164	SAVINGS 734

1789

NFC Characteristics and Techniques

Since the establishment of the NFC in 1973, the office has been involved in the development and implementation of new systems. The size of the operation has continued to grow from about 5 million transactions in 1975 to about 12 million this year. Currently, the NFC schedules for disbursement about $3.6 billion of payments and collects about $126 million.

Large volume and a diversity of workload have enabled the NFC to build systems which utilize extensive computer edit routines in order to eliminate most manual audits. The manual audits which are performed are primarily to test the operation of the automated system or to meet requirements established by the GAO. Extensive automation is a prime ingredient in the ability of the centralized concept to show a savings of so many staff years.

The size of the operation has also allowed NFC to reduce the number of manual audits through extensive use of statistical sampling routines. When NFC began processing in 1973, a sampling routine was established for travel vouchers under $100. (It is interesting to note that prior to centralization, USDA agencies did not use sampling to any great extent.)

We estimate that the use of sampling of transactions $100 and less saved USDA about 30 staff years. The NFC collected statistics during the first year of operation which showed that it was not cost effective to manually audit all

transactions up to $300. Since the office processed over 500,000 travel vouchers, enough supporting data was gathered to furnish GAO with information which was used in securing a legislative change which increased the sampling limit in accordance with that prescribed by the Comptroller General.

After the Comptroller General set the limit at $300 in 1975, we implemented the change and saved 14 staff years in the audit organizations. We were able to justify that the sampling level should be increased to $500. After GAO changed the limit, we had savings of eight more staff years. GAO has since approved sampling of greater value vouchers, based on the fact that the actual audit is performed by the automated system and the full manual audit is only required to verify the integrity of the system.

The NFC has long recognized the need to continue to improve the processes used in the office. There has been an aggressive posture whenever organizational changes were dictated by events or whenever innovative techniques were required.

Optical scanning was introduced for processing time and attendance reports in 1972. This procedure relied on hand written time and attendance reports prepared and submitted by agency personnel in the field. This source document scanning replaced the much less effective keypunch contract with a real savings of $250,000 per year.

The use of intelligent minicomputers was introduced in 1973, which resulted in the elimination of an annual $600,000 card punch contract and a savings of about $300,000 per year. The use of this equipment provided more effective processing techniques by providing front-end edit capabilities, which were not possible with keypunch equipment. Presently, terminal techniques are used for data transcription, research, correction, inquiry and computer programming.

Another innovation which reduced costs and staffing at the NFC was the automation of certain vendor invoices. Gasoline vendors historically submitted individual billings for each USDA account for which there were charges. This resulted in about 5,000 individual billings per vendor per month with a total annual volume of over 600,000 invoices. Working with the oil companies, NFC was able to obtain magnetic tapes or punch card billings from 13 major companies, representing 80 percent of those individual hard copy billings. This enabled the companies to reduce their mailing costs and expedite receipt of their funds, while NFC was able to eliminate document handling and transcription costs, thus

saving over 10 staff years. All of this was accomplished without a loss of internal controls, since the automated invoices must still pass through the full range of system edits.

NFC has pursued changes in processing techniques which can be shown as cost effective. One example is a test project to show the benefits which can be derived through the elimination of certain receiving reports. Most Government agencies require an obligation document, receiving report, and vendor invoice which must be matched and audited prior to making payment for goods and services received. Like many agencies, we have had difficulty obtaining receiving reports from the applicable offices.

Although the NFC system provides a very sophisticated automated follow up, the untimely submission of receiving reports delays payments and causes vendor complaints. To remedy this, the NFC developed data which showed that positive receiving reports are of questionable value since in most cases goods are actually delivered. The NFC proposed and GAO approved a limited test designed to demonstrate the merits of a system which would process payments without receiving reports for obligations of $500 or less. Some features of the system are: invoices cannot exceed the established obligations; procurement offices are allowed to require a receiving report whenever necessary; a selected statistical sampling of obligations require positive evidence of receipt; and procurement or receiving offices may notify NFC that goods were not received and that payment should be withheld.

Depending on the results of this test, a decision will be made as to whether the concept should be used Department-wide. If this occurs, the NFC estimates a savings of 9 personnel at the office and an additional 19 in the agencies, with a total annual savings of $310,000.

In the area of automated systems, NFC has never been hesitant to make changes to improve the operations. Last year, the office made some 2,500 enhancements to systems that range from the alteration in the array of a report to the production of additional reports facilitating research and correction of transactions. Most of the ideas for such changes originate from the supervisory or worker level of the office.

Programs for Employees

NFC has always provided a work environment designed to encourage employee commitment and dedication to the

accomplishment of the job. In addition to a very active employee suggestion program, the NFC has developed extensive EEO programs to assure opportunity for all employees and to assure that the merit selection process is used to its fullest extent. Upward mobility programs have also been used to develop and place clerical personnel in 2-grade interval jobs. Particular success was achieved through in-house developmental programs which have provided 28 computer programmers and 5 management interns over the last three years.

This office was one of the first in the Government to introduce full gliding flexitime. About 90 percent of our employees are allowed to change their work schedule each day as long as they are present during the core period of 9 a.m. to 3 p.m. This change has substantially reduced the use of sick leave, and increased employees' morales.

Barometer for Measuring Reduced Costs and Increased Productivity

The NFC techniques have had the effect of substantially improving productivity. Some barometers which can be used to demonstrate these productivity gains are demonstrated by the data on the following charts. They show an increasing number of documents processed per staff year and a continuous decreasing unit cost per document processed:

COMPARISON OF DOCUMENTS PROCESSED PER STAFF YEAR EFFORT

CALENDAR YEAR	VOLUME	STAFF YEARS USED	DOCUMENTS PER STAFF YEAR
1975	5,044,269	927	5,441
1976	7,177,374	988	7,265
1977	8,518,761	996	8,553
1978	9,667,900	1,029	9,395
1979	11,409,624	1,068	10,683

COST PER DOCUMENT PROCESSED
1979 DOLLARS

CALENDAR YEAR	VOLUME	ADJUSTED DOLLARS	COST PER DOCUMENT
1975	5,044,269	$21,054,148	$4.17
1976	7,177,374	22,629,892	3.15
1977	8,518,761	23,260,367	2.73
1978	9,667,900	25,683,449	2.66
1979	11,409,624	28,125,174	2.46

Timely Document Turnaround

NFC has been conscious of the need to not only save personnel resources and reduce costs but to effectively process transactions. As a result, systems have been built to monitor the amount of time a transaction spends at the Center. Each system includes management reports which numerically track documents processed, rejected, audited, corrected, and which documents fail the correction process. Each system also has the capability to let the managers of the organization know exactly how many documents must be worked and the age of each transaction from the time it arrived at NFC. As a result of this step, transactions are processed very quickly by the office. The following results were achieved in administrative voucher processing last year.

	Days in House
Travel Advances	1.54
Travel Vouchers	3.89
Transportation	5.41
Over-the-Counter Purchase	3.18
Telephones	4.22
Gasoline Credit Cards	6.18
Utilities	4.65
Uniform Allowances	4.12
Imprest Fund	3.72
Casual Employee Time Reports	7.42
Major Purchase Orders	3.38
Miscellaneous Payments	3.57

Key to NFC Success

We sincerely believe that the key to the demonstrated NFC success is the fact that management has always approached the job in a business-like manner and has been cost conscious about each decision. NFC management has tried to view the operation as if it were a partnership and the money expended was ours. This philosophy has resulted in a hard nosed management approach which has always demanded the most for each dollar expended. Also, it has resulted in an operation which is lean in terms of dollars available and personnel employed. By having top management insist on such an approach, the entire organization has become more conscious of the need to effectively and efficiently perform a job no matter how difficult it might appear.

Operation of a lean organization is difficult because it requires tough standards of performance, which places additional pressure on personnel to accomplish their job. It is

sometimes difficult to convince middle and lower management that this is worthwhile since there are so many disincentives to the operation such as: budget process encourages managers to spend every nickel; lean organizations are penalized in across-the-board personnel and budget cuts; grade levels are tied to number of employees supervised; and Congressional and public attitudes toward Government workers are not very supportive.

Although there are obvious disincentives to productivity improvements, Federal managers have the obligation and responsibility to assure operation of an efficient and effective organization. One can, in fact, expect a high degree of self satisfaction and other personal rewards from knowing that such a job can and is being done.

GAO Review of Payments Centers

A recent GAO report, entitled "Improving the Productivity of Federal Payment Centers Could Save Millions," showed that the productivity level ranged 600 percent between 22 Federal payment centers. The NFC achieved a rate of 17.9 documents per staff hour which was the highest productivity rate of all those reviewed, while one center had a production rate of only 2.7 documents per staff hour. If all centers achieved a rate of 11 documents per staff hour, the Federal Government could save millions of dollars annually.

GAO made some very positive recommendations for achieving productivity improvements. We fully endorse the following of these recommendations and encourage anyone interested in improving productivity in their accounting and finance organizations to actively pursue these techniques, such as: eliminate or consolidate low volume centers; obtain services through larger agencies; use alternatives to receiving reports; eliminate unnecessary or redundant steps in the payment process; and use statistical sampling techniques.

NFC Plans to Continue Aggressive Approach to Change

Although we are proud of our success as indicated by the GAO report, we are still striving to make additional improvments. One major change will affect the organization and the approach to document flow. Our approach to document processing has historically been by function rather than system. For instance, there have been separate groups to do the document preview and batching, data transcription, the research and audit, document control, and inquiry processing. Regardless of document type, these units handled their prescribed portion of the processing in an assembly line approach to processing.

We recently tested a new approach and are prepared to fully implement this change. The change would provide individual groups to handle particular transactions. For example, a unit would do all of the processing and handling of the inquiries for the travel system. We are moving in this direction, because we believe it will significantly increase our productivity by providing job enrichment for employees of the office, improved levels of expertise in the office, and improved services to clientele.

We are anticipating that we will develop a more sophisticated work measurement system so that problems with productivity can be identified more readily and be corrected faster. As part of this system, an error analysis technique will be developed to provide information to be used internally and by the agencies serviced, so that proper focus can be directed to those entities with high document preparation errors.

We also anticipate the introduction of distributed processing within the next two years. This will provide for the input and correction of transactions through use of intelligent terminals located away from the NFC. This will eliminate mail time and will make field offices responsible for document processing. Distributed processing should give the Department the best of both worlds, by allowing the operation of economical centralized systems which are fed by transaction created input and corrected at remote locations, thus making field personnel accountable for their own success or failures.

In summary, NFC plans to continue an active campaign to find better and less costly techniques for processing transactions. We sincerely believe that productivity increases must be pursued everyday and that any less active approach will result in loss of momentum and eventual organization stagnation. We encourage every Federal manager to develop a similar philosophy toward improving productivity so that the image of the Government can be significantly enhanced.

THE MANAGER'S NETWORK

DEBORAH LOEB

Special Assistant to
the Deputy Director
Office of Personnel
Management

Thank you very much for inviting me here today to talk to you about our "Manager's Network" concept.

I would like to begin by telling you a little about what we are not. We are not a new organization. You cannot pay dues and become a card-carrying member. We are not, we hope, artificial. We are not a revolutionary new idea. And we especially are not a panacea for your management problems.

What are we then? We are something which already exists, but in many cases is not used to its fullest. We are something which you are involved in every day whether you consciously recognize it or not. We are something we hope will make it a little easier for you to manage more efficiently and effectively.

Our basic working hypothesis is that by improving the quantity and quality of communication among managers, by facilitating a greater collegial sharing of knowledge, we can improve your knowledge of management techniques and practices. Hopefully, this will improve the way you manage--both for you personally and for your organization. We would like to do this by energizing both the formal and informal networks that already exist.

We started out with several basic assumptions, most of which are somewhat negative but which most people we have met, agree with.

The first assumption is that managers in the Federal Government are, for the most part, underutilized. They are oftentimes boxed into seeing only their immediate responsibilities and not the broader picture of the full significance of their actions.

A second assumption is that managers are not current on the "state of the art" of management through no fault of their own. Most Federal managers come up through the technicians' ranks. They then become managers because they have mastered some area of expertise--such as accounting or law or engineering--and not because they were trained in management. Indeed, some people might argue that in many instances "management" does not enjoy the professional status that many technical or recognized occupations do. Managers often do not perceive themselves as "managers." Additionally managers are not expected to be current in their field nor are there any incentives in the system to really make them want to go out and learn about the latest budgeting techniques or concepts in personnel.

Thirdly, management is a soft science with few easy answers which makes it difficult for people to grapple with. There are no definite answers for many of the problems or decisions managers face, no simple right and wrong. As a result, many managers find it simpler just not to deal with management at all.

Assumption four is that managers are not talking to each other the way they should be. Again, the system does not provide any incentives for them to do so. Instead of finding support if they turn to a fellow manager for assistance in solving a problem, managers often find people ready to criticize and ridicule.

The last assumption we make is that the best managers out there today have the best networks or rather the best "know how" to utilize the networks they have. Others need to recognize the value of how these "best" managers capitalize on the ideas of others in their networks.

Let me give you some background on how the idea of OPM promoting manager's networking came about.

As I mentioned earlier, we are not a new idea. For years people have been talking about the importance of communication between managers. Everyone has recognized the importance of an "old boys' - girls' - network." As Alan Campbell, the Director of OPM and Jule Sugarman, the Deputy Director of OPM, traveled around the country and talked to

Federal managers, more and more they saw the need for good channels of communications--both formal and informal--among managers. They would hear from one manager or management group about a problem which they were grappling with--a problem which another group of managers elsewhere in the country had solved. The importance of this was especially highlighted to them as they tried to disseminate information about Civil Service Reform. It became clear to them that the necessary channels of communication simply did not exist as universally as they should.

OPM had sponsored the Second Annual Management Conference with OMB and GSA last February where over 550 of the Government's top career managers came together. OPM took a conference evaluation survey, to find out the usefulness of such a conference.

These officials further stated that they thought it was very useful to communicate about their successes, their failures, their problems and their potential solutions with other managers. The results were that over 90 percent of the respondents agreed that it was extremely useful to be able to meet and communicate with their peers in Government.

Another project that OPM is working on to help managers communicate with one another includes compiling a list of all Executive Resources Board Chairmen and then circulating the list of all the members. Simple enough, but no one else had bothered to take the time to do it and if one Executive Resources Board Chairman had a problem or a good idea he/she had no easy way of sharing that with other individuals who might be interested in it.

In Kansas City, a Federal Executive Board Chairman told me that many of the top managers within Kansas City did not know each other and did not draw upon each other's knowledge the way that would be most helpful to all. I recently received a letter from the Chairman stating they were going to be sponsoring a one or two-day seminar for their managers built around the "managers network" concept.

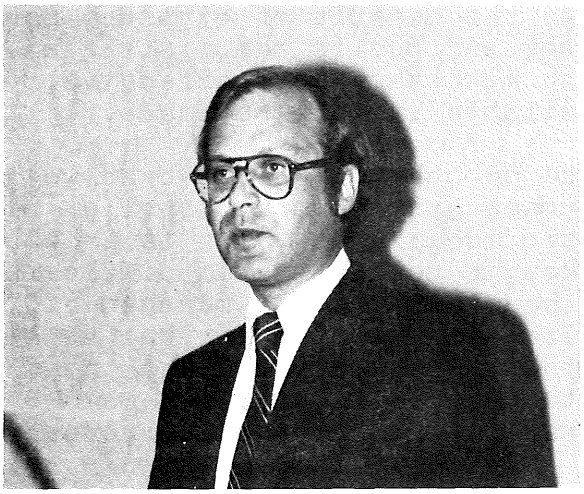
OPM also is offering to agency managers the Management Subscription Series--an annual subscription package consisting of four issues of Management Magazine, eight issues of Performance and the revised Manager's Handbook. To date, we have "sold" nearly 25,000 subscriptions. The response to this program really shows the desire by managers for increased access to general management information.

We are trying to develop an eight-week course (one day a week) to involve managers in recent thinking about management. This is going to be aimed at managers who are effective but who have not had the benefit of exposure to the classic management sciences and public administration theories--which we think might make them more effective. We hope this program will be available in late November.

I could further elaborate on other projects that we hope to facilitate under the managers network umbrella, but I think that you have the basic idea by now. It is a soft "amorphous" subject which makes it both easy and difficult to deal with. What OPM and the other central management agencies have come to recognize--and endorse is that benefits can accrue to both the individual managers and their agencies--and down the line to the public at large--by improving the Federal managers ability to manage through improved communications.

We are not a panacea for all your management problems and we do not claim to be. But if we can simply facilitate information exchanges and try to improve the access managers have to current management information we believe we can make things at least a little bit better for everyone involved.

THE FEDERAL PRODUCTIVITY MEASUREMENT SYSTEM



JAMES A. URISKO

Program Director,
Federal Productivity
Measurement
Department of Labor

The Bureau of Labor Statistics (BLS) has the responsibility for maintaining the data base which measures the productivity of the Federal civilian work force. This paper will summarize the measurement efforts, examine the concepts and problems involved in developing the measures as well as present the results for FY 1979.

The ultimate goal of this productivity measurement project is the improvement and enhancement of productivity in the Federal sector. Measurement is generally considered a prerequisite for improvement.

Currently this measurement effort is limited to the Federal Government and does not include State and local government organizations. BLS obtains data from 373 Federal Government units in 50 agencies with employment covering two-thirds of the civilian employment.

Submission of data to this measurement system is voluntary. However, we constantly strive to expand the data base of participating agencies and seek the participation of those agencies not measured.

The program is a continuing developmental activity, which has not had a great deal of recognition or support. Recent concern about the performance and productivity improvement in the Federal sector, as well as a need for more accountability, should increase interest in the program. Results of Federal productivity have been compiled through FY 1979.

The BLS will be assisting the Office of Personnel Management (OPM) in the preparation of the annual report, which summarizes the latest aggregate findings. The productivity and related indexes will not be published, but returned to each participating organization to stimulate further examination of causes of productivity change.

Productivity Measures

There is no specific definiton as to what public sector productivity measurement encompasses, as it is defined in public sector literature in various ways. Generally the various efforts can be classified into three broad areas: efficiency; work measurement; and effectiveness.

Efficiency measures relate the products or services leaving the organization to the resources consumed in the production process. They tell how efficiently the organization is utilizing its resources to produce final outputs, but do not reveal whether these products should be produced or whether some societal objective is being met.

Work measurement analysis examines the work activities in the production process rather than the results. The concern is to assess resource requirements under a given set of technological conditions. This contrasts with efficiency measures, which are concerned with the relationship between final outputs and inputs.

Effectiveness measures attempt to quantify the impact of a program on society. These measures deal with the consequence of the production process. The emphasis shifts from the relationship of outputs to inputs to the consumer or recipient of the outputs. Each of these measures has an important role in the analysis of productivity.

Federal Productivity Measurement System

The Federal Productivity Measurement System is an efficiency based measurement system. The productivity measures developed for the Federal Government are indexes of output per unit of labor input and the measures are grouped into functional categories having common characteristics. The measures compare the current input-output relationship with that of a previous reference period. The measures reflect the changes which have taken place in labor input per unit of output, regardless of the mission of the organization.

If possible, the output is defined as the final product output or what the given organization produced for use outside the organization. Since the outputs of one organization may be consumed wholly or partially by another Federal organization in the production of its final outputs, all output indicators will not be final from the perspective of the entire Federal Government. Therefore, the overall statistics presented in the study do not represent Federal Government productivity, but rather the average of the productivity changes of the measured Federal organizations included in the sample.

In determining final output indicators, the agencies and the BLS have to identify specific units of outputs which are countable, fairly homogeneous over time, can be adjusted for quality changes, and reflect a significant proportion of the agencies' workload. In addition, since historical trends are important and the BLS does not want to unduly burden the reporting agency, the measures are derived from existing records or management information systems.

The output data are collected in as much detail as possible and the nature of the indicators varies substantially. Presently, the BLS processes almost 3,100 indicators from the 373 organizations supplying data to the system.

Employee-year indexes are developed from agency data submissions. As in all labor input measures used to develop productivity indexes, employee-years are treated as homogeneous and additive with no distinction being made between different groups of employees.

Since the productivity measure is a labor productivity series, the output indicators for a given organization are combined with labor requirement weights to develop an output measure for the organization.

The 373 organizations are then further aggregated into 28 functional categories and the total Federal summary with productivity indexes computed at all levels. Only the indexes for the Federal summary and the 28 functional categories are published.

Measurement Problems

In measuring Federal sector productivity, it is often difficult to define and quantify the outputs of an organization, since the bulk of Federal activities are service oriented as opposed to product oriented.

After the indicators are specified, they must be reported in sufficient detail to avoid the problem of "product mix." If output indicators are not homogeneous with respect to labor requirements, the productivity measure will register a spurious change. It will reflect shifts in the types of outputs as well as the change in labor productivity.

Agencies are requested to report any change in output quality, so that appropriate adjustments can be made to ensure that the same unit of output is being measured over time.

Measurement problems exist when outputs have long production cycle times, since the system attempts to match outputs produced with inputs expended for the same period of time. When cycle times extend beyond the measurement period, inconsistencies develop and estimates of the proportion of the output produced in each year must be made.

Another problem is that changes in the degree of vertical integration require special adjustments. This problem emerges when the Federal Government contracts work out. If no adjustment is made, the final output measure for an organization may reflect not only the results of the effort of Government employees but also those of the private contractors. It is important to determine which output is exclusively associated with the Government workforce.

In this project, the main approach used to surmount these problems has been to press for more detail in the data collection. Improving the output indicators by disaggregating the data and creating more homogeneous product categories, usually results in productivity measures more truly reflective of the performance of the organization.

Findings

Output per employee year for the total measured sample increase at an average annual rate of 1.4 percent per year for the FY 1967-79 period. This reflected an average annual increase of 1.3 percent in output and a slight decline in employee-years of 0.1 percent.

Year-to-year changes during this period varied considerably ranging from +2.9 percent in 1977 to -0.5 in 1974. For FY 1979, productivity increased 0.5 percent, somewhat below the long term trend rate. The growth rates of the Federal sample and the nonfarm private business sector are identical over the period 1967-1979.

Productivity measures are also developed for 28 functional groupings which allow an examination of the trends of organizations with similar activities. However, the degree of homogeneity of outputs within each function varies. and can be significant in the long term productivity trends among the functions.

The "finance and accounting" function experienced a long term productivity growth rate of 2.5 percent. This function is comprised of 18 organizations from 14 agencies, representing 19.6 thousand employees. Some factors which have significantly increased productivity include: automation of systems, the use of work measurement standards, the retention of experienced personnel, and employee development and job enrichment programs.

BLS will also provide information to assist agencies in collecting data for its productivity measurement system. We can provide a methodology of index construction, a listing of output indicators in the Federal productivity indices for 28 functional areas.

SESSION #1

"IMPLEMENTING A PRODUCTIVITY MEASUREMENT SYSTEM WITHIN YOUR OPERATIONS"

Leader: Edwin Soniat, General Accounting Office

Panel Members:

Allan Udler, Office of Personnel Management
Clyde Ahrnsbrak, Department of Commerce
Matthew Schwienteck, Social Security Administration
Samuel George, National Institutes of Health

The panel presented individual experiences in implementing measurement systems for financial operations. The systems offered measurement concepts such as productivity, individual performance measurement, productivity standards, and objectives measurement. The systems discussed were applied to operations that are highly automated as well as to those that are run manually.

EDWIN SONIAT opened the session with a background presentation and (1) discussed the definitions of productivity, (2) suggested what is required for a productivity program, and (3) provided an approach to designing a productivity system.

Specifically, Mr. Soniat stated that the classic definition of productivity is an efficiency measurement. However, in the Government services environment, productivity should be measured in terms of efficiency and effectiveness, or more precisely, a ratio of quantity/quality of results to resources invested. Improving productivity means providing the Government services at less cost. One of the measures discussed was the unit labor cost. Productivity is an offset of that cost. It was noted that this index is significantly higher in the United States than in other countries.

Improvement of productivity is not significantly achievable through an individual alone but through the collective action and determination of individuals each improving his performance. Thus, productivity improvement is started at the "grass roots" level.

A productivity program is an organized systematic effort to develop measures and to use them in management of Government services. The development of such a program requires the commitment of top management, the involvement of those affected, including operating management and employee representatives, the awareness of program efforts and purposes by employees, and a measurable function.

Mr. Soniat offered some points that should be considered in putting together a successful productivity program:

(1) Use of a top down approach beginning with gross or crude aggregate measurements to be refined further;

(2) Use of systems already in place which can generate data for productivity measurement;

(3) Analyses of the data collection and measurement effort and the cost effectiveness of such productivity analyses; and

(4) Use of controlled systems that are practical and capable of easy analyses to determine the reasons for change.

The top-down approach can be illustrated by looking at the Postal Service. One of the elements of information available at the Postal Service would be pieces of mail handled. The measurement of that element would give a crude or broad measurement, since it does not take into consideration the different classes of mail handled and the degree of difficulties in handling the different types. Once this

broad measure is developed, the measurement process can then be applied to the more discrete types of mail. With the discrete measures, more meaningful performance units can than be weighted to give a more accurate productivity measure.

The old trade-off question of "total labor factor productivity" versus "total factor productivity" becomes a consideration when dealing with a change in the labor input in accomplishing a function, e.g., when going from a manual operation to a significantly automated operation.

The key point is knowing why productivity changed. The reasons for the change must be determined to better manage the services provided. The productivity statistical index is the mechanism that indicates that change has occurred.

ALLAN UDLER discussed OPM's methodological approach for productivity measurement used in many administrative service areas. He identified OPM's activities and those of a participating agency. Productivity is considered multi-dimensional, i.e., efficiency, effectiveness, quality and timeliness. One indicator may not be sufficient to measure all these traits. At this time, OPM's measurement is an efficiency measure. OPM recognizes that, to achieve a successful productivity measurement program, top management support is essential.

OPM begins by meeting with the agency subject matter specialists and tries to identify all activities. These activities are grouped into homogeneous categories of functions and are defined. This is a tedious and time consuming effort. Within the functions, labor is identified as direct or indirect. Output measures are assigned to functions and subfunctions wherever it is practical and feasible.

A worksheet is developed to collect data on employees' efforts under each of the previously grouped functions and subfunctions or activities. An analysis of the function's work cycle and work periods of employees is essential before employee efforts are measured. A random periodic sampling method with an assurance of 95 percent accuracy is then developed for collecting labor time inputs for the functions. Employees record on the worksheet what they were doing at the randomly designated time. The worksheets are then extrapolated to distribute total time to functions and subfunctions.

The approach generally attempts to use existing output measurement units that are being collected under some

reliable reporting system. The data can be gathered annually, quarterly, or at other periodic intervals. Generally, quarterly cycle is thought to be the most appropriate collection frequency.

OPM provides the technical assistance to develop the random sampling procedures, develop worksheets and process the data. The feedback from such a productivity system would include labor distribution in various functions and activities, unit costs and a productivity index. Employees are fully apprised of the development, purpose and the use of the system from the beginning. The system is then tested and modified, if necessary.

A basic premise is that these data must be usable by the management being served. This methodology has been applied with success to personnel offices, accounting and finance operations, engineering support groups and ADP operations.

CLYDE AHRNSBRAK discussed the development of a productivity measurement system in Commerce using the OPM's approach. The system was developed through a cooperative effort involving the Office of the Secretary, the Economic Development Administration, and the Maritime Administration in Commerce; the Office of Personnel Management and the Joint Financial Management Improvement Program. The overall objective of the project is to design, develop and implement a uniform approach to measure, compare and analyze productivity in a finance and accounting organization.

The project team first identified and defined the major functions and activities that an accounting and finance office performs. The three functional areas being measured under this system include:

(1) Payroll processing,

(2) Operational accounting transactions, and

(3) Control accounting.

This system does not cover auditing, system analysis, and developmental work because of the difficulty in developing adequate measures.

Mr. Arhnsbrak stressed that top management support, employee participation and their understanding of the system implementation are significant and necessary. The project has been through the design, development and test stages. The data collected from the pilot test conducted in August are currently being analyzed by OPM.

Several desirable requirements of this system for measuring productivity include: (1) anonymity; (2) minimal employee disruption; (3) minimal employee training; (4) measurement of final outputs; (5) accounting for all financial activities; and (6) an open ended system for future enhancement. In addition, this system is easily transferable to other agencies.

MATTHEW SCHWIENTECK gave a presentation on the Social Security Administration's (SSA) Goal and Performance Measurement System. The delivery of the Social Security program is decentralized; however, the accounting and finance activities are centralized. The system is used to manage and accomplish the Division of Finance's mission. Since 1975, the Division of Finance's average productivity increase has been 4 percent. The system is not limited to productivity measurement. It also measures the quality and effectiveness of the Division's performance. It produces the data required under the Department of Health and Human Services' reporting standards in financial management.

The Goal and Performance Measurement System is used for budget formulation justification and execution in the following areas: (1) personnel ceilings, (2) overtime ceilings, (3) training plans, (4) travel plans, (5) other object plans, and (6) affirmative action plans.

The system is used for making merit pay decisions. Some of the goals are also identified as merit pay performance requirements. The use of formalized goal setting assures that employees know what they will be measured against. Some of the elements of the Goal and Performance Measurement System are: (1) merit pay elements, objectives and standards, (2) monthly workload and productivity report, and (3) a quarterly goal and performance measurement report.

Mr. Schwienteck reemphasized the need for top management support to assure a usable and relevant system. Management must set realistic objectives and hold people accountable for performance. Mr. Schwienteck concluded by stating that productivity statistics themselves are not the major interests. What is important is the causes for the change in the statistics. If the factors causing the change were negative, it is important to address those factors in order to make a positive change in productivity.

SAMUEL GEORGE discussed the implementation of a National Institutes of Health (NIH) Accounts Payable Productivity Measurement System. This system was one of several actions

taken as a result of a study of the accounts payable function. Other actions were a complete redesign of the payment system, and a change in the organization and staff makeup of the function.

One of the most interesting features about the NIH system is the application of "equivalent units" of work performed. The system includes the setting of standard production time values for the different types of vouchers processed based on engineering and time and motion studies. Different equivalent units are assigned to different types of vouchers based on the degree of difficulty in processing them. This system, therefore, permits the comparative weighting of the various work units. The performance of each employee is expressed in terms of equivalent units regardless of the number or types of vouchers processed and can be compared to each other. Also, equivalent unit data can and are used to compare team performances and unit performances.

The standard production time values are also used to determine the ratio between hours earned (time allowed based on actual production) for any given period to actual hours worked. Comparisons between earned hours and actual hours worked are valuable in determining the overall effectiveness of the accounts payable organization.

The system permits NIH to evaluate employee performance, value and worth. The NIH considered the following as critical performance evaluation criteria:

(1) Variety of work activity performed;

(2) Quantity of work activity completed; and

(3) Quality of work performed.

Processing is performed using a work station arrangement which has put control in the process of handling vouchers for a specific group of vendors. The use of Cathode Ray Tube devices for input/inquiry allows for capturing data once, at origin, and for improving productive efforts for followup and control of payables. The data base is integrated with the accounting system. One output of the system is a magnetic tape for Treasury's Washington Disbursing Center to generate payments.

The performance data generated by the system supports the annual performance appraisal system. It is used for supporting cash awards, granting or denial of within grade step increases and other personnel actions. Each person receives feedback on their performance.

Edwin Soniat summarized the session by reviewing the uses of productivity data which included goal setting, budget interface, reducing costs, improving organization, gaining control of resources, accountability, and demonstrating the results of actions taken.

Basically, in order to do this, realistic and reliable measurement systems are absolutely necessary. The development of measurement systems has always been a concern of management. What type of measurement is needed? Do we need a performance or work measurement system or something less finite such as productivity measurement? The selection of the type of system is dependent upon the organization needs.

SESSION #2

"IMPROVED PRODUCTIVITY TECHNIQUES AND PROCEDURES IN FINANCE AND ACCOUNTING OPERATIONS"

Leader: John Crehan, Department of Defense

Panel Members:

Robert Bordley, Defense Logistics Agency
William Rita, General Services Administration
James Lemly, Department of Justice
James Robinson, Veterans Administration

ROBERT BORDLEY discussed the use of multifunctional data files to reduce costs of payments in the Defense Logistics Agency (DLA). The Agency's mission is to purchase, store and sell common expendable items to the military departments, provide contract administration in the field, and undertake property disposal services.

From 15 payment locations, DLA will pay out about $28 billion this year, $10 billion of which are its own funds. DLA maintains common multifunctional data files at six Defense Supply Centers and at nine Defense Contract Administration Service Regions (DCASR's).

By employing the Standard Automated Materiel Management System with teleprocessing, the Defense Supply Centers were able to reduce personnel spaces by 25 and absorb a 15 percent increase in workload. The Standard Automated Materiel Management System with teleprocessing used by the Defense Supply Centers is now processing 900 thousand simple invoices.

The Defense Supply Centers use the Standard Automated Materiel Management System to perform cataloging, supply management, contracting, accounting and payment. The file used for contractor payments is the active contract file. Much of the basic data are passed forward from previous operations, but the actual entry of the award of the contract is made by contracting personnel. The active contract file is placed on disc storage during the day for interrogation, not update. Under previous procedures, this file was only available during updates and in monthly printouts. After the contract data file was made available, small payments were automated.

Automated small purchase procedures are used for over 90 percent of the buys at most of the Defense Supply Centers. These procedures are used with purchase orders that are not transferred to DCASR's for contract administration. The General Accounting Office gave approval to pay these invoices without a receiving document with two provisions: (1) contractors must agree to replace items damaged, or those paid for but not received, if notified within a specified time and (2) the agency's system must be able to detect nonreceipt of items. To meet these requirements, a monthly report of items paid for, but not received, is generated. Also, unreceived fast-pay items over 30 days old are identified by the system.

Under this fast-pay procedure, invoices are received by the Accounting and Finance Office mail room and date stamped. Stamped invoices are given to a supervisor who assigns them to voucher examiners. Each voucher examiner uses a cathode ray terminal (CRT) to process invoices for payment. They begin processing by "calling up" the contract and the contract line item. Most are single line item purchases. The contractor address is checked and the data necessary for making the payment is entered. If everything is in order, the voucher examiner processes the next invoice. If not, the examiner instructs the computer to print the data. Printouts and applicable invoices are researched to determine problems. Accepted invoices continue through the process with a predetermined total. At night, the computer processes the accepted invoices file; prepares checks, vouchers, and a check listing; assigns appropriate control numbers; and updates the file.

The following day, the cashier verifies the number of checks and the predetermined totals, and reviews the checks against invoices for dollar amounts and addresses. The checks are then processed and mailed. Invoices are processed at a rate of about one every two minutes. Voucher examiners have been very satisfied with the CRT's.

The second automated process is accomplished at the nine Defense Contract Administration Service Regions. By employing the automated payment of invoices system, the DCASR's were able to reduce personnel spaces by 125. Additional savings in personnel resources are anticipated in the future. This system will process over 450 thousand complex invoices.

The DCASR's administer contracts assigned by Defense and non-Defense activities. There are three basic files which support the full mission, all of which are involved in the payment process: contract administrative data file; on order delivery schedule summary file; and contingent liability report file.

The process is as follows: a contract is established on the contract file. Once established, the receipt for acceptance of the material is the second step in the process. The receipt establishes, by shipment number, an accounts payable. When an invoice is received, it is perforated with the date, placed under mechanical control, and entered via CRT onto disc storage, where some editing is performed.

The file is run at night against the accounts payable, and if there is a match, the system produces the check, voucher, check listing, and updates the records. If there is not a match or if a payment code requires action by a voucher examiner, the data are sent from the system to the voucher examiner for review. When the voucher examiner makes a decision to pay, the data are entered.

WILLIAM RITA addressed GSA's efforts to improve productivity in finance and accounting. One of GSA's goals is to eliminate duplicate accounting records, such as "cuff records," by providing better and faster information through the official accounting system. GSA needs more computer capacity and remote terminals to achieve this goal.

GSA also wants to be able to measure the total effort in accounting and finance. Presently, GSA does not have productivity standards. However, it has used productivity averages to reallocate personnel among some of its offices. GSA utilizes the concept of sharing productivity and

effectiveness data among its regional offices. This has resulted in competition among them to improve productivity and effectiveness.

Mr. Rita cautioned that quality must be considered, as well as quantity of work produced, and that there is an inverse relation between efficiency and effectiveness. Also, he stated that other goals, such as maintaining adequate internal controls and providing adequate service to the system's customers, sometimes compete with the goal to increase productivity.

GSA is planning to educate program managers in financial management and accounting so that they will be able to better understand the accounting system. This will enable the managers to better define their reporting needs so that the accounting office can provide these managers with better service in a more timely manner.

Mr. Rita summarized some of GSA's system capabilities during the question and answer session:

--The accounting system provides cost reports to managers of revolving funds.

--The system has the capability to provide full cost and full obligation data.

--Regular appropriation funds can have, but do not presently have, cost reporting.

--GSA has its own centralized payroll system at Kansas City.

--GSA provides accounting and payroll support to about 20 small client agencies.

--GSA's accounting is decentralized in ten regional offices.

JAMES LEMLY discussed the Drug Enforcement Agency's automated travel advance system which is part of the Agency's unified administrative accounting and fund control system. He stated that the control over travel advances is important, since about 2,000 of the agency's 4,000 employees are agents who travel extensively. In 1979, the agency processed 23,000 temporary duty travel vouchers and 900 vouchers for permanent changes of station. Total obligations for travel were about $8.5 million and, as of July 31, 1979, outstanding travel advances amounted to about $2 million.

The Drug Enforcement Administration's accounting system data base consists of six files: tables, budget, obligations, travel advances, general ledger, and detailed audit trail. All files except the detailed audit file are on-line. Three files--the budget file, obligations file, and travel advance file--can be queried via terminal by the regional and district offices. All input is made on-line except for payroll data which comes from a centralized Department of Justice system. All edits are performed at the time of input. The off-line detailed audit trail file is updated in a batch mode over night.

The automated travel advance system utilizes the travel advance file which contains a separate record for each employee with an outstanding travel advance. Each record contains the employee's name, social security number, and the cost center to which the employee is assigned. The record also carries the outstanding temporary duty travel advance balance, permanent change of station travel advance balance, a memorandum entry of any standing or recurring advance, and the last two transactions in the account. The travel advance file keys on the employee's social security number.

The system uses a straightforward concept to simplify input and to minimize errors. The system requires a two-digit transaction code for input and a single-digit code for transaction type. The transaction codes are table driven so there is no need to specify the applicable general ledger account for a transaction. For an advance, only the fund year and fund code are indicated. Advances are not charged to a specific cost center or given an obligation control number since there is no obligation involved.

The travel advance file is used to generate five monthly reports:

(1) Individual employee travel advance statement which indicates the previous month's balance brought forward, transactions occuring during the month, the end-of-month outstanding balance, and a memorandum entry of the limit placed on employees with "standing" advances.

(2) Travel advance alphabetical listing of all employees which contains specific data concerning their travel advance records, including the current outstanding balances and aging messages indicating accounts with no activity for more than 30, 60, 90 or 120 days.

(3) Travel advance listing by social security number which contains the same information as the alphabetical listing.

(4) Travel advance by home center which contains the same information in the travel advance listings but sorted and alphabetized. This enables each home center to reconcile their local records of travel advances.

(5) Travel advance aging summary provides an agency-wide summary of the total amounts of advances outstanding by home center. This report also ages the amounts outstanding for specific time periods and is sent to the agency administrator monthly.

Mr. Lemly also briefly discussed the budget file and the obligations file. The budget file can be queried from the appropriation level down to the allotment holder level. Accounting personnel, who input data, will receive an advisory message if obligations exceed an allowance. This message can be overridden. The next day a report will be generated indicating all allotments that have been exceeded.

The obligations file contains a separate record for each document that has a unique control number. Payments cannot exceed the amount of the obligation. This file can also be treated as a summary file from the appropriation level down to the individual record. It has summaries of obligations, expenditures, accrued expenses, and prepayments for each record.

JAMES ROBINSON explained how the Veterans Administration (VA) uses minicomputers for processing payments. The Automated Input Design System utilizes fifteen cathode ray display terminals for data entry into a minicomputer which provides front end edit capability. This process is only one part of the VA's Centralized Accounting for Local Management (CALM) system which is operated at Austin, Texas.

The Automated Input Design has enabled the agency to reduce its staff by about nine people. It has also reduced the number of rejected transactions, simplified batching and control, reduced document handling and virtually eliminated code sheet preparation. Dollar savings are estimated to be about $100,000, annually.

The automated payments process, which is used for commerical payments, works as follows:

Invoices are sent by contractors directly to the Austin payment facility, where they are physically matched with receiving reports which have been sent by VA field facilities. Vouchers are prepared, audited and marked with the applicable vendor identification. VA has a vendor identification file on microfiche which contains the vendor's Dun and Bradstreet number or internally assigned unique number. After a document is identified with the applicable vendor, it is moved to the automated input section.

At the automated input section, operators throughout the day, enter transactions directly from source documents via cathode ray terminals, onto magnetic disk on a minicomputer. As transactions are entered, edit checks are performed to validate the data. Errors are flagged by the system and the specific field in error is indicated. Edit checks validate such things as vendor identification and whether or not an accounting record already exists in the main CALM system.

Errors can be corrected immediately or at the operator's option. The edits, combined with immediate error message notifications on CRT's to the data entry person have greatly reduced the number of transactions rejected. The edits are performed quickly so that operators only have about a one second delay time when inputting data.

Data are inputted in batches which facilitate identification of rejected transactions. The System also allows predetermined batch totals to be entered into the minicomputer. To verify that all transactions in a batch have been entered, each operator runs an adding machine tape of the total amount of transactions in a batch to compare the two amounts. The totals must agree before further processing can take place.

Accepted transactions are stored on a magnetic disk for subsequent processing and updating of the main system nightly. The system utilizes a holding file for timing payments for cash management purposes.

Twice daily accepted transactions are put onto magnetic tapes for backup in case of a system failure. Simultaneously, the system produces reports by operator number, showing the number of transactions processed, the number of dollars involved, and whether batches were in balance with predetermined totals on the first try (about 75-80 percent of batches balance on the first try).

The terminal operators are accounting technicians working for the accounting section. These individuals make

the same type of decisions regarding who gets paid, what gets liquidated, etc. as they did previously under the manual system.

VA officials' analysis of work rate effectiveness showed a six-percent increase during the first three months that the automated input system was used. During the same period, work units produced increased about 10 percent.

The agency anticipates even greater productivity with future system enhancements and increased operator awareness of system capabilities.

SESSION #3

"THE EFFECTIVE USE OF INCENTIVES TO IMPROVE PRODUCTIVITY"

Leader: Edith Stringer, Office of Personnel Management

Panel Members:

Kenneth Eaton, Veterans Administration
Dr. E. Chandler Shumate, Department of the Navy
Daniel D. Brand, Department of Housing and Urban Development
Gary M. Regan, Department of the Treasury

EDITH STRINGER gave a brief overview of the Incentive Awards Program for the Federal Government. The Program established in 1954 includes the traditional special achievement, sustained superior performance, special acts of services, suggestions and invention awards. However, most agency managers do not know that they can and may design their own systems for incentives. This is possible if their departmental incentive awards program does not meet the recognition needs of their employees and is not being used to support the goals and objectives of the organization. What they need to determine is what kinds of incentives are needed

to improve the operation and productivity. The incentive awards program can, when used effectively and with integrity, improve individual and organizational productivity.

Incentive award regulations are designed to give organizations maximum authority to use the incentive awards program to support goals and objectives. It has been described by GAO and congressional sources as one of the most underutilized programs of the Government.

This is the ideal time to rewrite incentive award plans, since each agency has to bring them into compliance with the changes in the Civil Service Reform Act. These incentive award plans must be furnished to the work force for comment and to employee organizations who are involved with the representation of employees.

Innovative and new efforts which have been initiated in panelists' agencies are presented in the following paragraphs.

KENNETH EATON highlighted the incentive awards program for the attorneys at the Board of Veteran Appeals. This organization uses work measurements and productivity as the true basis for their awards. In most Government agencies, however, award justifications describe how good managers feel an individual is doing, but they do not provide sufficient criteria or performance standards to really justify the award.

The Veterans Administration (VA) measures the performance of a section of attorneys as a whole, to see how the supervisor is doing. Also, the performance of each attorney is measured. Both the supervisor and attorney are measured; however they are two entirely separate measurements and there is no direct correlation between the two. Quality and amount or production of work are combined to determine the efficiency of the individual or the section.

VA established the production criteria for the various types of issues to be addressed by the attorneys. Over a period of time, VA kept track of each particular type of issue and determined the average time it took to complete. This process established the criteria for determining whether or not an individual was doing average work.

There are numerous types of issues which may be addressed by the attorneys; a time value was attached to each of the issues routinely performed. When the attorney has completed a particular type of issue, he marks down on

a recording sheet the time it took and identifies the issue with a preassigned code. If the supervisor approves the coding on the recording sheet, the attorney will be awarded an established credit for addressing that issue.

The quality of an attorney's work is reviewed by his supervisor when the decision is submitted for signature. This continuous review of the attorney's work provides management with a good insight of the quality of work performed.

The consolidation of the production rating and quality rating produces the overall efficiency of the employees and establishes an equitable basis for the ranking of individuals. The ranking will be used in identifying those individuals who will receive some type of incentive award for maintaining the high level of performance. Further incentive to do better is provided to those who are performing at an unacceptable level. The required documentation to initiate procedures to terminate the services of individuals with substandard performance can then be obtained from this method of evaluation.

CHANDLER SHUMATE from the Naval Personnel Development and Research Center discussed current motivation and productivity systems in the Navy Department. Human behavior can be broken down into two components: ability and motivation. For example, looking at ability, a determination is made whether the person has the capacity to perform the job. If the person has the potential ability, he/she should be trained to perform the work. The second aspect is to motivate individuals to perform their jobs well. Motivation can be provided through incentives, which are rewards contingent upon a specific behavior. The incentive does not solely have to be in a monetary form, as money is not the only motivator. "Being at the top of the list" is a strong motivator for many people. Incentives should be positive, rather than negative.

To clarify what is meant by rewards which are contingent upon a specific behavior, the following examples are provided. If an individual stays with an organization for a long period of time (behavior) we may give him a service award (reward), but this service award will not improve the overall productivity of an organization. If an individual provides a high level of performance (behavior) you could use a monetary award (reward) as the incentive to maintain this level of performance. Although this is not the only incentive which could be used, we have found it to be one of the highest motivators in our society. Money is one of the

easiest incentives to equate to performance. If performance is at a certain level, compensation should reflect that performance to include a specific monetary reward.

Requirements for the establishment of a performance contingent and reward system are broken down into three areas. First, a clear definition of desired behavior should be established. This is extremely important as managers should be sure what they want. Secondly, organizational resources (rewards) that are valued by the employees should be identified. The system should have incentives which are important to people such as money and training. Thirdly, there should be a direct correlation between the reward and the desired behavior.

The Navy Department developed its incentive awards systems through action research by physically placing the analysts in the actual work environment, working with the people and making adjustments to the system as required. In order to establish this type of system, the Department chose a work center with specific task characteristics:

(1) An operation with measurable work which was repetitive;

(2) An operation that could be tied to an individual or group;

(3) The individual was free to do work at their own pace, and not on an assembly line basis; and

(4) All people would have an equal opportunity to perform that work with no one having any advantage.

The Key Entry Section of the Data Processing Center at the Long Beach Naval Ship Yard was chosen to pilot test the system. The steps for establishing this system were to:

(1) Identify work behavior--what the manager wanted, in terms of quantity, quality, a reduction of union grievances and absenteeism;

(2) Determine work measures--production measure and machine time, actual number of hours you expect full production from the employee, e.g., six hours in an eight hour day;

(3) Establish base rates--system or method for maintaining records of individual's performance or other desired data collection;

(4) develop standards--use regression analysis to attach performance requirements to the different types of jobs to be done;

(5) communicate--sit down and discuss with employees what is going to happen and purpose behind it;

(6) monitor rates--see how the system is working;

(7) evaluate effectiveness;

(8) make necessary adjustments; and

(9) monitor rates--determine how the performance of individuals is reacting to the system.

Data were compiled on the performance rate, machine time, wages, absenteeism, job turnover, average daily backlog and number of overtime hours utilized. This effort was coordinated with the incentive awards officer in the agency to establish an effective awards program to compensate individuals for their increased production and with union representatives, to eliminate possible friction.

The results of this system were that: production increased meeting the goals of the manager; sustained high productivity level was maintained; and overtime has dropped significantly, reducing the cost of the operations. Since the system became operational, the work load can now be effectively handled by 20 individuals instead of 26.

All of the Naval Ship Yards have now implemented this system and Navy plans to generalize the program to cover other areas of activities.

DANIEL BRAND stated that a major problem is that management has not been getting people to produce adequately. Many Federal workers are not told specifically what their job entails and what is expected of them. Workers' performance often improves when these things are made explicit to them. For example, after an individual was informed what his goal should be and that his work load in the past was below average, he was able to keep track of his production, through continuous feedback, and began working more efficiently to provide a much higher level of production. Workers must receive continuous feedback which is helpful to correct their shortcomings.

At HUD there are three crucial elements in its system:

(1) Goals and standards,

(2) A feedback system so that an individual can receive timely information as to where corrective and reinforcing actions are necessary, and

(3) Reward and consequences for high or low performances.

Utilizing these three critical elements as its cornerstones, the Performance Management System has been under development for approximately 12 years and continues to be improved. Exhibit 1 is a flowchart of the steps needed to implement an effective Performance Management System and highlights the basic concepts and known needs of the employees which were considered in its development.

GARY REGAN discussed the Work Planning Performance Review System (WPPR) used for the Office of the Secretary in the Department of the Treasury. The WPPR provides a way for conducting appraisals and awarding outstanding performance.

Some of the principles of the system include:

(1) A work plan between the employee and the supervisor is developed at the beginning of each appraisal period;

(2) Feedback on individual's performance is given during the appraisal period;

(3) A cross review session is held at the end of the appraisal period to compare what was planned to what was actually achieved or accomplished. Treasury has a 6-month appraisal cycle.

The key to the system is in the establishment of the standards. The standards should be written in measurable or observable terms, in quality as well as quantity, and in terms of outcome or output. These standards also need to be reasonably achievable yet sufficiently challenging.

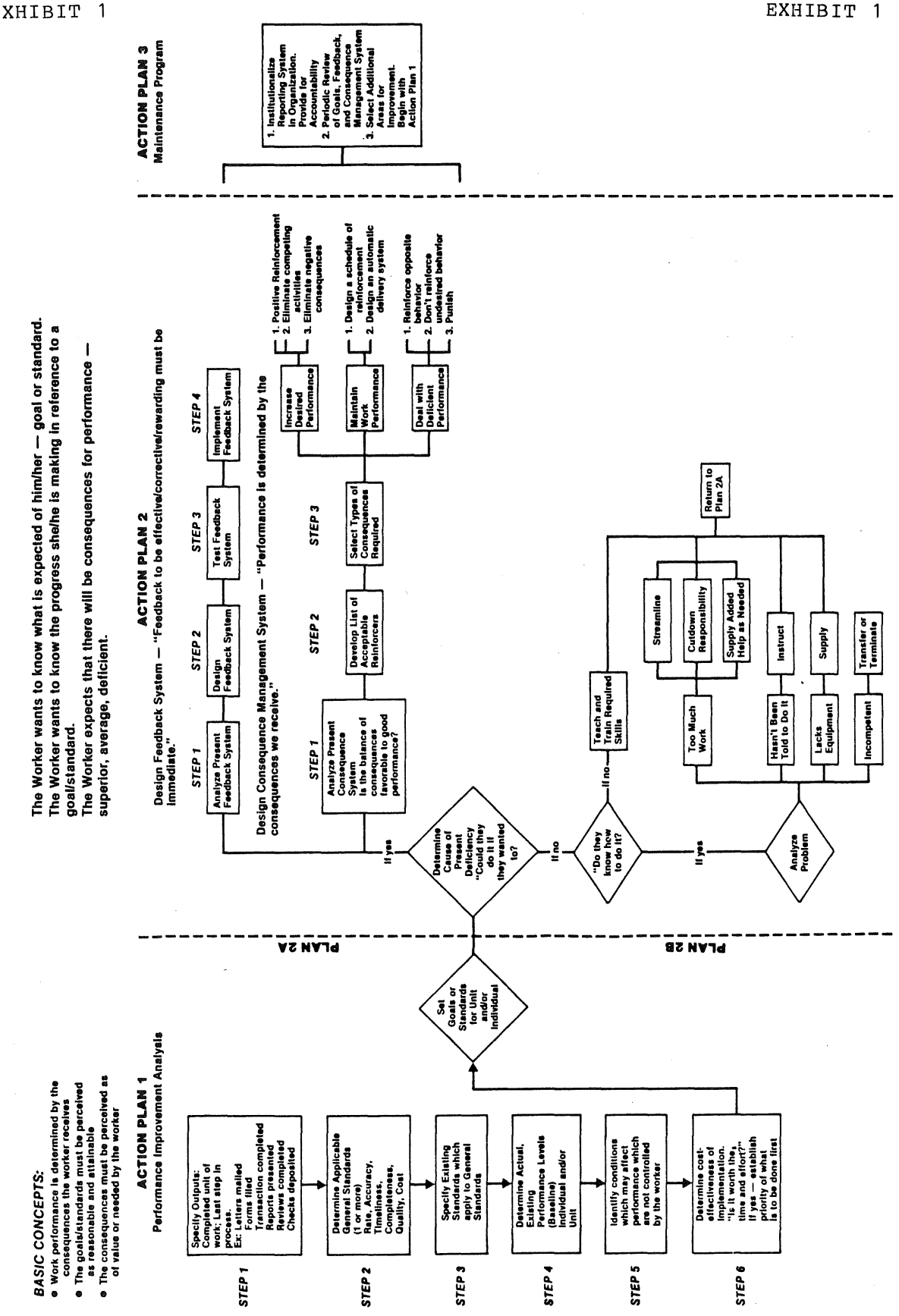
The purpose of the system is to let each individual know what is expected of him, the evaluation of his current performance, improvements he must make, and how the individual can be rewarded. The burden of the process is on the employee who has a stake in improving his own performance.

The system allows the individual to establish his own objectives for the upcoming 6-months with his supervisor. Standards and objectives are also written by the employees. These standards are then approved by the supervisor. This system is designed for professionals. The employee also does a self-appraisal of himself. Within three months, a mid-point review is held to discuss any corrective actions the employee must take.

The system rewards individuals monetarily with cash awards from $1,000 to $5,000. Treasury has found out that this incentive awards system has increased the productivity of its professional staff in the Office of the Secretary.

EXHIBIT 1

PERFORMANCE MANAGEMENT SYSTEM



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