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# **Association for Federal Information Resources Management**

**September 1995**

The **Association for Federal Information Resources Management (AFFIRM)** was founded with the goal of advancing the state of the art in Federal IRM. *AFFIRM's* membership is large and diverse, composed of Federal agency IRM professionals, Federal oversight agencies (GAO, GSA and OMB), Congressional staff, the National Academy of Public Administration, and industry representatives.

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September 1995

Dear Colleague:

Federal Information Resources Management (IRM) professionals have been presented with an exciting opportunity to team with program managers in the accomplishment of agency missions. The Government Performance and Results Act (GPRA) of 1993 directs Federal agencies to improve the management of their programs by implementing outcome-oriented performance measurement systems. Federal IRM managers are an integral part of this effort.

As IRM professionals, we have already learned a great deal about measuring our own performance. We have been employing performance measurement techniques to manage data centers, monitor delivery of customer services, and manage contractors for many years. We have generally demonstrated an ability to measure the quantity of resource inputs and our activity outputs, as well as the quality of our processes and products. GPRA creates an opportunity to work with our program counterparts to measure IRM's contribution to mission accomplishment.

Much remains to be learned about the relationship between mission performance and

IRM's contributions. The Association for Federal Information Resources Management (AFFIRM) established a Performance Measurement Group to focus on how IRM professionals should approach performance measurement within the context of the GPRA. The discussions of this Group led to development of the enclosed paper, which provides a framework for understanding the relationship of IRM performance measurement to mission accomplishment, and some of the key implementation issues.

AFFIRM hopes this information will serve as a resource for senior IRM managers and other senior managers, as well as others interested in performance measurement. We intend to sponsor other similar forums with the aim of producing additional papers to advance the state of knowledge and practice in managing information resources.

I want to personally thank the many individuals who participated in the Performance Measurement Group and contributed the information and concepts that enabled this paper to be produced.

Paul Wohlleben, President  
AFFIRM

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# EXECUTIVE SUMMARY

## 1 The Connection: Linking IRM and Mission Performance

The *Government Performance and Results Act (GPRA)* seeks to improve the efficiency and effectiveness of Federal programs by establishing a results-oriented process for defining program outcomes and evaluating their accomplishment. The intent is to establish a system to set goals for program performance and to measure results. Congress has expressed its intention to use this information for policy making, spending decisions, and program oversight. To comply, agencies must establish strategic and performance plans with specific goals, and measures of progress. GPRA's focus on program outcomes creates some question about how traditional support programs fit into this framework.

This document explores the *opportunity for IRM managers* to demonstrate IRM's contribution to mission performance in the context of GPRA. It explores the GPRA conceptual framework for measuring mission performance, and how this framework provides an opportunity to measure IRM's contributions to mission performance. Key implementation issues and current Federal efforts already underway were explored as the basis for understanding these issues.

*Applying the framework to measure IRM contributions* to mission accomplishments requires an understanding of how IRM relates to programs. IRM is a strategic function which supports the activities that accomplish the agency/program mission. Accordingly, the IRM organization must create mechanisms that link the role of IRM to activities and mission performance. In this GPRA framework, IRM performance measurement moves beyond traditional measurement of IRM activities to the measurement of IRM contributions to the accomplishment of mission performance.

*IRM's contributions to mission performance* can be measured in terms of improved efficiency and effectiveness. IRM professionals have traditionally measured their activity performance, or in GPRA terms, IRM program outputs. Often, IRM performance measures have been inward-looking, measuring the efficiency of the IRM program. Measuring IRM outcomes requires the IRM professional to understand the efficiency and effectiveness gains IRM brings to the program, especially those linked to mission performance.

### *IRM and Mission Performance*

*The IRM performance measurement model* is based on three concepts: First, IRM

strategic goals must support the agency's strategic goals. Second, traditionally, IRM's measurement of performance has generally focused on outputs. Finally, IRM outcome performance measures are actually measures of the efficiency and effectiveness improvements IRM contributes to the agency/program outputs or outcomes. Thus, IRM outcomes overlap and are linked with program or agency performance measures.

**Implementation issues** exist and must be dealt with for the measurement process to be effective. To measure contributions to mission performance, clear and objective agency goals and indicators to measure achievement must exist. Program managers and IRM managers should accept joint responsibility for planning IRM participation and measuring achievement of results. Oversight agencies and management must actively use the plans and measurement reports to direct, fund, and evaluate programs.

Definitions of key terms are provided in the introduction of this document. Examples are offered throughout this document in sidebar boxes such as this.

There are a number of approaches to and points at which IRM organizations can begin performance measurement. Measurement of IRM infrastructure benefits/performance may be significantly different from performance measurement of a specific IRM project. In some cases, surrogate measures may be required in lieu of measurements which cannot be directly obtained.

**Current efforts and successes** were shared by a number of agencies who participated in the AFFIRM Performance Measurement Group. Many agencies are attempting to implement the GPRA requirements into their strategic planning and into their daily business operations. Several agencies have already put performance measures in place and have begun the process of documenting benefits. This paper includes brief reports on the presentations made by some of the agencies, as well as a bibliography of reports and papers published by the participating agencies.

The principal **lesson learned** from the information provided by the participant agencies is the critical need to establish the IRM-program linkage in terms of IRM's contribution to mission performance. In GPRA terms, IRM mission performance outcomes are efficiency and effectiveness improvements for programs. In addition, performance measures can serve not only as assessment and evaluation tools, but also as incentives to align program and IRM managers. Measures should become an integral part of the entire management approach, not just a reporting requirement. The direct result of linking IRM and mission performance will be an opportunity to fully support program accomplishment and demonstrate the value of IRM's contributions.

## **Summary**

In order to meet the performance measurement challenge successfully, agency IRM and program managers must:

- Identify the best techniques for creating and defining the link between IRM and mission performance. This should include investigating current best practices and lessons learned throughout the government, and selecting the most appropriate method for their agency.
- Carefully consider the suite of measures to be used, and recognize that not all possible

performance measures should be employed. Too many measures will result in few being achieved successfully, while too few will limit their value to the mission.

- Establish joint ownership of the performance measures, forming a partnership as stakeholders in the success or failure of the measures.
- Use performance measurement to benefit the organization, not simply as a reporting tool. Effective measurement may help management to improve processes within the program and IRM communities. Be willing to accept the results and act upon the changes required to make performance measurement successful throughout the organization.

## I. INTRODUCTION

### *KEY TERMS AND DEFINITIONS*

**Information management** includes management of the definition, collection, storage, analysis, use, dissemination and disposal of information and related technology.

**IRM** is the organizational component responsible for providing information management systems, tools and resources.

**IRM infrastructure** is the basic information management hardware, software, tools, systems and capabilities that exist within an organization, upon which specific projects are built.

**Baseline** is a quantifiable point at which an effort began, and from which change can be measured and documented.

**Input measures** are the level of resources in funds, time, or staff used to carry out a program.

**Mission performance** is the unit of measurement which represents the accomplishment of program or agency outcomes. It is used throughout this document to provide a neutral basis for referring to levels of the organization upon which measurement is performed.

**Outcome measures** are the assessments of results, effects, or the actual achieved impact of a program, as compared to its intended purpose.

**Output measures** are assessments of the actual level of activity, process or effort, such as the provision of goods or services.

**Effectiveness** refers to the qualitative level of achievement of program goals and the intended results, as defined in strategic plans and in legislation. **cy** is the quantitative measure of relationship of outputs to inputs, such as unit costing, work measurement, labor productivity, and cycle time.

Federal managers have profound opportunities, albeit challenging ones, today. In an era of tight budgets, increased public scrutiny, and emphasis on results for tax dollars, Federal managers must better define and communicate their contributions to mission performance to justify investments. This environment, along with recent legislative requirements, creates the need for program managers to improve their ability to measure and communicate program performance and results. IRM managers, as stakeholders in the performance measurement process, have the opportunity to

better define and articulate IRM's contribution to program performance.

This is not a new challenge for the IRM community. While increased public and legislative pressures exist, Federal managers have also been attempting to improve their ability to measure program performance for some time. Similarly, IRM managers have had increasingly sophisticated internal performance measurement abilities. However, there is a new and heightened emphasis on planning for and documenting program results.

### ***Purpose of this Paper***

The Government Performance and Results Act (GPRA) of 1993 requires that Federal agencies conduct strategic planning and measure progress towards mission accomplishment. Complying with GPRA from the perspective of the Federal IRM community appears complex, since the information management function supports mission performance, but generally does not have final responsibility for mission results.

This paper explores how the function of managing information resources is to be measured in relation to GPRA, and presents a framework for creating the link between IRM and mission accomplishment. The information presented is intended to be a resource for senior managers (IRM and others), as well as others involved in information management throughout the government and commercial sector. The paper explores a framework and approach for establishing IRM performance measurement, and builds an understanding of IRM's contributions to the overall mission performance measurement process.

### ***Methodology***

As a starting point for exploring how IRM fits into the framework of GPRA, the AFFIRM Performance Measurement Group (PMG) invited guest speakers from Federal oversight agencies, as well as agencies in the process of implementing GPRA and/or IRM performance measurement processes to share their knowledge and experiences. Following these presentations, Group members met to discuss and analyze the materials presented. This report provides the conceptual conclusions of the discussions of the Group.

### ***Results***

Chapter II provides a review of the GPRA concepts and framework and a high-level analysis of the implications for the performance measurement of IRM. More detailed concepts for applying GPRA to measuring IRM's performance are explored in Chapter III. Potential implementation issues and challenges for Federal organizations faced with implementing the requirements of GPRA are presented in Chapter IV. The final chapter in this paper provides a brief summary of the agency presentations to the AFFIRM Performance Measurement Group.

## **II. SETTING THE FRAMEWORK**

Results from Federal programs are the ultimate concern of the public, Congress, and the Executive Branch. While Federal programs have sophisticated capabilities to report on their activities and the

resources used, Congress and others have cited as an issue the lack of timely and accurate information on the achievement of intended program outcomes (e.g. reduced crime levels, reduced illegal immigration, increased cleanliness of the environment, etc.). Policy-making, spending decisions, and oversight responsibilities require that improved information be provided on program results. To meet this need, Congress and the Executive Branch have agreed upon a framework (the Government Performance and Results Act of 1993) to formally define and measure program results. Other legislation and guidance, including the Chief Financial Officers Act, Government Management and Reform Act, OMB Circulars A-11 and A-130, as well as pending legislation from both the House and Senate contain and strengthen this focus on performance management. Information on other related legislation and guidance can be found in Appendix A.

## ***GPRA - A New Framework for IRM Managers***

GPRA provides agencies with a general framework for planning, assessing and communicating the results of Federal programs.

Figure 2-1. Traditional Management Feedback Loop

GPRA requires agencies to develop and institutionalize processes to plan for and measure mission performance in the basic management cycle (Figure 2-1). The Act requires agencies to develop strategic plans and formulate specific measures of progress towards achieving the goals articulated in the strategic plans. The Act also requires annual performance plans with specific performance goals and performance indicators to measure program performance. Finally, accomplishment reporting is required as part of the measurement phase of management. Ultimately, performance measurement is to be an integral part of the Federal management process, as illustrated in Figure 2-2, on the following page.

As suggested by the traditional management feedback loop in Figure 2-1, planning, execution, and measurement are integral parts of any management control system. GPRA defines specific efforts, at the highest level, that Federal agencies must undertake to address this measurement process. Agencies must have a planning process that defines goals, implementation issues and methods of measurement. GPRA provides a strategic framework for the traditional agency tactical, budget and operational plans. The plans should specify goals, objectives and targets for performance. Ideally, measurement, assessment, and evaluation of results should refer back to the plans, account for use of resources, and measure, to the extent possible, the results or outcomes of the agency's activities. The loop should then be closed by the consideration of results in ongoing planning processes, including legislative oversight and budget.

GPRA focuses on a relatively new (for the Federal government) level of planning and measurement: program outcomes. The Act requires managers to look beyond the traditional reporting of activities (outputs) and resources consumed. In the various products required (as noted above), it seeks to focus attention on the program's intended results, i.e. outcomes. From the basic understanding of the GPRA measurement process, AFFIRM began its investigation of how IRM fits into GPRA efforts.

[In many cases, this document refers to mission performance as a generic term, where the precise organizational level or the difference in outputs and outcomes is not fundamental to the point being made.](#)

GPRA creates a structure that requires performance measurement in a mission context. Measuring

agency/program outcomes in a mission context can be a challenge, especially where program goals in legislation are in general or vague terms; there are inherent difficulties of measurement (what is a "good" law enforcement outcome?); issues of causality are unclear; or there is management reluctance to undertake the effort. Because of these and other difficulties, agencies and programs will have differing approaches to defining their outputs and outcomes, and will do so at differing organizational levels.

*Figure 2-2. Performance Measurement within GPRA*

### ***GPRA: An Opportunity***

Historically, the ability of IRM to define and measure its contributions to mission performance has been difficult due to the lack of clearly articulated program goals and specific performance measures. This made it difficult for IRM managers to effectively define and link IRM program contributions to mission performance. GPRA's requirement for strategic plans should make the creation of the link between IRM and mission performance accomplishments easier in the future, by creating a set of specific program output and outcome goals/measures to which IRM managers can contribute. With clearly defined program goals/missions, IRM can work with program managers to define the support that IRM will provide for the programs. The GPRA framework provides the opportunity for increased communication between IRM managers and program managers and better understanding of IRM's strategic role in supporting mission performance.

### ***GPRA Moves Beyond Traditional IRM Performance Measures***

IRM managers have significant experience with performance measurement in terms of input (budget, personnel, and IT resources), process (quality assurance, controls, and adherence to standards) and output (products produced). IRM managers have developed baselines for comparisons, customer standards, and various IRM program efficiency measures. These types of measures provide valuable support to the new measurement framework, particularly in terms of the IRM program's outputs.

These traditional IRM output measures focus inward on the performance of information management functions and services. They tend to assess the quality of the information management function in isolation, and have not focused on measuring the contribution of IRM to mission performance. Through cost-benefit studies and return-on-investment measures, IRM managers have attempted to identify potential mission benefits (particularly during the planning stages) for IRM investments. Rarely, however, have the results from the planning phase cost-benefit studies and the return-on-investment measures been substantiated through post-implementation follow ups. In general, Federal IRM programs have had limited experience and success in measuring their contribution to mission performance. Clearly, IRM managers will need to move beyond traditional IRM output measures to address IRM program outcomes.

### ***What are the Benefits of GPRA Performance Measures?***

The benefits of GPRA performance measures may include:

- Improved Congressional and public reporting;
- Improved management reporting;

- Effective decision-making;
- Improved efficiency of operations;
- Improved business planning;
- Improved resource forecasting and budgeting;
- Improved quality of information and processes; and
- Improved technology transfer.

To achieve these benefits, GPRA plans and reports must be used by all parties.

### **III. APPLYING THE FRAMEWORK: MEASURING IRM'S OUTCOME PERFORMANCE**

This section presents a conceptual framework developed by the AFFIRM Performance Measurement Group for measuring IRM's performance outcome in terms of mission performance. IRM's performance contributions and their organizational context are placed into a conceptual framework, and a conceptual approach to measurement of IRM outcome performance is recommended.

#### ***IRM's Outcome: Program Efficiency and Effectiveness Gains***

To understand how to measure IRM's level of success and contributions, the expectations of IRM must first be defined. [In general, improved efficiency and effectiveness are the two primary ways in which IRM is expected to contribute.](#)

Efficiency examples include:

- Automated Accounting;
- Reporting;
- Check Production; and
- Scheduling,

[at decreased cost or time, per unit of production.](#)

Historically, **efficiency** improvement is the most common goal of automation. Measurement of efficiency gains on a project basis is a well-understood practice. It is often determined by comparing the cost or time required to complete a particular task before and after automation. The automated data processing (ADP) function (a precursor to IRM) began as a way to increase the efficiency of many back room operations. This led to the frequent placement of ADP and IRM functions into administrative offices. Less understood is the ability to measure the cumulative efficiency gains from IRM, or the gains made possible by the existence of the information management infrastructure. For example, measuring and allocating the efficiency gains to a program caused by a Wide Area Network is more problematic where multiple programs may benefit. The contributions from these efficiency gains to mission performance are often difficult to articulate and measure.

[Example of Effectiveness: An automated model of the measurement of airborne contaminants may be the only realistic approach to research which depends on such a model. It may, in fact, be impossible to duplicate the model's results in a timely manner without automation, regardless of the other resources available. While other less sophisticated, non-automated models may be possible, in this case, the existence of the automated model provides](#)

a tool that makes the program more effective.

**Effectiveness** gains are a different form of measurable improvement. Measures may be the ability to complete a task, the accuracy of the information recorded, or customer acceptance of the work results that would not occur without IRM support. These are frequently harder to identify, more intuitive and less tangible, and difficult to quantify. Enabling a task to be performed which could not otherwise be done at an acceptable level of sophistication or timeliness is one method of providing an effectiveness improvement. Another measure of information management's effectiveness may be the accuracy, completeness and timeliness of the information provided to managers in order to accomplish their mission responsibilities.

The line between efficiency gains and effectiveness is not absolute, and can merge in many examples. When beginning to examine IRM outcome performance in a GPRA context, the critical point is that efficiency and effectiveness gains to mission performance are the primary values to be measured.

### ***IRM Baseline for Measuring Program Contribution***

Intuitively managers know that IRM efforts over the past decades have spawned an information management infrastructure that is part of the lifeblood of every Federal agency, and which has increased the efficiency of the workforce. Workers can do more, quicker, and with greater quality than they could have prior to automation. The cumulative effects of these efforts, however, has generally not been well documented.

One hundred years ago the telephone looked so promising that visionaries believed that eventually there would be one in every city. Today, virtually every employee's desk is equipped with a telephone, without a cost-benefit justification needed. There is not yet the same level of unquestioned acceptance that computer workstations, local area networks, and Internet access are as much a part of the infrastructure as the telephone.

Nevertheless, the IRM infrastructure is assumed for many projects. This can lead to a mismatch in comparing information management costs to program benefits and determining efficiency gains. Total information management costs may be compared to program costs, without assuming the full staffing requirements that would exist without an IRM infrastructure.

In general, Federal IRM programs have had limited experience and success in measuring the contribution of the IRM infrastructure to program outcomes and mission performance. A result of this is that a **baseline** of current contributions against which to measure future IRM contributions to mission performance has not generally been established.

### ***IRM Contributions Must be Measured in a Program Mission Context***

It is clear that IRM's contribution primarily occurs in the context of another program's processes and activities. The improvements to be measured are primarily efficiency and effectiveness gains for one or more programs other than IRM. In other words, while IRM supports the mission

performance; it does not have its own independent mission and goals. One exception may be the basic IRM management functions prescribed in the Paperwork Reduction Act. This could constitute an independent function which can be separately measured. However, most would agree that this is not the primary thrust of the overall IRM support function of an agency. Many Federal support functions, and some agencies such as GSA, have similar duality of roles: support of programs and management oversight. This may also identify a third type of contribution for support functions -- risk management. These issues should be examined in a broader context. This paper, however, focuses on the primary service role of IRM. -- thus its strategic outcome performance measurement must occur in the context of its contribution to mission performance.

Is IRM "just" a support function, as the above conclusion would seem to indicate? Isn't there a strategic value beyond a typical support function? Can't IRM have a direct mission outcome for an agency? Each of these questions recognizes the transition IRM has made from primarily supporting back room operations to a situation where it is rapidly becoming highly integrated into programs. In an increasing number of cases, a program's entire business strategy depends upon sound management of its information resources.

This move of IRM into a more integrated role reinforces the argument that IRM is a support function, albeit a strategic one, whose outcome contribution is properly measured in terms of agency or program mission performance. For example, an agency might have an information collection and dissemination program, with public policy goals, that is heavily automated. Providing timely information may depend on automation, and in turn, the outcome of the program might well depend on the timely output of the information. The high degree of integration between IRM and the program reinforces the concept that IRM's contribution is in the context of mission performance and is not independent. Thus, IRM can be viewed as a "business within a business." As such, it can relate to the entire agency or any program. IRM's mission is to meet the mission need for strategic information technology support services.

### ***An IRM Performance Measurement Model***

Figure 3-1. Levels of IRM Performance Measurement

Understanding IRM's contribution to mission performance and its organizational context permits modeling IRM's outcome performance measurement in two ways, as depicted in Figure 3-1.

Outputs from the IRM organization, can be measured at the Information Technology (IT) level, where hardware and software performance are directly measured for up-time, processing speed, and the like. Measures can also be devised to assess how the IRM program is meeting its own output goals, in terms of its service outputs to the customers it supports.

The IRM function's outcomes are primarily measured in terms of its contributions to mission performance. In other words, the outcome of the IRM function is primarily seen as the efficiency or effectiveness gains provided to specific mission performance measures. The IRM outcome to be measured should be directly linked to either an agency- or program-specific output or outcome measure. The exact linkage is one which the IRM manager and activity manager should jointly define and measure.

Even if the program has clear and measurable goals and objectives, the contributions of the IRM organization, activities, and information systems to a program may be less measurable. For example an agency-wide Local Area Network may support programs with measurable goals, but there may not be an easy method to show a direct contribution to any specific one.

The most difficult task may be to define a link between IRM and mission performance. However, this problem is not unique to IRM. As a general rule, outcomes are usually measurable at the highest agency levels. When outcomes occur at lower levels, they may not "roll-up" into an agency-level outcome. As an example, if a desired outcome is to reduce the incidence of a specific disease, IRM may put in place measurable, specific goals such as providing data on incidence and trends, providing a scheduling mechanism for immunization, and reporting activity data. While these efforts will support the overall measure, it may not be possible to roll up these measures to directly

reflect IRM's impact.

Measurement of IRM's contribution to mission performance must be based, whenever possible, on a clear understanding of the agency's strategic plan, and its mission outcome performance measures. It should be supported by effective IRM and information technology planning. An agency's IRM investment must be aligned with the organizational mission, programmatic objectives and administrative needs, and its contributions must be measured against them. Effective use of measurement in managing IRM programs should recognize that measures serve as incentives to managers; require accurate, timely and responsive measurement systems; and should be integrated into an overall management approach.

Measuring IRM's performance is an iterative process. This process should involve IRM management participation in:

- Defining the areas in which the agency will measure performance;
- Assessing the value and contribution of the infrastructure;
- Identifying the audience - the customer - for each measurement area;
- Identifying the corresponding detailed performance measures and suites of measures;
- Gathering performance data; and
- Refining the measures so that they are truly indicative of performance.

While IRM managers' experience can contribute to the understanding and implementation of performance measurement at the program level, the agency strategic plan must set the stage for IRM planning. IRM managers must work with program personnel to create a link between the program goals and the effect of IRM contributions towards the achievement of those goals.

### ***Aligning the IRM Performance Measurement Model with the Agency Model***

#### *Agency Models:*

- Product Orientation - SSA
- Regulation Orientation - EPA
- Law Enforcement - INS
- Scientific/Research - USGS/NOAA

Agencies have their own unique performance measurement models based upon their agency mission and structure. An agency which has a very specific high-volume product orientation will differ in its approach to defining mission performance from an agency whose mission emphasizes development and enforcement of regulations.

Traditional production measures, i.e. speed, number produced, etc. may not be primary measures for an agency promulgating regulations (at least not without many other qualitative measures of stakeholder coordination, etc.). On the other hand, these may be primary measures applied to the processing of claims or benefit payments.

Differing agency models will lead agencies to emphasize outcome or output type measures, and to differ in emphasis on efficiency and effectiveness contributions by IRM. No agency will exclusively follow any particular model.

### ***GPRA Benefits to IRM Managers***

GPRA performance measurement provides IRM managers with an opportunity to articulate and demonstrate the value of their programs in supporting program and agency goals. In today's environment, this is critical to continued investment in IRM and the contributions which it provides to agency mission performance.

While realizing the benefits of performance measurement is a crucial activity, agencies must recognize that information management is a strategic asset, an essential element of their programs, and should be utilized for more than simply "bean counting." Measuring IRM's contribution to mission performance helps agencies set priorities, focus on the results, and provide a means for program evaluation and refinement.

## **IV. IMPLEMENTATION ISSUES**

This section discusses various implementation issues and challenges which IRM organizations face in measuring performance as required by GPRA. Responsibilities of individual organizations are suggested, methods for linking IRM to the National Performance Review requirements are discussed, and finally, recommendations are provided for an approach to entering into the performance measurement process.

Management or technology improvements that are clearly associated with a defined and accepted goal are generally better received and understood within an organization than improvements which enhance processes in general, or improve the technology infrastructure. While IRM investments are often identified as making key contributions to discrete projects, many IRM investments and contributions can be difficult to link to larger and often less clearly articulated program goals. This link can be difficult to discern, not simply because larger program goals are not always clearly articulated, but because some IRM contributions to programs are also inherently difficult to communicate.

Establishing the connection between IRM plans and program goals is the essence of what is needed to successfully implement GPRA and increase the value and understanding of IRM performance and contributions. The challenge to IRM managers, agency policy officials, and central guidance agencies and legislative oversight groups alike is to make that connection, and in the process, determine the best method for doing so.

The GPRA requirement for agencies to develop mission-based strategic plans provides a potential target, or link for IRM to communicate and measure its contribution to mission performance. This is not a link, however, that IRM alone can forge. Changes in the way IRM and its program partners work together are required. New partnerships must be forged and organizations must work together.

### ***Organizational Responsibilities***

The following section suggests some areas of responsibility and areas of improvement within an organization for GPRA and the performance measurement process to be effective:

#### **For agency policy officials**

Agencies need to ensure that a comprehensive, effective strategic planning process is undertaken. Strategic planning is an executive function -- leadership provides a plan to inspire and direct staff and inform oversight agencies, the public, and others.

- The agency strategic plan cannot be merely a compilation of component plans, but must set agency overall goals and direction.

- The development of an agency strategic plan should emphasize the planning process and results as opposed to document production. As the saying goes: "Planning is everything; the plan is nothing."

- Effective strategic planning can support development of the true and effective use of outcome-based performance measures.

Program officials can help in the effort to demonstrate IRM's incremental contributions. They can articulate their own program strategies, clearly identify the expected IRM support, and help to establish the links between program accomplishment and IRM support.

### *For oversight groups*

In large measure the ultimate success of GPRA's implementation will lie in the Act's credibility. GPRA must be perceived as real in order to achieve its intended outcome. This is the challenge for organizations such as OMB and Congressional appropriations and oversight committees.

- Federal oversight organizations must use the Act's principles to make budget decisions.
- Oversight organizations should create incentives for the operating agencies, by providing rewards for sound agency strategic plans.

The Chief Financial Officer's Act, a precursor of GPRA, delineated initial requirements for the integration of performance measurement, budgeting and financial reporting. The need to more fully integrate these processes was further established through the Government Management and Reform Act and GPRA, recognizing that the results of performance measurement are an extremely valuable resource in budget formulation and execution.

Performance measurement, given today's budgeting environment, is essential. Those agencies that can show clear achievements should be more successful in the competition for scarce and even dwindling resources. In the IRM arena, this opportunity is equally important. When IRM can demonstrate direct impact on the success of a program's performance, then the potential for continued, sufficient funding should be greatly increased.

The determination of budgets and allocation of resources should take into consideration not just the results of performance measurement, but additionally, the agency and program objectives and goals. This will provide the opportunity to allocate funding and resources to the most appropriate areas of focus within each agency, thus increasing the likelihood of achieving certain performance measures.

### *A shared responsibility*

As indicated above, organizations have differing responsibilities in establishing and implementing the performance measurement process. Therefore, implementation should be a team effort.

- Program managers and IRM managers should accept joint ownership for the performance measurement process, working together to achieve a common understanding of the mission objectives and how to achieve them.
- The program manager/IRM manager partnership needs to continue through the evaluation process. Joint planning is not enough -- joint ownership of the assessment of efficiency and effectiveness of actions taken and joint determination of whether or not the anticipated outcome was actually achieved is also required.

In many instances, IRM's experience in strategic planning predates agency strategic planning efforts. Currently, there are many ongoing agency efforts to integrate these areas. IRM managers should work directly with the program offices and other senior management to develop strategic plans. This allows for IRM input into the process, leads to a better IRM understanding of program goals, while developing the joint partnership between the two entities. A successful relationship between program managers and IRM should be largely based on making the dependencies between mission goals, the systems that help to achieve them and the projects that deliver the systems, very explicit.

Following the traditional management feedback loop, such as the one in Figure 2-1 on page 3, the planning process can be seen as the beginning of the measurement process. Organizations, to effectively plan what the process and results should be, must first look at the current measures, and how they are performed. Without this solid baseline against which to measure performance, planning does not function as a means to improve the process. GAO's best practices model can aid in this planning process, and help managers formulate directions for processes, goals and their respective measurement.

### ***Linkage With the National Performance Review***

Implementation of an IRM performance measurement process linked to the agency strategic plan also offers the opportunity to respond to recommendations of the National Performance Review (NPR). Two principal examples are:

#### ***Customer Satisfaction and Responsiveness***

Today, a major focus of government is customer service. Prevalent throughout many agencies is the recognition that the taxpayer must be satisfied with the level of service and responsiveness being provided by the government. Customers are recognized and defined as internal users of IRM, external government agencies, and the public. IRM may fulfill requirements of the internal customers through program-level impacts, as well as through support and maintenance of the infrastructure. It can also provide the means to improve customer service through effective information gathering, access and storage. Still, IRM must respond to the needs of customers -- if no customer needs exist, then IRM does not exist.

The President's Executive Order 12862 (dated March 22, 1995) directs agencies to conduct surveys of customer needs. The results of these surveys might be used to demonstrate how IRM could incorporate the concepts of customer needs and customer service within their planning and performance measure development.

## ***Process Improvement***

Performance measurement is a great opportunity for process improvement at the IRM, program, and agency levels. Process improvement requires program and IRM managers to clearly define outputs and outcomes, so that the process to achieve them can be identified, analyzed and potentially, dramatically reengineered. In this period of government downsizing, restructuring, reengineering, and rapidly shrinking budgets, IRM professionals must provide solid input on their *role* and *value* in the new organization structure.

Early in this decade, business began to radically re-engineer its processes by dramatically cutting costs (to increase efficiency) and reducing cycle times (to increase effectiveness). The ability to carry out this reengineering was often made possible by the technology infrastructure put in place in the 1980's . Thus, Business Process Reengineering (BPR), as a means to achieving process improvement, provides a unique opportunity for IRM performance measurement.

The link between process improvement and the measurement of IRM benefits demonstrates how difficult infrastructure investments can be to measure, particularly on a short-term basis. BPR often provides both effectiveness and efficiency improvements on a major scale, thereby complicating the measurement process. While IRM often provides the infrastructure for process improvement, it is not always recognized as the enabling tool. To document this type of benefit requires a clear understanding of how IRM affects the work process, a long-term measurement framework, broad scope, and good baseline information.

## ***Approaches***

While IRM strategic planning processes often pre-dated agency strategic planning, there are a number of methods for addressing IRM performance measurement. Figure 4-1, below, illustrates principal entry points to this process.

Figure 4-1. Performance Measurement System Entry Points

As depicted in this figure, IRM managers must decide how to enter the varying levels of the performance measurement scheme. The figure shows five common entrance points. Any or all of these approaches may be used in IRM performance measurement at any time.

**IRM Infrastructure** - In many organizations the IRM infrastructure has dramatically increased the efficiency of the workforce. The program offices can do more, quicker, and with greater quality than they could have had these efficiency opportunities not been provided. But some organizations have never documented the IRM infrastructure's cumulative effect of these efforts. These organizations may need to go back to define and document the baseline in order to establish a more effective relationship with the program offices. Before doing this, all parties should carefully consider the cost/benefit of the task of recreating the baseline. Some organizations may find that recreating the baseline is not cost-effective. Measuring the value of additions to the IRM infrastructure may be an appropriate stage for some IRM organizations to begin outcome-oriented performance measurement.

**Process Linkage** - Some organizations' IRM managers may find that while they have a linkage

with their program counterparts, it is one of process not strategy. The IRM organization may be providing operational support to agency mission programs, filling individual support requests with no overall plan of work for an extended period or for multiple efforts. Conversely, the IRM organization may have a strategic plan even in the absence of an agency strategic plan. If so, it is probably inwardly focused. If this reflects the status of IRM/program processes and strategic plans, then organizations will usually begin the performance measurement process at this level and proceed to develop the necessary strategic link with their agency program officials.

#### GAO Best Practices

GAO's best practices methodology is one example of the potential of surrogate measures. GAO's best practices effort may represent a sophisticated set of surrogate measures for IRM management performance. Management performance measurement is often highly subjective and thus difficult to demonstrate as reliable and accurate.

**Surrogate Measures** - Surrogate measures are performance metrics which may be able to demonstrate having an impact on program outcomes, although that connection can not be established as a direct link. These may be a grouping of a number of measures, which when taken together, demonstrate the ability to contribute overall to achieving goals. This is certainly on a level beyond having only a process linkage, but is short of the ultimate direct strategic linkage sought. However, surrogate measures can be very valuable tools for measuring performance in areas where direct measurement is not practical.

**Strategic Linkage** - This typifies the IRM organization that has a strategic plan, in an agency which has a strategic plan, and has already established an effective link between the two plans, i.e., the IRM plan is based on and is in support of the agency plan. The planning phases are connected, however the evaluation or performance phases are not clearly connected yet. This organization, however, may still have only developed surrogate measures.

**Performance Measures** - The organization that has a fully established linkage between the agency and IRM strategic plans and has the ability to develop measures of IRM's contribution to the agency goal is at this stage. If the linkage is already established, the organization is ready to begin the process of identifying the actual measures.

### *Cautions*

There are some circumstances which organizations should be aware of as they establish measures. Three prime situations are:

**IRM Acquisitions** - Acquisition is one area in which IRM's contribution has historically been measured for performance. Traditionally, IRM and its IT component have demonstrated considerable experience in performance measurement in this area, with metrics for measuring processing MIPS (millions of instructions per second), lines of print, system up-time in relation to service agreements, and other similar types of direct measures. Many examples of current efforts can be cited. Yet, due to the rapidly changing technology, it is crucial to monitor, understand, and respond to the continuous change and innovation. This creates a new paradigm for IRM performance measurement, and the danger exists that technology could drive people and objectives, rather than vice versa.

Measuring the performance of acquisitions is a valuable initiative. However, careful consideration must be given to determining the acquisition benchmarks to be used. Not all acquisition programs

are valid candidates for this type of measurement. Acquisition is generally one of two types within an organization: *Infrastructure* and *Program Mission*. In cases where the acquisition is of a general utility nature, such as creating the infrastructure to provide support for multiple projects on an as needed basis, or to handle administrative requirements, then any attempt to measure the performance benefits of the acquisition becomes difficult, and may not be cost effective. When IRM acquisition is in direct support of a specific program requirement, management can more easily demonstrate its contribution to the program.

Still, many other factors related to acquisition must be carefully considered before determining measures to avoid inappropriate performance goals. Comparisons must be carefully selected. For example, many agencies operate in a complex technology environment, requiring equipment to meet the connectivity challenges of those environments. This complexity may cause nominally poor acquisition price comparisons. Hence, the specific requirements and environment must be factored into the measurement, rather than a clear-cut, lowest cost assessment. Technology pricing has decreased precipitously over relatively short periods of time in recent years. This may also render comparisons inaccurate, at best.

#### Unintended Consequences

Consider the case of establishing measures for garbage collection. Should the measure be weight of trash collected? One could "game" this by adding water to half-full trucks. Should the measure be hours worked (typical implicit measure used?) Or should it be the collection of all garbage on the route, regardless of time and weight? This is a real example from one major city.

**Unintended Consequences** - A second caution to be aware of is the potential for the actual outcome of a measure, i.e., the actual performance against a performance goal, to differ from what was planned or expected. Performance deviations of this nature can result from at least two situations. One is the participants willfully "gaming" the system. This occurs through such procedures as inappropriately counting or not counting accomplishment units against a goal, or establishing a false goal. The second situation stems from the same root cause -- placing more focus on producing the units to be measured rather than the job to be accomplished. Inappropriate goals and performance measures can result in not clearly identifying the intended outcomes or the actual customer.

**Time Lag** - Another caution is to frame realistic expectations of the amount of time required for the IRM activity to have an impact on accomplishing agency strategic plan goals. Intermediate performance measures may be required to demonstrate progress toward achieving goals in some cases. Some projects may not yield final results for some time, but may actually be contributing to and supporting the agency strategic plan. This may well be a key issue in the understanding of IRM's infrastructure contribution, and questions that have been raised regarding IRM's relationship to white collar productivity.

## Summary

These are some of the issues identified by the Performance Measurement Group participants. We expect others to emerge during ongoing efforts to implement performance measurement.

## V. CURRENT EFFORTS AND SUCCESSSES

Federal agencies are currently implementing the requirements of GPRA and other relevant legislation in their strategic planning as well as in their daily business practices. A number of approaches have been undertaken and are being refined to meet these new obligations. Varying perspectives on performance measurement and its applicability to IRM have been proposed among government agencies and oversight organizations.

This section discusses some of the efforts underway at various Federal agencies to implement GPRA, based on documents and presentations provided by representatives of the various agencies. The first section discusses oversight organizations responsible for GPRA implementation for the Federal government. The second section provides brief case studies for a number of agencies.

### *Oversight Efforts*

A number of Federal Government oversight organizations have taken the lead in developing recommendations for GPRA compliance and processes; reporting on "best practices;" and establishing reviews of current agency efforts. These organizations include Congress, through pending legislation in the House and Senate (specifically addressed here are issues raised by Senator William Cohen, Chairman of the Subcommittee on Oversight of Government Management, Governmental Affairs Committee), the General Accounting Office, the Office of Management and Budget, and the General Services Administration. These organizations have been involved as active participants in AFFIRM's Performance Measurement Group, and they work with various client agencies. They have participated directly in discussions to help devise solutions to the GPRA issues.

**Senator Cohen's Office** examined computer and communications acquisition in the Federal government. In this study, significant problems with the current acquisition process and efforts were identified. The study supported an overhaul of the process through legislative action. In general, the report found that the government was paying too much for their computer equipment, and was still functioning on 1960's and 1970's technology. This was largely attributed to poor planning. The study indicated that the Federal government should streamline their business practices, and design their computer systems requirements around these new processes, and their subsequent results.

Specifically, the report provided a number of recommendations and guidance in the subject area, including:

- Emphasize early oversight and planning;
- Reduce bureaucratic barriers to purchases, i.e., replace the Delegation for Procurement Authority with a better process;
- Avoid reinventing technology, i.e. buy commercial off-the-shelf hardware and software, and re-use as much as possible;
- Size projects to manageable levels;
- Encourage innovation through pilot programs;
- Create incentives for performance by government and contractors;
- Communicate lessons learned; and
- Re-evaluate or stop existing efforts until the process is improved.

To follow up on this report, Senator Cohen has introduced new legislation, namely the Information Technology Management Reform Act, to correct the problems and implement many of the report's recommendations. The bill calls for the creation of Chief Information Officers in OMB and every executive agency, simplification of the acquisition process, and emphasis on improving mission related and administrative processes before acquiring information technology or automation. This and other new Congressional proposals focus on more performance measurement of programs.

The **General Accounting Office (GAO)** also has a significant role in Federal oversight of performance measurement. Through a number of GAO documented studies and reports, recommendations and "best practices" have been provided to help agencies understand the process and framework to be followed in adhering to the Congressional and Executive Branch requirements. Within their "best practices" guidance, GAO offers a suite of measures to be applied to the GPRA performance measurement effort. The GAO document "A Model for Evaluating Performance Measures" provides a recommended model for assessing performance measurement. This involves determining the right targets to measure, establishing a baseline to track progress, selecting the correct suite of measures, and assessing whether the results are being correctly identified. The document also suggests:

- A customer base for performance measures, composed of external government organizations, and internal IRM teams, program offices and financial audit teams;
- Mission measures determine IT measures;
- Effectiveness outweighs efficiency; and
- Key concepts are strategic planning and long-term thinking.

GAO has also made studies available to Federal government agencies which provide further guidance. These studies include best practices among government and private sector corporations, and a Strategic Information Management (SIM) Self-Assessment Toolkit, a model intended to assist agencies in achieving measurable improvements in outcome-oriented performance.

The **Office of Management and Budget (OMB)** is responsible for establishing the framework for Federal government agency implementation of GPRA. OMB has issued revisions to circulars related to performance measurement. One example is OMB Circular A-11, requiring the incorporation of performance information into the budget decision-making process and budget documents, and providing guidance on the implementation of GPRA. Another is OMB Circular A-130, which highlights the importance of evaluation and performance measurement. A-130 sets forth a number of recommendations. These include that agencies seek opportunities to improve the effectiveness and efficiency of government programs through work process redesign and the judicious application of information technology; perform various benefit-cost analyses to support ongoing management oversight processes; and conduct post-implementation reviews of information systems to validate estimated benefits and document effective management. OMB has also provided substantial guidance to agencies during the budget process.

Finally, the **General Services Administration (GSA)** holds a unique role in GPRA oversight. While they must adhere to the requirements of GPRA as an implementing agency, GSA's

responsibility for government procurement and acquisition also puts the agency in a oversight position. GSA has established requirements that all Delegations of Procurement Authority (DPAs) must include performance measures and metrics and cost-benefits analyses. These factors are used to determine the acceptance of agency requests. As the purchasing organization for the government, GSA also has an important role helping to develop an agency's infrastructure, and thus, has an impact on the potential process improvements recognized by an agency. GSA has demonstrated a willingness to work with agencies to develop performance measurement practices and metrics, in concert with the mission needs of agencies.

## ***Agency Implementation Efforts***

### **Environmental Protection Agency**

Some of EPA's IRM program effectiveness measures include:

#### **INCREASED:**

- value of EPA information to customers,
- customer satisfaction with information and access,
- value of EPA information to decision-makers,
- customer knowledge and use of available tools,
- ability to integrate information resources,
- ability to assess progress of programs in achieving environmental goals at all levels,
- quality of EPA's IRM program in relation to industry's IRM best practices,
- administrative processes conducted electronically,
- management satisfaction with IRM stewardship, and
- reliability, ease of use, and range of services provided.

#### **DECREASED:**

- burden on reporting community,
- staff time required to complete administrative processes, and
- total time to complete administrative processes.

The Environmental Protection Agency (EPA) has taken several key steps towards the implementation of an effective IRM performance measurement program. In the summer of 1994 the agency published a Strategic Plan which provided a clear articulation of the EPA's mission and goals across all programs. In the fall of 1994 the agency's Executive Steering Committee for Information Resources Management, comprised of senior managers from across the agency's programs, published an IRM strategic plan. Two key factors make this current strategic plan different from other IRM strategic plans published by the agency. First, the plan reflects the decision of the agency's senior program managers with input from IRM management and staff, external stakeholders and partners. The plan is an agency-wide plan developed with the input of program partners -- not a plan solely for and by the IRM community. Secondly, the publication of an agency strategic plan provided EPA with the opportunity to clearly link IRM support with the agency's mission and goals.

The EPA's IRM mission is supported by eight vision elements. Each of these vision elements ties to elements in the agency's strategic plan. In order to measure the success of activities to support each of the IRM vision elements, EPA has established performance measurement areas for each IRM vision element. These measurements are linked to the agency's mission and focus on IRM contributions to agency outputs and outcomes.

Joint development of the IRM strategic plan by program and IRM managers and their respective staffs established a working relationship and better understanding on both sides. Program requirements are more clearly understood by IRM managers and IRM capabilities are better understood by program managers.

### **Immigration and Naturalization Service**

The Immigration and Naturalization Service (INS) has implemented acquisition performance measures for an Information Technology Partnership (ITP). INS established goals, service-level agreements, performance measures and process monitoring, and performance reporting. The intent is to demonstrate clear, quantifiable benefits in the IRM program. The primary purpose is to measure the ITP's Return on Investment. Goals are business results, quality and customer satisfaction.

The ITP has a method to solicit feedback from the operational programs on the business process improvements (BPI) once an Information Technology project is implemented/operationally deployed. Measures are developed for contract performance, and BPI for high-impact/mission critical tasks. These include performance measures of:

INS also plans to measure cost, process improvements, customer satisfaction and quality of service, through:

- Quarterly Task Performance Measurement Reports;
- Customer Satisfaction Surveys;
- Quarterly Contractor Evaluations; and
- Return on Investment and Net Present Value Calculations.

- On-Time;
- Within-Budget;
- Customer Satisfaction;
- Contractor Technical Performance;
- and
- Mission Improvement.

The INS ITP program also focuses on BPI as a contributing factor in demonstrating quantifiable benefits in the IRM program. INS's plans call for a method to solicit feedback from the programs on the business process improvements for these tasks once implemented.

### **Social Security Administration**

The Social Security Administration (SSA) has demonstrated experience in developing performance measures. Traditionally SSA has measured activity and productivity using a number of measurement systems. These systems, as they were already in place, were used to determine

performance measures.

To begin the procurement process, GSA required specific performance measures to be identified to allow the Delegation for Procurement authority. SSA justified this procurement to GSA via a cost/benefit analysis, while performance measures were developed to provide a separate basis for evaluation from the cost/benefit analysis.

SSA offers a number of lessons learned during this process:

- Metrics must be tied to the existing agency planning process and plan;
- Current reporting systems should be utilized. Don't reinvent the wheel;
- Get agency buy-in; and
- Establish a baseline for measuring change.

SSA conducted a full lifecycle of performance measures with their Integrated Work Station (IWS) initiative. They began with the agency strategic plan, separated into specific program areas. Existing measures were identified, and potential business improvements through implementation of IWS were determined. From these findings, performance measures were selected. In addition, SSA conducted a pilot of IWS to resolve issues and improve the information base prior to the full scale acquisition.

While this procurement was primarily an infrastructure acquisition, SSA was able to define a clear linkage between the acquisition effort and the potential benefits and performance to be measured within the program mission. This program provided support across multiple business lines within SSA, and successfully presented the benefits that helped programs achieve their goals. While performance measures were not necessarily directly tied to IRM, the need existed to define independent classifications of measures. Inherent in the success of the effort was an expected overlapping of performance measures between IRM and the program objectives. This also demonstrates that IRM and the programs must take joint ownership of the relevant performance measures, and become equal stakeholders in aiming to achieve success.

### **General Services Administration**

GSA measurement occurs at three levels:

<b>Level</b>	<b>Example</b>
Agency	Acquisition costs, timely delivery, Return on Investment (ROI), and competitiveness.
Program	Meeting service and information needs of customers, reducing program costs, improving efficiency (e.g. time, quality), and return on investment.
Acquisition and Implementation Projects	Acquisition time, acquisition price, acquisition quality (e.g. customer satisfaction, obtained through an end-user customer satisfaction survey, or other tool).

The General Services Administration (GSA) has established an IT Acquisition Performance Measurement program. This program seeks to measure the performance of an IT acquisition in terms of its impact on mission outcome. Unlike most other agencies, GSA has a specific agency mission in the area of IRM procurement.

GSA places their focus on outcome-based performance measures for Information Technology when Agency Procurement Requests (APRs) are submitted. At the program level, GSA's acquisition program factors in performance measurement of process improvement and measures outcome-based performance by assessing if the GSA's efforts are meeting the service and information needs of customers, reducing program costs, improving efficiency and return on investment. The future of this program is unclear in light of the recent changes in the program for Delegation of Procurement Authority and on-going GSA changes.

### **U.S. Department of Agriculture**

The USDA is undertaking a program to focus on how to best measure Information Technology (IT) performance, as well as how to evaluate programs for GPRA requirements.

To accomplish the accurate measurement of IT contributions, the agency has established a software metrics model process to measure quality, productivity, program costs and program duration. With this process, trends and relative performance ratios are determined. When it is appropriately applied, this metrics model combines strategic planning, information engineering and process control disciplines. Additionally, USDA developed and utilized a performance improvement matrix at their National Finance Center to focus on such factors as customer satisfaction, quality, productivity, measurability and cost estimation. The key to the success of this effort was to link both outcomes and processes, ensuring that an effectiveness baseline matrix was first determined.

USDA also conducted a number of site visits to assess performance measurement efforts, including a review of the efforts of the State of Oregon. Oregon initially determined a set of "core" and "urgent" benchmarks for measuring performance. Based on these goals and policies, budget allocations are made to correspond to the level of support provided to meeting the objectives. Oregon established a planning and progress review board, composed of state government and private sector representatives, to assess the progress made towards achieving the benchmarks and measures. Oregon felt one key to the success of the performance measurement program was achieving a "corporate" mind-set. To establish this groundwork, all employees were trained in performance measurement, process analysis and team building.

USDA also conducted a site visit to Sunnyvale, CA, which has a long history of performance measurement. Sunnyvale representatives felt that the key to successful performance measurement is a change in organizational dynamics that allows the understanding to make the process work. The methods used to achieve their desired results included stressing long-range planning, performance budgeting and performance auditing. Sunnyvale reported successes from their program, such as: prioritizing programs based on what works; planning the detailed level of service desired and cost per unit; receiving a 90% approval rating from their citizens; reducing staffing by 5%; and achieving a 20% cost reduction over 6 years.

### **Summary**

These are only a few examples of the current efforts underway throughout the Federal government. They provide insight into the varying approaches and methods being used to develop performance measurement.

## APPENDIX A

### LEGISLATION AND GUIDANCE ON PERFORMANCE MEASUREMENT

Over the last few years, in addition to GPRA, the following legislation has placed increased requirements on Federal Government managers to develop, implement, report on, and manage through the use of performance measures:

- Chief Financial Officers (CFO) Act of 1990;
- Government Management Reform Act (GMRA) of 1994; and
- Office of Management and Budget (OMB) Circulars.

Legislative and Executive branch oversight agencies have differing perspectives on performance measurement. A number of Federal Government agencies have issued guidance to clarify approaches and establish procedures for compliance. Additionally, Congress, in both the House and Senate, are undertaking efforts to place a strong focus on using performance measurement for improved quality and service throughout the Federal government.

The **Chief Financial Officers Act** requires certain Federal Government agencies to:

- conduct pilot efforts in developing performance measures
- report these measures in their annual financial statements.

This act requires that the agency CFO provide for systematic measurement of performance. While the Act only addresses performance measurement in the general sense, implementing instructions (issued by OMB on February 5, 1992) expands the role of performance reporting to provide a basis for management improvement as well as financial reporting. The OMB guidance provides for the linkage of performance measures to organizational goals and missions, and for definition of output and outcome characteristics in terms of quality, timeliness, access, coverage, customer satisfaction and program results. The guidance also requires identification and presentation of performance data in annual financial statements and calls for auditors to assess the reliability and validity of data in those statements.

The **Government Management Reform Act** is intended to improve the management of the Federal government through reforms to the management of Federal human resources, financial management, and other processes. To achieve these goals, GMRA proposes limitations on certain annual pay adjustments and leave accumulation, expands use of electronic payments, authorizes franchise fund pilot programs. The Act also establishes authority to increase efficiency in Congressional reporting requirements, simplify management reporting, and finally, expands the coverage of the requirement of the CFO Act reporting requirements.

**OMB Circular A-11, Preparation and Submission of Budget Estimates** requires the incorporation of performance information into the budget decision-making process and budget documents. It provides guidance on the implementation of GPRA, and it specifies that budget justification must be provided through the inclusion of performance indicators and goals, program

evaluation activities, and an agency's program evaluation agenda.

In **OMB Circular A-130, Management of Federal Information Resources**, OMB highlights the importance of evaluation and performance measurement by stating that "Agencies shall promote the appropriate application of Federal information as follows:

- a) seek opportunities to improve the effectiveness and efficiency of government programs through work process redesign and the judicious application of information technology;
- b) prepare, and update as necessary throughout the information system lifecycle, a benefit-cost analysis for each information system;
- c) conduct benefit-cost analyses to support ongoing management oversight processes that maximize return on investment and minimize financial and operational risk for investments in major information systems on an agency-wide basis; and
- d) conduct post-implementation review of information systems to validate estimated benefits and document effective management."

## **APPENDIX B**

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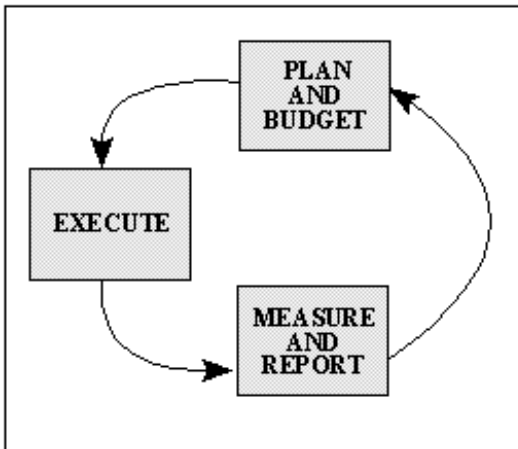


Figure 2-1. Traditional Management Feedback Loop

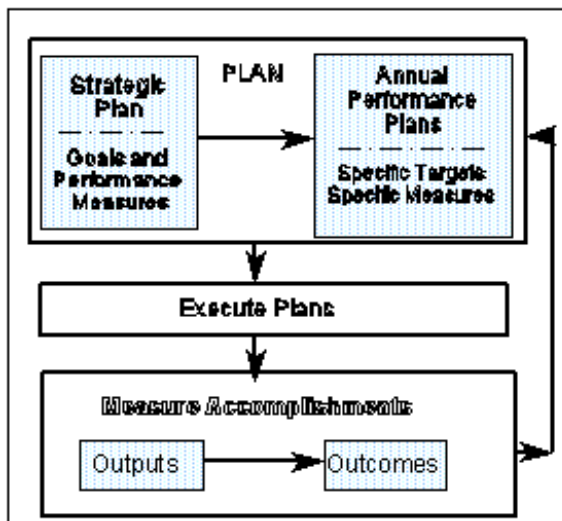


Figure 2-2. Performance Measurement within GPRA

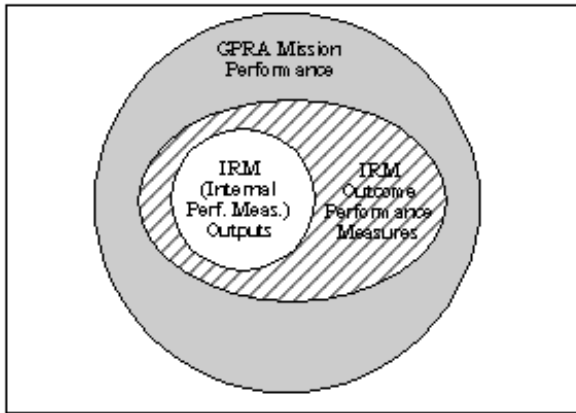


Figure 3-1. Levels of IRM Performance Measurement

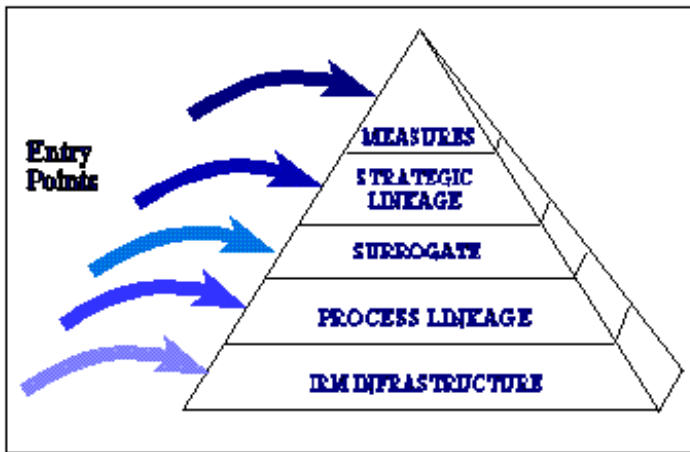


Figure 4-1. Performance Measurement System Entry Points

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