Performance Measurement within the Statistics of Income Division

Kevin Cecco, Internal Revenue Service

eveloping performance measures continues to play an important role for many of the Federal statistical agencies. Federal statistical agencies produce critical data to inform public and private decisionmakers about a range of topics of interest, including the economy, the population, and other pertinent statistics. The ability of statistical agencies to make appropriate decisions about the statistical data they produce depends critically on the availability of relevant, innovative, and timely performance measures. The Federal statistical community remains on alert for opportunities to strengthen these measures, when necessary.

For Federal statistical programs to effectively benefit their data users, the underlying data systems must be viewed as credible. In order to ensure this credibility, Federal statistical agencies have worked very hard to develop high-quality standards, as well as maintain integrity and efficiency in the production of data. As the collectors and providers of these basic statistics, the responsible agencies act as data stewards, balancing public and private decisionmakers' needs for information with legal and ethical obligations to minimize reporting burden, respect respondents' privacy, and protect the confidentiality of the data provided to the Government.

To reach this goal, Federal statistical agencies have focused on developing and measuring performance in the critical areas of quality, program performance, relevance, and timeliness. Lastly, customer satisfaction is quite often used as a means of measuring the usefulness of products and services provided by Federal statistical agencies. Performance measures form the basis for evaluating such areas as how efficiently Federal agencies provide services, how well taxpayer dollars are spent, and assessing whether Federal agencies are meeting their mission requirements.

Understanding Performance Measures

In general terms, a performance measure is a quantitative or a qualitative measure derived from a series of observed facts that can reveal relative positions in a given area. When evaluated at regular intervals, the measure can point out the positive or negative trends and changes over time. Performance measures are also useful in drawing attention to particular issues that pertain directly to organizational mission achievement. They can also be helpful in setting policy priorities for a Federal agency.

There are several pros and cons related to performance measures. These include:

Pros:

- Can summarize complex issues in simple terms for supporting decisionmakers.
- Are easier to interpret than trying to find a trend among larger sets of data.
- Facilitate communication with appropriate target audiences.
- Promote accountability and credibility.

Cons:

- May send misleading messages if they are poorly constructed or misinterpreted.
- May be misused if the construction process is not transparent and lacks sound statistical or conceptual principles.

▶ Constructing Performance Measures

There are countless sources of information on how statistical agencies should construct solid performance measures. Provided below are four guidelines that should be followed when creating and implementing performance measures. Each step is important for statistically sound and defensible measures. Equally important is the notion of ensuring that all four guidelines are followed in an orderly and cohesive process. Choices made in one step can have important implications for other steps.

- 1. Developing a Solid Foundation: A sound framework is the starting point in formulating performance measures. The framework of measures should be built in a manner that correlates with the mission of an organization, as well as aligns with strategic goals and organizational objectives. The framework should be precise, articulating the purpose of the statistical agency.
- 2. Selecting Quality Data: The strengths and weaknesses of performance measures are largely based on the quality of the underlying data. Ideally, measures should be formulated based on their relevance, analytical soundness, timeliness, and availability. While the development of performance measures must be guided by the framework of useful indicators, the data selection process can be very subjective as there is no specific and generally accepted method for developing measures. More importantly, the inability to obtain relevant data may also limit a statistical agency from building sound and defensible performance measures.
- 3. Identifying the Right Performance Measures:
 Over the past decade, there has been a renewed effort in developing meaningful performance measures. Unfortunately, performance measures are sometimes selected in an arbitrary manner. This can lead to measures which confuse and mislead decisionmakers and the general public. The underlying nature of the data needs to be carefully assessed before constructors can develop the "right" measures.

4. Presenting and Disseminating: The way performance measures are presented is not a trivial issue. Performance measures must be able to communicate an accurate and persuasive picture to decisionmakers and organizational leaders. The representation of performance measures should provide clear messages without obscuring individual data points. There are many interesting ways of disseminating critical information, such as developing innovative balanced scorecards. These offer the general public the means to clearly show evidence of improving or declining performance. Statistical agencies should always strive to be independent and unbiased when presenting and disseminating performance measurement results.

► Performance Standards within the Federal Statistical Community

Statistical agencies maintain the quality of their data or information products, as well as their credibility, by developing meaningful performance measures for their organizations. Federal statistical agencies have collaborated on developing a meaningful set of performance measures for use under the Government Performance and Results Act and in completing the Administration's Program Assessment Rating Tool (PART). These statistical agencies have agreed that there are six conceptual dimensions within two general areas of focus that are key to measuring and monitoring statistical programs.

The first area of focus is Product Quality, encompassing the traditional dimensions of relevance, accuracy, and timeliness. The second area of focus is Program Performance, encompassing the dimensions of cost, dissemination, and mission achievement.

Provided below is a brief review of these six quality dimensions, split between Product Quality and Program Performance.

Product Quality: Statistical agencies agree that product quality includes many attributes, including *relevance*, *accuracy*, and *timeliness*. The basic measures in this group relate to the quality of specific products, thereby providing actionable information to key stakeholders.

These are "outcome-oriented" measures and are critical to the usability of these products. Statistical agencies establish goals and evaluate how well targets are met. In some sense, relevance relates to "doing the right things," while accuracy and timeliness relate to "doing things right."

- 1. Relevance: Qualitative or quantitative descriptions of the degree to which products and services are useful and responsive to users' needs. Relevance of data products and analytic reports may be monitored through a professional review process and ongoing contacts with data users. Product relevance may be indicated by customer satisfaction with product content, information from customers about product use, demonstration of product improvements, comparability with other data series, agency responses to customer suggestions for improvement, new or customized products or services, frequency of use, or responses to data requests from users (including policymakers).
- 2. Accuracy: Qualitative or quantitative measures of important features of correctness, validity, and reliability of data and information products measured as degree of closeness to target values. For statistical data, accuracy may be defined as the degree of closeness to the target value and measured as sampling error and various aspects of nonsampling error (e.g., response rates, size of revisions, coverage, and edit performance). For analysis products, accuracy may be the quality of the reasoning, reasonableness of assumptions, and clarity of the exposition, typically measured and monitored through review processes. In addition, accuracy is assessed and improved by internal reviews, comparisons of data among different surveys, linkages of survey data to administrative records, redesigns of surveys, or expansions of sample sizes.
- 3. *Timeliness*: Qualitative or quantitative measure of timing of information releases. Timeliness may be measured as time from the close of the reference period to the release of information, or customer satisfaction with timeliness. Timeliness may also

be measured as how well agencies meet scheduled and publicized release dates, expressed as a percentage of release dates met.

Program Performance: Statistical agencies agree that program performance encompasses balancing the dimensions of cost, dissemination, and mission accomplishment for the agency as a whole; operating efficiently and effectively; ensuring that customers receive the information they need; and serving the information needs of the Nation. Costs of products or programs may be used to develop efficiency measures. Dissemination involves making sure customers receive the information they need via the most appropriate mechanisms. Mission achievement means that the information program makes a difference. Hence, three key dimensions are being used to indicate program performance: cost (input), dissemination (output), and mission achievement (outcome).

- 4. *Cost:* Quantitative measure of the dollar amount to produce data products or services. The development and use of financial performance measures within the Federal Government are an established goal; the intent of such measures is to determine the "true costs" of various programs or alternative modes of operation at the Federal level. Examples of cost data include full costs of products or programs, return on investment, dollar value of efficiencies, and ratios of cost to products distributed.
- 5. Dissemination: Qualitative or quantitative information on the availability, accessibility, and distribution of products and services. Most agencies have goals to improve product accessibility, particularly through the Internet. Typical measures include: on-demand requests fulfilled, product downloads, degree of accessibility, customer satisfaction with ease of use, number of participants at user conferences, citations of agency data in the media, number of Internet user sessions, number of formats in which data are available, amount of technical support provided to data users, exhibits to inform the public about information products, issuance of newsletters describing products, and usability testing of Web sites.

6. Mission Achievement: Qualitative or quantitative information about the effect of, or satisfaction with, statistical programs. For Government statistical programs, this dimension responds to the question—have we achieved our objectives and met the expectations of our stakeholders? Under this dimension, statistical programs document their contributions to the goals and missions of parent departments and other agencies, the Administration, Congress, and information users in the private sector and the general public. For statistical programs, this broad dimension involves meeting recognized societal information needs; it also addresses the linkage between statistical outputs and programmatic outcomes.

▶ Performance Standards within the Internal Revenue Service Statistics of Income Division

The mission of the Statistics of Income (SOI) Division is to collect, analyze, and disseminate information on Federal taxation for the Treasury Department's Office of Tax Analysis, Congressional Committees, the Internal Revenue Service in its administration of the tax laws, other organizations engaged in economic and financial analysis, and the general public. To accomplish the mission, the SOI provides statistical data to be used strictly in accordance with, and subject to, the limitations of the disclosure provision of the IRS Code.

The SOI Division worked with others within IRS to develop 12 performance measures. The measures cover various areas of operation and attempt to magnify the level of service provided to our primary stakeholders. In creating the performance measures, the group worked very hard to ensure that the measures were all-encompassing within the four strategic goals of SOI, including becoming our customers' preferred source, attracting and challenging high-quality employees, making a difference in tax administration, and increasing visibility of the SOI Division.

▶ Twelve SOI Performance Measures

What follows is a summary of the 12 performance measures. Specifically, a definition is provided, as well as a synopsis of results over the past 3 years.

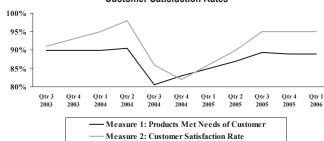
Measures 1 and 2 are collected from customer satisfaction surveys that are administered to our critical stakeholders in OTA, JCT, and BEA, as well as selected customers and employees throughout IRS.

1. Percentage of customers who feel the product or service met their needs:

Include a question on a customer satisfaction survey asking: "Did the product(s) or service(s) provided to your organization meet your needs."

2. Overall RAS Customer Satisfaction rate:

Include a question on a customer satisfaction survey asking: "Please rate your overall satisfaction with SOI."



Measures 1 and 2–Product Met Needs of Customer and Customer Satisfaction Rates

- Results from the chart show fairly comparable rates between Measures 1 and 2 over the past 3 years
- Since this measure captures results from five different customer surveys, relevance and satisfaction rates vary quarter by quarter.

3. Overall Employee Satisfaction Scores from the Employee Survey:

Definition: The grand mean score from 12 questions found on IRS's annual employee satisfaction survey.

Measure 3-Employee Satisfaction

Measure captures the annual Gallup Grand Mean Score across Q12 questions for SOI:

	2003	2004	2005
Grand Mean Score	3.99	3.86	3.81

Results show a slight decline in employee satisfaction over the past three years

4. RAS Attrition rates:

Definition: Attrition rate is defined as the total number of employees who have a break in service from IRS within a given fiscal year divided by the total number of employees (part and full-time) on the rolls at the beginning of a fiscal year.

Measure 4-RAS Attrition Rate

Attrition rate is defined as the number of employees who have a break in service from IRS within a given fiscal year divided by the number of employees on rolls at the beginning of the fiscal year.

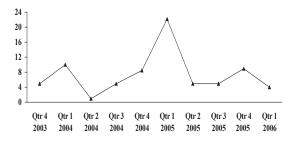
Results:

2003	2004	2005	
4.70 %	3.80 %	4.40 %	

5. Number of applicants per job opening:

Definition: The total number of unique applicants received for each job announcement. This includes all applications received by the servicing personnel specialist.

Measure 5-Number of Applicants per Job Opening

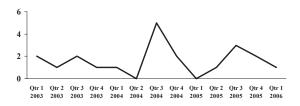


Number of applicants per job opening has fluctuated significantly over the past 3 years. On average over the past 3 years, SOI receives approximately seven applicants per job announcement.

6. Number of Senior Leadership Briefings:

Definition: Tally of senior leadership team briefings. Senior leaders are defined as individuals and comprise 23 senior IRS executives.

Measure 6-Number of Senior Leadership Briefings

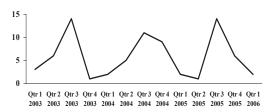


IRS Senior Leadership Group consists of 23 executives across the Service. The graphic shows a relatively small, yet inconsistent, number of Leadership briefings over the past 3 years.

7. Number of Presentations Given Outside the Service:

Definition: The number of program presentations given to groups and/or individuals outside the Service. Each briefing will count as one (e.g., if an organization briefs multiple customers at the same time, that will count as one briefing).

Measure 7-Number of Presentations Given Outside the Service

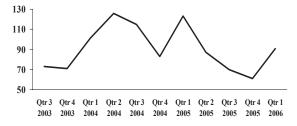


Such audiences for presentations include GAO, TIGTA, ASA, and NTA meetings, and various IRS advisory groups. Results show a relatively consistent pattern in the number of presentations over the past 2 years.

8. Number of New and Repeat Customers:

Definition: A Customer is defined as an individual person or organization that officially authorizes a product or service. A Repeat Customer is the same individual or organization requesting a new work activity, and a New Customer is a new individual person or organization requesting a new work activity.

Measure 8-Number of New and Repeat Customers



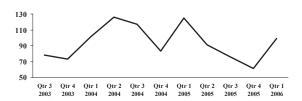
- A customer is defined as an individual or organization authorizing a product or service from RAS. Web activity is not included in this measure.
- Data have fluctuated for this measure over the past 2 years.

9. Number of data requests, publications, reports, and data sets completed:

Definition: This measure is a count of work products completed by SOI. It includes four types of work products. It captures: 1) data requests produced from a query from one of the RAS data sets; 2) publications produced according to a regular or routine schedule or as part of

normal business operations; 3) reports produced as a result of an analysis; or 4) new data sets produced from existing databases.

Measure 9-Number of Data Requests, Publications, Reports, and Data Sets



Similar to new and repeat customers, the number of data requests, publications, reports, and data sets has bounced around between 75 and 125 per quarter.

10. TaxStats Internet Activity:

Definition: The number of visits to the TaxStats Internet site. Visits are defined as the number of times a visitor came to TaxStats within a given period of time.

The number of page views to the TaxStats Internet site. When a visitor accesses a page, it requests all of the hits on that page, including the page itself. In order to report the number of page views, the Web site analysis software separates the page hits from the other hits. These numbers make up the page view metric.

Measure 10–TaxStats Internet Activity

3,500,000
3,000,000
2,500,000
1,500,000
1,000,000
0
Qtr 3 2004 Qtr 4 2004 Qtr 1 2005 Qtr 2 2005 Qtr 3 2005 Qtr 4 2005 Qtr 1 2006

— Visits — Page Views

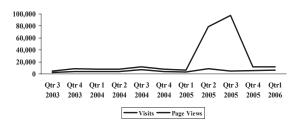
The redesign of the IRS.gov Web site in 2005 might be the prevailing reason for the lack of a spike in TaxStats visits and page views during the 1st Quarter of 2006.

11. RAS Intranet Web Activity:

Definition: The number of visits to the RAS Intranet site. Visits are defined as the number of times a visitor came to the RAS Intranet site within a given period of time.

The second part of this measure is the number of page views to the RAS Intranet site. When a visitor accesses a page, it requests all of the hits on that page, including the page itself. In order to report the number of page views, the Web site analysis software separates the page hits from the other hits. These numbers make up the page view metric.

Measure 11-Number of Visits and Page Views on the RAS Web site

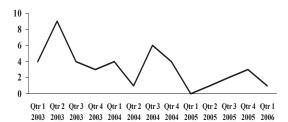


Data for this measure became available to RAS during the 3rd Quarter of 2003. Results clearly reveal an aberration in data. This spike was likely caused by Google search testing in June and July.

12. Number of mentions of SOI in major media:

Definition: This indicates media coverage of SOI activities by mass media, such as the *Wall Street Journal*, *Washington Post, New York Times, and Tax Notes*.

Measure 12-Number of Mentions of RAS in Media



Measure includes citations in the *Wall Street Journal, Washington Post, New York Times, and Tax Notes.* The number of media citations for SOI has remained fairly constant over the past 2 years.

References

Strengthening Federal Statistics, *Analytical Prespectives, Budget of the United States Government, Fiscal Year 2007*, Chapter 4, February 2006.

OECD Working Paper 2005/3, *Handbook on Constructing Composite Indicators: Methodology and User Guide*, August 2005.