

# Appendix I

(this appendix appears only in the website version of the PAR)

## PERFORMANCE MEASURE DEFINITIONS

### PROGRAMMATIC THEME 1: ECONOMIC GROWTH

**Strategic Goal: *Innovation and Entrepreneurship: Develop the tools, systems, policies and technologies critical to transforming our economy, fostering U.S. competitiveness, and driving the development of new businesses***

**Objective 1: *Facilitate intellectual property protection by reducing patent and trademark pendency and increasing quality of issued patents and trademarks (USPTO)***

#### ***Final Disposition Compliance Rate***

This metric is a measure of the propriety of the final disposition of individual applications, i.e., allowance or final rejection.

Data Source	Office of Patent Quality Assurance Database System
Frequency	Daily Input, month reporting
Data Storage	Automated systems, reports
Internal Controls	Manual reports and analysis
Data Limitations	None
Actions to be Taken	N/A

#### ***Non-final in-process compliance rate***

This metric is a measure of the propriety of the actions taken during the course of the examination in individual applications; i.e., first and subsequent actions on the merits by the examiners.

Data Source	Office of Patent Quality Assurance Database System
Frequency	Daily Input, month reporting
Data Storage	Automated systems, reports
Internal Controls	Manual reports and analysis
Data Limitations	None
Actions to be Taken	N/A

- ***Patent first action pendency (months)***
- ***Patent total pendency (months)***

These two measures reflect the time it takes to grant a patent. The first measure tracks the timeliness of first office actions on patent applications, measuring the time from the application filing date to the date of mailing the first office actions. The second measure identifies the timeliness related to issuance of the patent or abandonment of the application, measuring the average time from the application filing date to the date of issue or abandonment.

Data Source	Patent Application Location and Monitoring system (PALM)
Frequency	Daily Input, month reporting
Data Storage	PALM, automated systems, reports
Internal Controls	Accuracy of reporting data is controlled through internal program edits in the PALM system. Final test for reasonableness is performed internally by patent examiners, supervisors and program management analysts
Data Limitations	None
Actions to be Taken	N/A

#### ***Patent applications filed electronically***

This measure shows USPTO's progress in moving toward operating in a fully electronic environment. The number of applications filed electronically indicates USPTO's support of, and applicants' willingness to operate in, an e-government environment and identifies the percent of basic applications filed electronically.

Data Source	PALM system
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Frequency	Daily Input, month reporting
Data Storage	PALM, automated systems, reports
Internal Controls	Accuracy of reporting data is controlled through internal program edits in the PALM system and cross checks against other automated systems
Data Limitations	None
Actions to be Taken	N/A

### ***Trademark first action compliance rate***

This measure assesses product quality as measured by the internal quality review processes. USPTO measures the quality of trademark examination decisions by the reopening rate or similar internal quality measures.

Data Source	Office of Trademark Quality Review Report
Frequency	Daily Input, month reporting
Data Storage	Automated systems, reports
Internal Controls	Manual reports and analysis
Data Limitations	None
Actions to be Taken	N/A

### ***Trademark final compliance rate***

This measure is the percentage of evaluations meeting the criteria for decision-making conducted on a random sample of applications that received a final decision regarding registrability under the Trademark Act either by approval or final refusal. Appropriate decisions should have legally sound basis and be reasonably supported by the statute, regulations, the TMEP, case law or other legal sources.

Data Source	Office of Trademark Quality Review Report
Frequency	Daily Input, month reporting
Data Storage	Automated systems, reports
Internal Controls	Manual reports and analysis
Data Limitations	None
Actions to be Taken	N/A

- ***Trademark first action pendency (months)***
- ***Trademark total pendency (months), excluding suspended and inter partes proceedings***

These two measures reflect the time it takes to grant a trademark. The first measure determines the timeliness of trademark first office actions, measuring the time from the application filing date to the date of mailing the first office actions. The second measure identifies the timeliness related to office disposals, measuring the average time from the application filing date to the date of registration, notice of allowance, or abandonment.

Data Source	Trademark Reporting and Application Monitoring system (TRAM)
Frequency	Daily Input, month reporting
Data Storage	TRAM, automated systems, reports
Internal Controls	Accuracy of reporting data is controlled through internal program edits in the TRAM system. Program management performs final test for reasonableness
Data Limitations	None
Actions to be Taken	N/A

### ***Trademark applications processed electronically***

This measure tracks the percentage of trademark applications disposed that were received, processed and examined using electronic communications, records and systems. The results demonstrate the extent that filing, workflow, processing and communications can and are handled without paper or manual processes.

Data Source	TRAM system
Frequency	Daily Input, month reporting
Data Storage	TRAM
Internal Controls	Accuracy of reporting data is controlled through internal program edits in the QTQRT system. Final test for reasonableness is performed internally by trademark examiners, supervisors, and program management analysts
Data Limitations	None
Actions to be Taken	N/A

**Objective 2: Expand international markets for U.S. firms and inventors by improving the protection and enforcement of Intellectual Property Rights (USPTO)**

Percentage of prioritized countries that have implemented at least 75% of action steps in the country-specific action plans toward progress along following dimensions:

- Institutional improvements of IP office administration for advancing IPR
- Institutional improvements of IP enforcement entities
- Improvements in IP laws and regulations
- Establishment of government-to-government cooperative mechanisms

These measures track the USPTO’s efforts in relation to prioritizing countries of interest for purposes of improved IP protection and enforcement, capacity building, legislative reform, including creation of country/region strategic plans and specific action plans.

Data Source	External Affairs’ reports and databases
Frequency	Monthly input and reporting
Data Storage	Reports
Internal Controls	Manual reports and analysis
Data Limitations	None
Actions to be Taken	None

**Objectives 3, 6 and 7**

The following ten measures associated with EDA overlap among the following three different objectives. A crosswalk of these measures appears after this list followed by the histories of each. While objective 6 has no other measures other than the ones noted in this list, objectives 3 and 7 have separate measures that don’t overlap with each other. These measures are shown separately under the appropriate goal after this section, along with the funding breakout for all three objectives.

- **Objective 3: Stimulate high growth business formation and entrepreneurship, through investing in high-risk high-reward technologies and by removing impediments to accelerate technology commercialization (EDA, NIST)**
- **Objective 6: Promote and support the advancement of green and blue technologies and industries (EDA)**
- **Objective 7: Promote competitiveness of disadvantaged and distressed communities and businesses (EDA,MBDA)**

	Objective 3	Objective 7	Objective 6
Private investment leveraged – 9 year totals (in millions):	→	→	→
Private investment leveraged – 6 year totals (in millions):	→	→	→
Private investment leveraged – 3 year totals (in millions):	→	→	→
Jobs created / retained – 9 year totals:	→	→	→
Jobs created / retained – 6 year totals:	→	→	→
Jobs created / retained – 3 year totals:	→	→	→
Percentage of economic development districts (EDD) and Indian tribes implementing economic development projects from the comprehensive economic development strategy (CEDS) that lead to private investment and jobs	→	→	
Percentage of sub-state jurisdiction members actively participating in the economic development district (EDD) program	→	→	
Percentage of University Center clients taking action as a result of the assistance facilitated by the University Center	→	→	
Percentage of those actions taken by University Center clients that achieved the expected results	→	→	

- **Private investment leveraged**

- **Jobs created/retained**

For FY 2012, EDA reported on three-year performance results of investments made in FY 2009, six-year performance results of investments made in FY 2006, and nine-year performance results of investments made in FY 2003. EDA estimated targets based on a study done by Rutgers University, a formula-driven calculation projecting investment data at three, six, and nine-year intervals from the investment award. Actual results reported here reflect a 25 percent discount to account for the attribution of jobs to economic conditions other than the EDA investment. EDA conducts reviews to adjust targets based on actual performance.

Data Source	Investment Recipient Performance Reports
Frequency	At three year intervals (three, six and nine years after investment award)
Data Storage	EDA Management Information System
Internal Controls	To validate data, EDA regions contacted recipients, or confirmed with engineers or project officers who had been on site. EDA will perform regional validation on-site visit with some recipients.
Data Limitations	Regular Appropriation for PW and EA implementation and revolving loan fund investments. Private investment may vary along with economic cycles.
Actions to be Taken	EDA will continue to monitor investment and job creation data

The following four measures apply to objectives 3 and 7, but not objective 6.

**Percentage of economic development districts (EDD) and Indian tribes implementing economic development projects from the comprehensive economic development strategy (CEDs) that lead to private investment and jobs**

This measure indicates whether the CEDs process is market-based and whether EDA helps to create an environment conducive to the creation and retention of higher-skill, higher-wage jobs.

Data Source	Investment Recipient Performance Evaluations and CEDs
Frequency	Annually
Data Storage	EDA Management Information System
Internal Controls	EDA will conduct periodic performance reviews and site visits
Data Limitations	This measure may vary with economic cycles due to limited local resources during downturns for project investments
Actions to be Taken	EDA established a baseline from FY 2002 data and will continue to monitor and develop trend data

**Percentage of sub-state jurisdiction members actively participating in the economic development district (EDD) program**

EDDs generally consist of three or more counties that are considered member jurisdictions. Sub-state jurisdiction participation indicates the District's responsiveness to the area it serves and shows that the services it provides are of value. EDA defined active participation as either attendance at meetings or financial support of the EDD during the reporting period. Sub-state jurisdiction members are independent units of government (cities, towns, villages, counties, etc.) and eligible entities substantially associated with economic development, as set forth by the District's by-laws or alternate enabling document.

Data Source	Investment Recipient Performance Evaluations and CEDs
Frequency	Annually
Data Storage	EDA Management Information System
Internal Controls	EDA will conduct periodic performance reviews and site visits on approximately one-third of the District and Indian tribe investments per year
Data Limitations	While an EDD may be effective, members still may not participate for other reasons
Actions to be Taken	EDA will continue to monitor compliance with the new definition of sub-state member jurisdictions

- **Percentage of University Center clients taking action as a result of the assistance facilitated by the University Center**
- **Percentage of those actions taken by University Center clients that achieved the expected results**

The first measure focuses on the perceived value added by University Centers to their clients. EDA funds 59 University Centers that provide technical assistance and specialized services (e.g., feasibility studies, marketing research) to local officials and communities. This assistance improves the community's capacity to plan and manage successful development projects. University Centers develop client profiles and report findings to EDA, which evaluates the performance of each Center once every three years and verifies the data. Taking action as a result of the assistance facilitated means to implement an aspect of the technical assistance provided by the University Center

in one or several areas. For University Centers it involves economic development initiatives and training session development; linkages to crucial resources; economic development planning; project management; community investment package development; geographic information system services; strategic partnering to public or private-sector entities; increased organizational capacity; feasibility plans; marketing studies; technology transfer; new company, product, or patent developed; and other services.

The second measure is a follow-up to the previous measure. This measure reflects whether the assistance provided by the University Center is market-based and results in desired outcomes. University Centers develop client profiles and report to EDA, which will evaluate and verify the performance of each University Center once every three years.

Data Source	University Center / TAAC client profiles
Frequency	Annually
Data Storage	EDA Management Information System
Internal Controls	Performance data will be verified by the University Centers and TAACs. EDA headquarters will annually review profile data
Data Limitations	While the assistance may be valued, clients may choose not to act for other reasons. Outside mitigating factors such as the local economy may affect the measure.
Actions to be Taken	EDA established the baseline from FY 2002 data and will continue to monitor and develop trend data.

**Objective 3: Stimulate high growth business formation and entrepreneurship, through investing in high-risk high-reward technologies and by removing impediments to accelerate technology commercialization (EDA, NIST)**

The following measures are unique to Objective 3 and are associated with NIST

- ***Cumulative number of TIP projects funded***
- ***Cumulative number of publications produced***
- ***Cumulative number of patent applications***
- ***Cumulative number of projects generating continued R&D***
- ***Cumulative number of projects with technologies under adoption***

TIP provides cost-shared awards for high-risk, high-reward research and innovation in areas of critical national need. The first measure reflects the cumulative number of projects funded to support areas of critical national need since the program’s inception. Participating organizations include small and medium-sized companies, institutions of higher education, national laboratories, non-profit research institutes, and other organizations. The long-term nature of TIP-funded projects will result in a three-to-five year lag from initial project funding to the generation of four additional measurable outputs and outcomes.

Data Source	Data are gathered from the portfolio of TIP project participants through company filings of patent information to the NIST Grants Office (a legal requirement) and an electronic survey instrument under TIP’s Impact Assessment Reporting System (IARS).
Frequency	Annual over the course of TIP funding.
Data Storage	TIP’s Impact Assessment Group maintains IARS data in an integrated set of databases covering both descriptive information about the funded organizations, and survey responses for all participants in TIP-funded research projects.
Internal Controls	All TIP reports using IARS data and patent reports filed through the NIST Grants Office are monitored closely by TIP for research quality and are subject to extensive NIST-wide review and critique prior to being issued.
Data Limitations	The IARS electronic survey represents a standardized reporting system. Standard sources of uncertainty include variation in interpretation of specific questions; variation in the estimation techniques used in response to specific questions; variation in the quality of industry data; and missing values.
Actions to be Taken	None

**Objective 4: Drive innovation through supporting an open global internet and communications and broadband policies that enable robust infrastructure, ensure integrity of the system and support e-commerce (NTIA)**

***Update the Spectrum Inventory first established in FY 2011***

This measure reflects NTIA's development and maintenance of a Spectrum Inventory and other information that describes the Executive Branch spectrum use. The spectrum inventory is needed to inform spectrum management policy decision-makers and technology innovators. System characteristics and assignment data will be used to determine spectrum/geographic areas that are underutilized or vacant. With advice and support from the Federal agencies through the Interdepartment Radio Advisory Committee (IRAC), and the Commerce Spectrum Management Advisory Committee (CSMAC), other improvements will be implemented as necessary to ensure the efficiency and effectiveness of spectrum management processes.

Data Source	NTIA Office of Spectrum Management (OSM)
Frequency	Monthly, Annually
Data Storage	Office of Spectrum Management, Associate Administrator
Internal Controls	NTIA document clearance process, OMB/Interagency clearance process
Data Limitations	None
Actions to be Taken	None

**Identify up to 500 MHz of spectrum to support commercial broadband services or products**

This measure reflects NTIA's task (in collaboration with the FCC) of making available a total of 500 MHz (in bandwidth) of spectrum to support wireless broadband services or products over the next 10 years. This work will also include regular progress reports.

Data Source	NTIA Office of Spectrum Management (OSM)
Frequency	Monthly, Annually
Data Storage	Office of Spectrum Management, Associate Administrator
Internal Controls	NTIA document clearance process, OMB/Interagency clearance process
Data Limitations	None
Actions to be Taken	None

- **Miles of broadband networks deployed (Infrastructure Projects)**
- **Community anchor institutions connected (Infrastructure Projects)**
- **New and upgraded public computer workstations (Public Computer Centers Projects)**
- **New household and business subscribers to broadband (Sustainable Broadband Adoption Projects)**

The American Recovery and Reinvestment Act of 2009 allocates \$4.7 billion to NTIA to administer BTOP to accelerate broadband deployment in unserved and underserved areas of the United States, stimulate broadband demand and adoption, and enhance broadband capabilities for strategic institutions that provide important public benefits. Of that amount, at least \$250 million is allocated for sustainable broadband adoption projects, at least \$200 million is for expanding public computer center capacity, and up to \$350 million is available to develop a broadband inventory map.

Data Source	NTIA/OTIA/BTOP
Frequency	Monthly
Data Storage	OTIA, Web server
Internal Controls	Inspection
Data Limitations	None
Actions to be Taken	Collection of data from grantee reports.

**Objective 5: Provide measurement tools and standards to strengthen manufacturing, enable innovation, and increase efficiency (NIST)**

**Qualitative assessment and review of technical quality and merit using peer review**

Beginning in FY 2007, the National Research Council (NRC) conducted an assessment process in which they review half of the NIST Laboratories each year. The assessment process focuses on the quality, relevance and technical merit of the NIST Laboratories Program to ensure it is developing and promoting the infrastructure tools and measurement standards needed by industry, academia and other government agencies. The NRC establishes an expert review panel for each of the NIST laboratories and selects the members from leaders in industry, academia, non-profit organizations, and other federal government agencies and laboratories. Each of the panels conducts on-site reviews of the laboratory's scientific and technical work and issues an assessment report. This measure simply reflects whether NRC conducted the review.

Data Source	On-site interviews and discussions with NIST management and research staff by independent external scientific and technical experts, managed by the NRC
Frequency	Beginning in FY 2007, the NRC conducted an assessment process where half of NIST Laboratories are reviewed each year

Data Storage	NRC
Internal Controls	Oversight of laboratory specific expert review panels provided by the NRC
Data Limitations	Data are qualitative in nature
Actions to be Taken	None

### **Citation impact of NIST-authored publications**

The citation impact measure demonstrates that NIST consistently produces relevant scientific and technical publications. Citation impact reflects the utility and relevance of NIST research and is outcome-oriented. Citation impact has remained consistently above average for the past 30 years (1981-2010).

Data Source	Thomson Reuters
Frequency	Ongoing
Data Storage	NIST
Internal Controls	Data represents NIST "relative citation impact" – that is, the average citation rate per NIST publication relative to Thomson Reuter's baseline citation rate number for a large group of scientific and technical organizations. Internal controls include verification and review by NIST Information Services Office and the NIST Program Coordination Office.
Data Limitations	Factors such as self-citations, citation circles, and multiple authorship may affect the reliability of any data of this nature.
Actions to be Taken	None

### **Peer-reviewed technical publications**

Technical publications represent one of the major mechanisms that NIST uses to transfer the results of its research to support the Nation's technical infrastructure and provide measurements and standards to those in industry, academia, and other government agencies. Each year, NIST produces on average 2,000 publications with approximately 50 to 60 percent appearing in prestigious scientific peer-reviewed journals. This measure is a direct count of NIST technical manuscripts that have been published in an elite body of influential, scientific, peer-reviewed journals as compiled in the Web of Science® bibliographic database maintained by Thomson Reuters. In addition to peer-reviewed journals, NIST publishes its research results through NIST technical reports and special publications. This measure reflects in part the quality and demand for NIST publications.

Data Source	Web of Science® bibliographic database compiled by Thomson Reuters
Frequency	Ongoing
Data Storage	NIST
Internal Controls	Publication data is collected by Thomson Reuters. Data represents analysis performed by NIST's Information Services Office
Data Limitations	Output only
Actions to be Taken	None

- **Standard Reference Materials (SRM) sold**
- **NIST-maintained datasets downloaded**
- **Number of calibration tests performed**

These three measures share nearly the same methods of validation and verification. SRMs are the definitive artifact-based source of measurement traceability in the United States and are certified in the NIST Laboratories for their specific chemical and material properties. Customers use SRMs to achieve measurement quality and conformance to process requirements that address both national and international needs for commerce and trade and public safety and health. This measure represents a direct count of the number of SRM units sold to customers in industry, academia, and other government agencies.

NIST provides online access to over 80 scientific and technical databases covering a broad range of substances and properties from a variety of scientific disciplines. Industry, academia, other government agencies and the general public use NIST's online data systems with this representing another method NIST uses to deliver its measurements and standards tools, data, with the exception of web-based time related services. Beginning in FY 2010, NIST has revised the methodology for this measure by excluding the hundreds of millions of annual downloads associated with web-based time-related services which dominated the total number of downloads in previous years. This adjusted measure will more clearly demonstrate the use of NIST's other on-line datasets covering scientific and technical databases throughout the NIST laboratories.

NIST calibration services are the definitive source of physical measurement traceability in the United States. Customers use calibrations to achieve measurement quality and traceability to address both the national and international needs for commerce and trade, and public safety and health. NIST offers nearly 600 different types of physical calibrations in areas as diverse as radiance temperature, surface finish characterization, and electrical impedence. This measure represents a direct count of the number of individual calibration test measurements made by NIST for customers in industry, academia

and other government agencies. .

Data Source	NIST Measurement Services Division
Frequency	Ongoing
Data Storage	NIST Measurement Services Division
Internal Controls	Data represents direct and verifiable counts. Internal controls include verification and review by the NIST Material Measurement Laboratory for SRMs and datasets and by the NIST Physical Measurement Laboratory for calibration.
Data Limitations	Data provide information on output levels only.
Actions to be Taken	None

**Strategic Goal: Market Development and Commercialization: Help create market opportunities that equip businesses and communities with the tools they need to create new businesses and quality jobs with special emphasis on unserved and underserved groups**

**Objective 6: Promote and support the advancement of green and blue technologies and industries (EDA)**

The measures associated with this objective also apply to objectives 3 and 7. The descriptions of these measures appear immediately after objective 2.

**Objective 7: Promote competitiveness of disadvantaged and distressed communities and businesses (EDA, MBDA)**

Several of the measures associated with this objective also apply to objectives 3 and 6. The histories of these measures appear immediately after objective 2. The following measures are unique to objective 7.

- **Percentage of Trade Adjustment Assistance Center (TAAC) clients taking action as a result of the assistance facilitated by the TAACs (EDA)**
- **Percentage of those actions taken by Trade Adjustment Assistance Center clients that achieved the expected results (EDA)**

The first measure focuses on the perceived value added by TAACs to their clients. EDA funds 11 TAACs that work with U.S. firms and industries adversely impacted as a result of increased imports of similar or competitive goods, to identify specific actions to improve each firm's competitive position in world markets. Taking action as a result of the assistance facilitated means to implement an aspect of the technical assistance provided by the TAAC in one or several areas. For TAACs, it involves three main types of assistance to firms: help in preparing petitions for certification (which must be approved by EDA in order for the firm to receive technical assistance), analysis of the firm's strengths and weaknesses and development of an adjustment proposal, and in-depth assistance for implementation of the recovery strategy as set forth in the adjustment proposal.

The second measure is a follow-up to the first measure. This measure determines if the assistance provided by the TAAC is market-based and results in desired outcomes. TAACs conduct client surveys and report findings to EDA.

Data Source	University Center / TAAC client profiles
Frequency	Annually
Data Storage	EDA Management Information System
Internal Controls	Performance data will be verified by the University Centers and TAACs. EDA headquarters will annually review profile data
Data Limitations	While the assistance may be valued, clients may choose not to act for other reasons. Outside mitigating factors such as the local economy may affect the measure.
Actions to be Taken	EDA established the baseline from FY 2002 data and will continue to monitor and develop trend data.

- **Dollar value of contract awards obtained (billions) (MBDA)**
- **Dollar value of financial awards obtained (billions) (MBDA)**
- **Number of new job opportunities created (MBDA)**

These measures track the performance of MBDA. The dollar value of contract awards obtained by minority business enterprises (MBE) and facilitated by MBDA's grantees and staff reflects the success of MBDA's business development programs. MBDA includes the full potential value of multiple year contract awards obtained in its annual reporting for this performance measure, and discloses the dollar value of option years in a footnote. For indefinite-delivery contracts, only actual



dollar values realized or guaranteed are included in the annual reporting of this performance measure. The second measure reflects the cumulative dollar value of transactions that have been approved, verified, and validated for each financial package (loans, lines of credit, surety bonds, etc.) obtained for clients serviced by MBDA-funded projects, agency staff, or the MBDA portal online tools. The third measure focuses specifically on the number of jobs created within MBEs as a result of contract and financial services provided by MBDA-funded projects and Agency staff.

Data Source	Secured Internet transmission to Program Performance System
Frequency	Ongoing submission after obtaining documentation by projects and staff
Data Storage	Oracle platform
Internal Controls	Client source documentation forwarded to Regional Project Managers / Client and Source Verification by Regional project managers
Data Limitations	Date integrity dependent on agency verification policy and timeliness of review
Actions to be Taken	Quarterly desk assessment and semi-annual site visit and review

**Objective 8: Provide services to improve the competitiveness of small and medium size firms in manufacturing and service industries (ITA, NIST)**

**Exports generated annually from public / private partnerships (ITA)**

This measure represents the dollar value of exports generated by Market Development Cooperator Program (MDCP) project activity. The MDCP is a public / private partnership that provides technical and financial assistance to non-profit organizations like trade associations. The MDCP enhances the competitiveness of U.S. industries by reducing the startup costs of new projects.

Data Source	MAS analytical reports and studies and MDCP award recipients
Frequency	Annually
Data Storage	MAS Planning , Coordination and Management Office Records ®
Internal Controls	Reported quarterly by each cooperator. Each report is reviewed by an ITA team including a MAS industry specialist , MAC country specialist, and Commercial Service staff – usually both foreign and domestic. The MDCP manager approves results after they are finalized. All ITA measures are stored on ITA's knowledge management data base – ITA Central
Data Limitations	None
Actions to be Taken	None

**Annual cost savings resulting from the adoption of MAS recommendations contained in MAS studies and analysis (ITA)**

This measure captures the work of MAS analysts who evaluate the upstream and downstream impact of various regulations on U.S. manufacturers and service providers with the goal of reducing the cost of regulation.

Data Source	MAS analytical reports and studies
Frequency	Annually
Data Storage	MAS Planning , Coordination and Management Office Records ®
Internal Controls	CFO staff will perform analysis to verify results and data sources
Data Limitations	A number of factors, including U.S. business cooperation, global trade trends, political developments, and other federal regulatory agencies may impact the actual numbers
Actions to be Taken	N/A

- **Number of clients served by Hollings MEP centers receiving federal funding (NIST)**
- **Increased sales attributed to Hollings MEP centers receiving federal funding (NIST)**
- **Capital investment attributed to Hollings MEP centers receiving federal funding (NIST)**
- **Cost savings attributed to Hollings MEP centers receiving federal funding (NIST)**

MEP works with U.S. manufacturing establishments willing to invest in their future, to make improvements in the short term, and position themselves to be stronger long-term competitors both domestically and internationally. MEP centers serve as trusted advisors to their small and medium sized manufacturing clients, helping them to strategically implement business growth opportunities and to improve their competitive position in the market.. These measures provide quantitative indicators of the impacts MEP services provide. The number of clients represents the annual number of new and repeat clients served by MEP centers who received training, technical, and business assistance. Increased sales, capital investment and cost savings indicate changes that are positively associated with productivity growth and competitiveness—two factors that are crucial for U.S. manufacturers to manage and succeed in the rapidly changing manufacturing environment. Data are collected through an annual survey of clients receiving services from MEP centers.

Data Source	The client impact survey is administered by a private firm, Turner Marketing, located in Sanford, FL.
Frequency	The survey is conducted four times per year, and the clients are selected based on when they completed the first project with a MEP center in the previous year. The process is used to reduce respondent burden, raise overall response rates and improve data quality. Clients are asked to estimate how the group of MEP provided services over the previous two years has affected their business performance in the 12 month period prior to the survey.
Data Storage	Survey data is sent directly to MEP for analysis. MEP reviews and stores survey data received from Turner Marketing.
Internal Controls	Internal controls include verification and significant review of the client responses by MEP staff. Criteria are in place for identifying outliers in the data. Centers verify the outlier and if necessary, the data are revised based on the Center review.
Data Limitations	As with similar survey instruments, sources of uncertainty include variation of interpretation of specific questions; in the estimation techniques used in response to specific questions; in the quality of industry data; missing values and other common survey problems. Turner Marketing uses standard survey techniques to clean the data, ensure accuracy and reliability, and improve the response rate.
Actions to be Taken	None

**Strategic Goal: Trade Promotion and Compliance: Improve our global competitiveness and foster domestic job growth while protecting American security**

**Objective 9: Increase U.S. export value through an emphasis on trade promotion, market access, compliance and interagency collaboration (including support for small and medium enterprises) (ITA)**

**Commercial diplomacy success (cases)**

This measure captures the results of US&FCS front-line diplomatic engagement based on three key factors: 1) Actions directed towards a foreign government in support of a U.S. company or the U.S. national economic interest; 2) An action by the foreign government; and 3) An outcome that benefits a U.S. company or the U.S. national economic interest. This performance measure is not limited to export-related achievements but instead captures the full range of CS diplomatic efforts to advance U.S. interests. It serves as a valuable tool to gauge CS performance in its government-to-government work and captures a critical component of the program's fundamental mandate to protect U.S. business interests abroad.

Data Source	U.S. Exporters
Frequency	Annual
Data Storage	Client Management System
Internal Controls	ITA performs quality control, including error checking and elimination of duplicates, and verifies results through peer review of verifiable documentation
Data Limitations	Date reported is wholly dependent on client's willingness to provide such information and underreporting is likely
Actions to be Taken	N/A

**Ratio of US&FCS Export Value to US&FCS Costs**

This measure focuses on US&FCS's ability to efficiently and effectively help U.S. companies export by comparing the dollar value of exports supported by US&FCS (e.g., US&FCS Export Value) to US&FCS program costs.

Data Source	U.S. Exporters
Frequency	Annual
Data Storage	Client Management System
Internal Controls	ITA utilizes Inspector General reviews and DOC/ITA verification and validation reviews to assess actual measure data. All ITA measures are stored on ITA's knowledge management database – ITA Central.
Data Limitations	Some of the assistance US&FCS provides to U.S. companies requires extensive negotiation with a foreign government or business entity lasting over 12 months, which result in fluctuation from year-to-year in the results US&FCS reports.
Actions to be Taken	None

**Number of clients assisted by US&FCS**

This measure focuses on US&FCS's ability to efficiently and effectively help U.S. companies export by comparing the dollar value of exports supported by US&FCS (e.g., US&FCS Export Value) to US&FCS program costs.

Data Source	U.S. Exporters
Frequency	Annual

Data Storage	Client Management System
Internal Controls	ITA utilizes Inspector General reviews and DOC/ITA verification and validation reviews to assess actual measure data. All ITA measures are stored on ITA's knowledge management database – ITA Central.
Data Limitations	Some of the assistance US&FCS provides to U.S. companies requires extensive negotiation with a foreign government or business entity lasting over 12 months, which result in fluctuation from year-to-year in the results US&FCS reports.
Actions to be Taken	None

***Dollar value of U.S. export content in advocacy cases won***

This measure illustrates the effectiveness of US&FCS advocacy efforts to help U.S. companies win foreign government procurements by providing the dollar value of U.S. export content in advocacy cases won. Improvement in this metric is an indicator that US&FCS advocacy efforts are increasingly effective at ensuring that U.S. business interests receive fair treatment in foreign markets.

Data Source	U.S. Exporters
Frequency	Annual
Data Storage	Client Management System
Internal Controls	ITA utilizes Inspector General reviews and DOC/ITA verification and validation reviews to assess actual measure data. All ITA measures are stored on ITA's knowledge management database – ITA Central.
Data Limitations	Some of the advocacy cases US&FCS works on requires extensive negotiation with a foreign government or business entity lasting over 12 months, which result in fluctuation from year-to-year in the results US&FCS reports.
Actions to be Taken	Questionnaire modification under review to encourage export dollar reporting.

***Annual number of SMEs US&FCS assists in exporting to a second or additional country***

This measure illustrates the effectiveness of US&FCS in helping more small and medium-sized enterprises (SMEs) to export to a 2<sup>nd</sup> or additional country. This measure replaced “Number of SME NTM firms/SME firms exporting to two to nine markets (annual)” which is dependent on Census reporting schedules often resulting in a lag in calculating ITA performance outcomes.

Data Source	U.S. Exporters
Frequency	Quarterly
Data Storage	Client Management System
Internal Controls	ITA utilizes Inspector General reviews and DOC/ITA verification and validation reviews to assess actual measure data. All ITA measures are stored on ITA's knowledge management database – ITA Central.
Data Limitations	Some of the advocacy cases US&FCS works on requires extensive negotiation with a foreign government or business entity lasting over 12 months, which result in fluctuation from year-to-year in the results US&FCS reports.
Actions to be Taken	None.

**Objective 10: Implement an effective export control reform program to advance national security and overall economic competitiveness (BIS)**

***Percent of licenses requiring interagency referral referred within 9 days***

BIS administers dual-use commodity export controls. Dual-use commodities include any product that may have both civilian and military applications. To export dual-use commodities outside the United States, companies must apply for an approval license from BIS. Generally, dual-use commodity license applications fall into two categories: (1) referred licenses (approximately 85 percent of applications), including those licenses that require an opinion from another agency (e.g., Departments of State and Energy, Central Intelligence Agency, etc.); and (2) non-referred licenses, license requests that BIS may review/approve without being referred to any other federal agency. Executive Order 12981 stipulates that BIS refer 100 percent of the licenses needing referral within nine days. However, the licensing process is subject to uncontrollable delays. Therefore, BIS used historical data to set a target of 95 percent. This measure focuses on the effectiveness of BIS meeting the target of referring 95 percent of those licenses requiring referral within nine days.

Data Source	Export Control Automated Support System (ECASS)
Frequency	Quarterly
Data Storage	ECASS
Internal Controls	Export Administration will verify ECASS reports by running similar reports to determine if they produce the same results.
Data Limitations	None
Actions to be Taken	None

***Median processing time for new regime regulations (months)***

BIS routinely issues new and amended regulations to effectuate its responsibilities under the Export Administration Act (EAA). Their prompt promulgation benefits the U. S. from a trade, economic, and national security perspective. Regulatory

changes can, for example, reduce the number of license requirements imposed on U.S. exporters, close loopholes in the regulations, implement international agreements, adapt controls to geopolitical developments, or address new export control challenges. This measure tracks the length of time it takes BIS to issue a draft regulation after regime changes have been received and analyzed. There is a significant amount of time that is spent analyzing each regime resolution before actual drafting of a regulation can begin.

Data Source	Paper records and WebDocFlow (Departmental internal document tracking system)
Frequency	Quarterly
Data Storage	Export Administration office files
Internal Controls	BIS will verify the information used to report on this performance measure against supporting documentation.
Data Limitations	None
Actions to be Taken	None

**Percent of attendees rating seminars highly**

BIS advances trade while promoting national security with an industry outreach program to facilitate compliance with U.S. export controls. Seminars include one-day programs on the major elements of the U.S. dual-use export control system and intensive two-day programs that provide comprehensive presentation of exporter obligations under the Export Administration Regulations (EAR). BIS conducts special topic seminars, such as exporter obligations, doing business with key trading partners, or key technologies. This measure focuses on overall effectiveness of the export control outreach seminar program. The target is for at least 85 percent of the seminar attendees to give the seminar an overall rating of at least 4 (out of a 5 level scale).

Data Source	Seminar evaluations
Frequency	Quarterly
Data Storage	Export Administration office files
Internal Controls	BIS will verify the information used to report on this performance measure against supporting documentation.
Data Limitations	Data is dependent on the voluntary responses of seminar participants and is based on respondent opinion. Opinions may, or may not be a factual indicator of performance.
Actions to be Taken	None

**Percent of declarations received from U.S. industry in accordance with the Chemical Weapons Convention (CWC) regulations (time lines) that are processed, certified, and submitted to the State Department in time for so the United States can meet its treaty obligations**

The CWC establishes a verification regime for weapons-related toxic chemicals and precursors that have peaceful applications. BIS’s CWC regulations require U.S. industry exceeding certain chemical activity thresholds to submit declarations and reports. BIS processes, validates, and aggregates the declarations and reports to develop the U.S. CWC industrial declaration, which is forwarded to the Department of State in time to submit it to the Organization for the Prohibition of Chemical Weapons, within established time frames mandated under the CWC. This measure is designed to measure the rate of U.S. industry in complying with the declaration provisions of the CWC regulations.

Data Source	Paper records of declarations
Frequency	Quarterly
Data Storage	Export Administration office files
Internal Controls	BIS will verify the information used to report on this performance measure against supporting documentation.
Data Limitations	None
Actions to be Taken	None

**Number of actions that result in a deterrence or prevention of a violation and cases which result in a criminal and/or administrative charge**

This measure tracks the actual number of Export Enforcement leads and cases that result in a deterrence or prevention of a violation or result in a criminal and/or administrative action. Prevention may be accomplished by an investigative lead which results in agent outreach to a business, a freight forwarder, or any party to an export, and deters or prevents an unauthorized export. This measure reflects the actual number and type of preventive enforcement actions conducted. The implementation of this measure allows BIS to gauge its overall effectiveness in terms of successful prosecutions and preventive enforcement. BIS monitors and enhances compliance with license conditions by detecting and prosecuting violations of such conditions.

Data Source	Export Enforcement Investigative Management System
Frequency	Quarterly
Data Storage	IMS

Internal Controls	The Office of Export Enforcement and the Office of Antiboycott Compliance will both perform two types of checks to ensure data are entered where they should be (system integrity) and to ensure that the data are accurate and valid.
Data Limitations	None
Actions to be Taken	None

**Percent of shipped transactions in compliance with the licensing requirements of the Export Administration Regulations (EAR)**

This measure evaluates how effective the dual-use export control system is in ensuring that items subject to a BIS licensing requirement are exported in compliance with the EAR. BIS measures exporter compliance with the EAR by annually reviewing the entire compilation of export transactions subject to a license requirement (i.e., licensed and license exception shipments) and determining what percentage are in compliance with the EAR following any BIS intervention as necessary. BIS interventions comprise actions taken to mitigate or resolve non-compliance findings (i.e., counseling, outreach, warning letters, enforcement referral).

Data Source	ECASS, AES
Frequency	Quarterly
Data Storage	Export Administration Office files
Internal Controls	BIS will verify the information used to report on this performance measure against supporting documentation
Data Limitations	None
Actions to be Taken	None

**Percentage of Post-Shipment Verifications (PSV) completed and categorized above the “unfavorable” classification**

PSVs confirm whether or not goods exported from the United States actually were received by the party named on the license or other export documentation, and whether the goods are being used in accordance with the provisions of that license. PSVs are selected through the use of a new decision rubric that scores several aspects of a license application. In addition, BIS enforcement analysts research other potential factors to make a final determination on whether to initiate an end-use check to include PSVs. While PSVs are a key component of compliance verification, they also identify diverted transactions and reveal untrustworthy end-users and intermediate consignees. By conducting PSVs, BIS can provide a level of assurance that foreign end-users are aware of BIS license restrictions and comply with them as well as identifying if controlled items shipped to unqualified end-users. Because BIS does not have the resources to conduct PSVs on every shipment, the bureau must carefully choose which ones to investigate, with a focus on uncovering potential violators. As a result, the PSV sample deliberately over-represents “Unfavorable” outcomes compared to the entire shipment population.

Data Source	ECASS and Export Enforcement Investigation Management System (IMS)
Frequency	Monthly
Data Storage	ECASS and IMS
Internal Controls	The Office of Enforcement Analysis will perform two types of checks to ensure data are entered where they should be (System integrity) and to ensure that the data are accurate and valid BIS will verify the information used to report on this performance measure against supporting documentation
Data Limitations	None
Actions to be Taken	None

**Percentage of leads that result in prevention of a violation and cases which result in a criminal and/or administrative action,**

Monitoring the number of Office of Enforcement Analysis (OEA) generated leads and law enforcement actions resulting from those leads will provide a quality check and production measure of the effectiveness of OEA leads. The focus of the measure is quality, thus effectiveness will be measured by the number of preventions (an OEE measure). to include investigations resulting in criminal and/or administrative action, thus ensuring greater compliance with the Export Administrative Act. The performance measure will capture the number of OEA initiated leads and the percentage resulting in a prevention of a violation [to include industry outreach and issuance of warning letters for the first time and/or minor export offenses), criminal / administrative cases and administrative settlement orders.

Data Source	Export Enforcement Investigation Management System (IMS)
Frequency	Monthly
Data Storage	IMS-R
Internal Controls	The Office of Enforcement Analysis will perform two types of checks to ensure data are entered where they should be (System integrity) and to ensure that the data are accurate and valid
Data Limitations	None
Actions to be Taken	None

**Number of end-use checks completed**

BIS conducts end-use verification checks with a primary means being Sentinel visits conducted under the Sentinel Program. During Sentinel trips, BIS agents attempt to verify bona fides of consignees named on a BIS license, and confirm that the equipment is being used in conformance with conditions on the license. Each trip requires a team of two special agents for nearly six weeks to perform target analysis, pre-departure technical training, actual travel, and the subsequent post-trip briefings and final report. The end-use check workload is likely to increase significantly.

Data Source	ECASS and Export Enforcement Investigation Management System (IMS)
Frequency	Quarterly
Data Storage	ECASS and IMS
Internal Controls	The Office of Enforcement Analysis will perform two types of checks to ensure data are entered where they should be (system integrity) and to ensure that the data are accurate and valid.
Data Limitations	None
Actions to be Taken	None

**Percent of industry assessments resulting in BIS determination, within three months of completion, on whether to revise export controls**

BIS assesses the current status of technologies employed in U.S. industries whose products are subject to export controls to determine: (1) if those technologies have changed in such ways that existing controls should be revised or new controls should be imposed, and (2) if the control criteria remain pertinent and relevant or should be altered so the controls achieve the greatest possible beneficial effect and avoid unintended consequences. BIS anticipates that such assessments will be of such importance to its decision-making concerning revising existing or imposing new controls that 100 percent of the export control-focused industry assessments BIS conducts will be instrumental in determining whether—and, if so, how—to revise existing or establish new export controls.

Data Source	Paper records
Frequency	Quarterly
Data Storage	Export Administration office files
Internal Controls	BIS will verify the information used to report on this performance measure against supporting documentation.
Data Limitations	None
Actions to be Taken	None

**Objective 11: Develop and influence international standards and policies to support the full and fair competitiveness of U.S. industry (NTIA)**

*Percent of NTIA’s positions substantially adopted or successful at international meetings*

NTIA will develop and provide the Federal Government positions and proposals necessary for technical and policy forums and meetings. This measure encompasses the completion of technical studies and preparation of draft proposals representing the federal agency views to prepare the US proposals to WRC-12. NTIA also will promote acceptance of U.S. positions and proposals internationally by representing U.S. interests at regional telecommunications meetings, bilateral meetings and conferences. This measure reflects NTIA’s success in terms of its influence on international standards and policies

Data Source	NTIA Office of Spectrum Management (OSM) and Office of International Affairs (OIA)
Frequency	Monthly, Annually
Data Storage	OSM, OIA, Associate Administration
Internal Controls	NTIA document clearance process, OMB / Interagency clearance process
Data Limitations	None
Actions to be Taken	None

**Objective 12: Vigorously enforce U.S. fair trade laws through impartial investigation of complaints, improved access for U.S. firms and workers and strengthened efforts to ensure compliance with Antidumping / Countervailing Duty remedies (ITA)**

**Percent of identified unfair trade practices (UTPs) affecting U.S. parties addressed through informal / formal intervention or dispute settlement**

This measure quantifies progress toward the removal of foreign trade barriers that place U.S. companies at a disadvantage in trying to enter foreign markets over a five-year period. These efforts assist in leveling the playing field for U.S. businesses. This measure illustrates MAS’s involvement in addressing industry-specific trade barriers to U.S. companies and captures the outcome of MAS’s efforts to address barriers to industry in foreign markets such as labeling requirements, foreign restrictions on U.S. investment, and spurious foreign standards.

Data Source	IA / Office of Policy staff collects and maintains database
Frequency	Annual
Data Storage	IA / Office of Policy
Internal Controls	IA/Office of Policy keeps workable guidelines and timelines to maintain the audit trail and recording/reporting process. All ITA measures are stored on ITA’s knowledge management database – ITA Central
Data Limitations	Variances exist in the degree of difficulty posed by any particular foreign trade practice or the quality of any particular intervention undertaken
Actions to be Taken	None

**Number of new AD/CVD petitioners counseled**

This measure captures IA first-time counseling assistance to U.S. companies and workers, including counseling resulting from contacts initiated by U.S. companies or workers and IA outreach. Such counseling improves U.S. companies’ understanding of and access to the U.S. unfair trade laws dealing with dumping and foreign government subsidies that can impede the competitiveness of U.S. companies and workers. Whether or not a U.S. industry ultimately files an AD or CVD petition, or pursues other options, is a complex decision each party makes after considering the resources involved in participating in the AD or CVD process.

Data Source	The Antidumping/ Countervailing Duty Petition Counseling and Analysis Unit (PCAU) maintains a database of its communications with U.S. companies
Frequency	Annual
Data Storage	PCAU internal database
Internal Controls	IA analysts entering the data review the data basis to ensure accuracy. All ITA measures are stored on ITA’s knowledge management database – ITA Central
Data Limitations	Data reflect the number of companies or law firms that have contacted the PCAU. These figures may fluctuate depending on economic circumstances outside the control of the PCAU. Likewise, the targets for this measure are derived from actual numbers due to the PCAU’s inability to control the number of contacts it receives from U.S. industries
Actions to be Taken	None

**Percent of industry-specific trade barriers addressed that were removed or prevented**

This measure quantifies progress toward the removal of foreign trade barriers that place U.S. companies at a disadvantage in trying to enter foreign markets over a five-year period. These efforts assist in leveling the playing field for U.S. businesses. This measure illustrates MAS’s involvement in addressing industry-specific trade barriers to U.S. companies and captures the outcome of MAS’s efforts to address barriers to industry in foreign markets such as labeling requirements, foreign restrictions on U.S. investment, and spurious foreign standards.

Data Source	MAS analytical reports and studies
Frequency	Long-term
Data Storage	MAS Planning , Coordination and Management Office Records
Internal Controls	CFO staff will perform analysis to verify results and data sources
Data Limitations	A number of factors, including U.S. business cooperation, global trade trends, political developments, and the extent to which foreign governments create barriers or act inconsistently with trade obligations (an exogenous factor) will impact the actual numbers.
Actions to be Taken	N/A

**Percent of industry-specific trade barrier milestones completed**

This measure reports on the success of MAS industry analysis staff to target and remove industry-specific trade barriers focusing on key milestones for each barrier. Industry has identified, and MAS program staff assessed, barriers to establish their commercial and strategic value. An example includes MAS efforts to prevent the adoption of wireless encryption standards in China that would adversely affect U.S. manufacturers of wireless devices.

Data Source	MAS analytical reports and studies
Frequency	Annually
Data Storage	MAS Planning , Coordination and Management Office Records
Internal Controls	CFO staff will perform analysis to verify results and data sources
Data Limitations	These industry specific trade barrier milestones are occasionally subject to externalities such as delays in trade meetings with foreign governments
Actions to be Taken	N/A

- **Number of market access and compliance cases initiated**
- **Number of market access and compliance cases resolved successfully**
- **Value of cases resolved successfully**

The first measure shows the number of cases ITA concluded successfully in a given year. This measure ensures staff works to achieve outcomes that meet the client expectations and does not simply close cases. The second measure provides the estimated cost of a particular trade barrier removed with the measure tending to fluctuate over time with the estimated cost of a particular trade barrier relating to a specific company or industry.

Data Source	ITA Compliance and Market Access Management System database
Frequency	Annual / Long-term
Data Storage	Trade Compliance Center Database
Internal Controls	Each month, MAC office managers review case data relevant to their areas in the MAC database.
Data Limitations	None
Actions to be Taken	N/A

## PROGRAMMATIC THEME 2: SCIENCE AND INFORMATION

**Strategic Goal: *Generating and communicating new, cutting-edge scientific understanding of technical, economic, social and environmental systems***

**Objective 13: *Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety (NOAA, NTIS, NTIA)***

### ***Number of updated items available (annual) (NTIS)***

The number of items NTIS offers for sale to the public includes scientific, technical, and engineering information products added to the permanent collection, and items made available through online electronic subscriptions. NTIS abstracts, catalogues and indexes each publication added to the permanent collection so that it can be identified and merged into the permanent bibliographic database for future generations of researchers and the public who may benefit from this valuable research. NTIS offers other information products as full text documents in electronic format through numerous online information services. NTIS acquires this material primarily from U.S. government agencies, their contractors and grantees, and international sources.

Data Source	NTIS operates and maintains internal systems for collecting acquisition statistics
Frequency	Data are available daily. Reports are produced monthly.
Data Storage	All data are stored with NTIS systems
Internal Controls	NTIS' accounting and budget offices analyze and report performance data to management. Data verification is provided through regular internal independent auditor reporting
Data Limitations	Output only
Actions to be Taken	None

### ***Number of information products disseminated (annual) (NTIS)***

This measure represents information NTIS disseminates and includes compact discs, diskettes, tapes, online subscriptions, Web site pages, as well as traditional paper and microfiche products.

Data Source	A modified commercial order processing system and a standard Web analysis software package used by industry
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Frequency	Internal management activity reports are produced daily, summaries produced monthly
Data Storage	All data are stored with NTIS systems
Internal Controls	NTIS' accounting and budget offices analyze and report performance data to management. Data verification is provided through regular internal independent auditor reporting
Data Limitations	Output only
Actions to be Taken	None

**Customer satisfaction (NTIS)**

This measure represents the percentage of NTIS customers who are satisfied with the quality of their order, the ease of order placement, and the timely processing of that order. NTIS receives orders by phone, fax, mail, and online, and fills them in a variety of formats. NTIS derives the percentage of satisfied customers from the number of customer complaints compared to the total number of orders taken. It does not take into account inquiries about the status of an order or other general questions.

Data Source	A modified commercial order processing system
Frequency	Internal management activity reports are produced daily, summaries produced monthly
Data Storage	All data are stored with NTIS systems
Internal Controls	NTIS' accounting and budget offices analyze and report performance data to management. Data verification is provided through regular internal independent auditor reporting
Data Limitations	None
Actions to be Taken	None

**Annual progress report on the test-bed (NTIA)**

NTIA is conducting a pilot test-bed program to evaluate approaches and techniques to increase spectrum sharing between Federal and non-federal spectrum users.

Data Source	NTIA Office of Spectrum Management (OSM)
Frequency	Monthly, annually
Data Storage	OSM, Associate Administrator
Internal Controls	NTIA document clearance. OMB / interagency clearance process
Data Limitations	None
Actions to be Taken	None

**Objective 14: Improve understanding of the U.S. economy, society and environment by providing timely, relevant, trusted and accurate data, standards and services enabling entities to make informed decisions (Census, ESA, NOAA)**

**Produce timely, relevant, and accurate measures showing the dynamics of local job markets and identifying the changing structure of the U.S. economy and its effect on jobs. (Census)**

Under the Local Employment Dynamics (LED) partnership, states supply quarterly worker and business wage records to the Census Bureau for data integration to build a longitudinal national frame of jobs and the production of Quarterly Workforce Indicators (QWI) that measure the dynamics of the U.S. labor force and economy. Timely production of quality QWI data is a key performance measure for the Census Bureau.

Data Source	Management information reports. Summary production reports.
Frequency	Hourly. Quarterly.
Data Storage	Census Bureau internet site
Internal Controls	Periodic review, monitor, management control, and continuous improvement
Data Limitations	None
Actions to be Taken	Continue quarterly reviews of performance data.

**Release monthly export statistics on schedule (Census)**

Percent of scheduled release dates for the *FT-900 International Trade in Goods and Services* released on the scheduled due date.

Data Source	"Bluebook" schedule of release dates
Frequency	Monthly
Data Storage	Schedules maintained on Foreign Trade Division Computers and publicly available on the Internet.
Internal Controls	The Census Bureau compares actual release dates with scheduled data. No variation from schedule is permitted.

Data Limitations	None
Actions to be Taken	Continue 100% on-time performance

***Achieve pre-determined collection rates for Census Bureau censuses and surveys in order to provide statistically reliable data to support effective decision-making of policymakers, businesses, and the public (Census)***

This measure focuses on maintaining a high level of response for both demographic and economic surveys to ensure that information from the Economics and Statistics Administration’s (ESA) Census Bureau surveys and censuses are always reliable and widely accepted by customers over the long term. Reliability of Census Bureau statistics is essential to enhance the supply of key economic and demographic data to support effective decision-making of policymakers, businesses, the American public, and others.

Data Source	Census Bureau surveys are the initial collection source. Internal control files and systems are the source of the response rate data.
Frequency	Response rates are tied to data collection. Frequency varies by survey.
Data Storage	All data are stored in Census Bureau databases and are published in public press releases.
Internal Controls	Quality assurance analyses, Automated Data Processing (ADP) routines, and peer reviews.
Data Limitations	Data that are released must adhere to Title 13 requirements to protect respondents’ confidentiality.
Actions to be Taken	Continue quarterly reviews of performance data.

***Release data products for key Census Bureau programs on time to support effective decision-making of policymakers, businesses, and the public (Census)***

It is essential that Census release data products on schedule to enhance the supply of key economic and demographic data to support effective decision-making of policymakers, businesses and the American public. This measure focuses on two parts: economic indicators and other key surveys and reports. OMB Statistical Directive Number 3 requires that Census release principal economic indicator data within prescribed time periods. Thus, the impact of not meeting release dates for the economic indicators is much more serious.

Data Source	Actual data releases by Census Bureau programs.
Frequency	The frequency of data releases varies. Release dates are often published in advance.
Data Storage	Data release information is stored in Census Bureau systems and public data releases.
Internal Controls	Performance data are verified by comparing actual release dates with scheduled release dates. Methodological standards for surveys are publicly reported.
Data Limitations	Data that are released must adhere to Title 13 requirements to protect respondents’ confidentiality.
Actions to be Taken	Continue quarterly reviews of performance data.

***Complete key activities for cyclical census programs on time to support effective decision-making by policymakers, businesses, and the public and meet constitutional and legislative mandates (Census)***

Due to the cyclical nature of these programs, it is important for Census to track annual key activities that support the programs. Census tracks the internal activities that are considered to be the most important in meeting the long-term goals of the cyclical census programs.

Data Source	Activity schedules kept by each of the cyclical census programs.
Frequency	Ongoing, based on activity schedules.
Data Storage	The Census Bureau program offices maintain activity schedules and performance data.
Internal Controls	The Census Bureau compares actual completion dates with scheduled dates. Performance data is reviewed quarterly.
Data Limitations	None
Actions to be Taken	Continue quarterly reviews of performance data.

***Correct street features in the TIGER (geographic) database – number of counties completed to more effectively support: Census Bureau censuses and surveys, facilitate the geographic partnerships between federal, state, local and tribal governments, and support the E-Government initiative in the President’s Management Agenda (Census)***

It is essential that Census correctly locate every street in the MAF/TIGER system to provide geographic products and services that meet the accuracy expectations of the 2010 Census field data collection staff, the Census Bureau’s data

product customers, and the needs of the U.S. Geological Survey/ The National Map. Many local and tribal governments that participated in the Census 2000 geographic partnership programs and many potential customers for MAF/TIGER geographic products indicated that they would not consider future geographic partnerships or use without substantial improvements in location accuracy. Investing in the identification and correct location of new housing units and streets or roads in small towns and rural areas will ensure uniform address and street coverage in the MAF/TIGER database and in the Census Bureau's data products, both for the American Community Survey (ACS) and the 2010 Decennial Census.

Data Source	MAF / TIGER activity schedule
Frequency	As scheduled
Data Storage	Census Bureau MAF / TIGER database
Internal Controls	The Census Bureau compares actual completion dates with scheduled dates
Data Limitations	None
Actions to be Taken	Continue quarterly reviews of performance data.

**Timeliness: Reliability of delivery of economic data (number of scheduled releases issued on time) (ESA)**

The importance of BEA data as an ingredient for sound economic decision-making requires BEA to deliver data into the hands of decisionmakers on schedule. This measure tracks the number of scheduled releases that occur on time.

Data Source	A schedule of release dates for the calendar year is published each fall in the <i>Survey of Current Business</i> and is posted on the BEA website. BEA maintains a record of subsequent actual release dates.
Frequency	Quarterly
Data Storage	BEA maintains the schedule of future release dates and the record of actual release dates. Both sets of information are available on the BEA website.
Internal Controls	Scheduled and actual release dates are a matter of public record and can be verified via the Internet at <www.bea.gov>.
Data Limitations	Not all releases may be included in the published annual schedule because their release dates cannot be established that far in advance.
Actions to be Taken	FY 2012 target will be added when the schedule is made available to OMB and published in the <i>Survey of Current Business</i> in the Fall of the preceding year. Continue quarterly reviews of performance data.

**Relevance: Customer satisfaction with quality of products and services (mean rating on a 5-point scale) (ESA)**

This measure tracks customer satisfaction with BEA products using a five point scale.

Data Source	BEA customer satisfaction survey conducted online at BEA's website, <a href="http://www.bea.gov">www.bea.gov</a> .
Frequency	Continually
Data Storage	BEA conducts the survey, compiles the results, and retains records of raw data and computations that lead to the final results. A report is written and made available to the public at <a href="http://www.bea.gov">www.bea.gov</a> .
Internal Controls	BEA provides a copy of the survey results to the OMB, Budget Office of the DOC, and the Economics and Statistics Administration. The report is made available on the BEA website.
Data Limitations	The customer satisfaction survey is an ongoing, voluntary survey conducted via the website. As a voluntary survey, responses are representative of those who choose to respond.
Actions to be Taken	Survey is continually conducted with results monitored quarterly and reported after the end of the fiscal year.

**Accuracy: Percent of GDP estimates correct (ESA)**

This measure tracks the ability of BEA to accurately estimate its most important statistic, GDP. The measure is a composite index of six indicators that measure the accuracy of the GDP estimate with respect to: (1) whether the economy is expanding or contracting, (2) whether the economy is growing faster or slower, (3) whether the economy is strong or weak, (4) the trend GDP growth rate, (5) the average quarterly GDP growth rate, and (6) the level of current-dollar GDP. BEA applies these indicators using three-year rolling averages to develop a single measure of the correctness of the GDP estimate. BEA chose three-year rolling averages because (1) at least 12 quarters of estimates are needed for statistical reliability, (2) BEA's annual revisions cover three years, (3) the impact of statistical improvements occur over time, and (4) reasonable balance must be struck between statistical reliability and a measure of current performance.

Data Source	Data used for this measure are produced by BEA and made available in press releases; in our monthly publication, the <i>Survey of Current Business</i> (SCB); and on the Website: <a href="http://www.bea.gov">www.bea.gov</a> . Background research studies are published in the SCB
Frequency	Annually
Data Storage	The <i>Survey of Current Business</i> is published monthly and available online.
Internal Controls	DOC has evaluated this measure and BEA has submitted a <i>Validation and Verification</i> report. The <i>Survey of Current Business</i> is a matter of public record and can be verified via the Internet or hardcopy.
Data Limitations	The measure is the best single point estimation of the accuracy of GDP. Economic conditions, rather than statistical

	practices, could dramatically change the measure.
Actions to be Taken	Research to calculate the new measure will be conducted, following the completion of the annual revisions, in August 2011.

**Complete all major Strategic Plan milestones related to improving the economic accounts (ESA)**

This measure tracks BEA's progress in improving its GDP and economic accounts. BEA must continually update its economic accounts to keep pace with the increasingly complex and rapidly changing U.S. economy. The GDP, the balance of payments, state personal income, and other data series must be as timely, relevant, and accurate as possible to inform the decisions made by public and private leaders.

Data Source	The BEA 5-year Strategic Plan provides annual milestones for this budget-related measure. At the end of each fiscal year, BEA evaluates and reports its progress in achieving the scheduled milestones. Background research studies are published in the SCB
Frequency	Annually
Data Storage	BEA compiles and maintains data annually via the BEA Scorecard, available on the BEA website.
Internal Controls	Internal review and analysis by BEA.
Data Limitations	BEA's annual review and update of its Strategic Plan could result in changes to the milestones.
Actions to be Taken	Milestones will be adjusted as necessary to match the BEA 5-year Strategic Plan.

**Objective 15: Enhance weather, water and climate reporting and forecasting (NOAA)**

- **Severe weather warnings for tornadoes (storm based) – Lead time (minutes)**
- **Severe weather warnings for tornadoes (storm based) – Accuracy (%)**
- **Severe weather warnings for tornadoes (storm based) – False alarm rate (%)**

The lead time for a tornado warning is the difference between the time the warning was issued and the time the tornado affected the area for which the warning was issued. The lead times for all tornado occurrences within the continental United States are averaged to get this statistic for a given fiscal year. This average includes all warned events with zero lead times and all unwarned events. Accuracy is the percentage of time a tornado actually occurred in an area that was covered by a warning. The difference between the accuracy percentage and 100 percent represents the percentage of events without a warning. The false alarm rate (FAR) is the percentage of times a tornado warning was issued but no tornado occurrence was verified.

Data Source	National Weather Service (NWS) field offices
Frequency	Monthly
Data Storage	NWS headquarters and the Office of Climate, Water, and Weather Services (OCWWS)
Internal Controls	Verification is the process of comparing the predicted weather to reported event. Warnings are collected from every NWS office, quality controlled, and matched to confirmed tornado reports. Reports are validated by WFOs using concise and stringent guidelines outlined in NWS Instruction 10-1605. OCWWS monitors monthly performance throughout the NWS, and the regional headquarters monitor performance within their respective regions.
Data Limitations	The number of tornado events each fiscal year generally varies from 1,000 to 1,800. A higher number of events in a fiscal year indicate that one or more large tornadic outbreaks have occurred. Forecasters perform better during large outbreaks due a high level of situational awareness, well defined tornadic radar images, and increased confidence based on tornado reports which verify warnings during these large scale events. These three factors lead to longer lead times and higher accuracy. The peak level of tornadic activity occurs April through June each year. A secondary peak activity time period is October and November in the southeastern United States.
Actions to be Taken	Review all warnings and storm data after each event to learn from past experiences. Use the information learned to improve forecast skill and product quality in the future.

- **Severe weather warnings for flash floods (storm based) – Lead time (minutes)**
- **Severe weather warnings for flash floods (storm based) – Accuracy (%)**

The lead time for a flash flood warning is the difference between the time the warning was issued and the time the flash flood affected the area for which the warning was issued. The lead times for all flash flood occurrences within the continental United States are averaged to get this statistic for a given fiscal year. This average includes all warned events with zero lead times and all unwarned events. Accuracy is measured by the percentage of times a flash flood actually occurred in an area that was covered by a warning. The difference between the accuracy percentage figure and 100 percent represents the percentage of events without a warning.

Data Source	National Weather Service (NWS) field offices
Frequency	Monthly

Data Storage	NWS headquarters and the Office of Climate, Water, and Weather Services (OCWWS)
Internal Controls	Verification is the process of comparing the predicted weather to reported event. Warnings are collected from each NWS office, quality controlled, and matched to confirmed flash flood reports. Reports are validated by WFOs using concise and Stringent guidelines outlined in NWS Instruction 10-1605. OCWWS monitors monthly performance throughout the NWS, and the regional headquarters monitor performance within their respective regions. All data is reported on to NWS and NOAA leadership on a monthly basis.
Data Limitations	While long-term performance has shown a steady increase in forecast accuracy, inter-annual scores tend to fluctuate due to varying weather patterns from year to year. Some weather patterns are more difficult to forecast than others. Typically, 1st and 2 <sup>nd</sup> Quarters have higher lead times, while the 3rd and 4th Quarters, during the convective season, bring the annual average down. Spring/summer mesoscale events (e.g., thunderstorms) are more difficult to predict than larger synoptic scale systems; hence lower scores are expected in the 3rd and 4th quarters.
Actions to be Taken	Review all warnings and storm data after each event to learn from past experiences. Use the information learned to improve forecast skill and product quality in the future.

### ***Hurricane forecast track error (48 hours) (nautical miles)***

The public, emergency managers, government institutions at all levels in this country and abroad, and the private sector use NOAA hurricane and tropical storm track forecasts to make decisions on life and property. This goal measures the difference between the projected location of the center of these storms and the actual location in nautical miles (nm) for the Atlantic Basin. The goal is computed by averaging the differences (errors) for all the 48-hour forecasts occurring during the calendar year. This measure can show significant annual volatility. Projecting the long-term - trend, and basing out-year goals on that trend, is preferred over making large upward or downward changes to the goals each year.

Projecting the long-term trend, and basing out-year goals on that trend is preferred over making large upward or downward changes to the targets. These targets are developed based on analysis of long term performance, thereby taking into account year-to-year natural variability. Therefore, NOAA has extrapolated from the recent downward trend in forecast errors to derive new lower GPRA targets. Data from FY 05-08 is on a downward trend, so therefore targets reflect this year-to-year downward trend motion.

Data Source	NWS/Tropical Prediction Center (TPC)
Frequency	Annual
Data Storage	NWS/Tropical Prediction Center (TPC)
Internal Controls	Evaluation of forecast track errors is very accurate, because the location of most tropical cyclones is well known. However, factors other than forecast performance can affect forecast errors, even on an annual-average basis. Some systems are inherently more difficult to forecast than others. For example, hurricanes are easier to forecast than tropical storms or tropical depressions; storms at low-latitudes are easier to forecast than those at high latitudes. Thus the character of the season is a big driver in the value of this particular forecast performance measure.  Out-year measures depend on a stable funding profile and assume new satellites, improved forecast models, new and continued research
Data Limitations	None
Actions to be Taken	NWS/TPC prepares a comprehensive annual forecast verification report on the performance of the official forecasts and the performance of the numerical guidance.

### ***Hurricane forecast intensity error (48 hours)***

The public, emergency managers, government institutions at all levels in this country and abroad, and the private sector use NOAA hurricane intensity forecasts to make decisions on life and property. This measure will represent the difference between the projected intensity of these storms and the actual intensity in knots for all hurricanes, tropical storms, and tropical depressions for the Atlantic basin. The target baseline was computed by averaging the differences for all 48-hour forecast made for tropical cyclones forming during the calendar year.

Data Source	NWS/Tropical Prediction Center (TPC)
Frequency	Annual
Data Storage	NWS/Tropical Prediction Center (TPC)
Internal Controls	None
Data Limitations	Hurricane intensity, defined as the maximum 1-minute mean wind at an elevation of 10 m associated with the circulation of the cyclone, is a difficult quantity to measure. TPC intensity estimates are believed to be accurate to within about 10% (e.g., 8 kt for an 80 kt hurricane). The current targets are above, but beginning to approach, this level of uncertainty. While not a problem at present, significant downward adjustments to the targets will not be attainable (or verifiable) without advances in our ability to monitor tropical cyclones.  Out-year measures depend on a stable funding profile and assume new satellites, improved forecast models, new and continued research activities of the Hurricane Forecast Improvement Project (HFIP), and investments in critical observing systems.
Actions to be Taken	NWS/TPC prepares a comprehensive annual forecast verification report on the performance of the official forecasts and the

	performance of the numerical guidance.
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**Accuracy (%) (threat score) of day 1 precipitation forecasts**

This measure tracks the ability of the weather forecasters of NOAA’s Hydrometeorological Prediction Center (HPC) to predict accurately the occurrence of one inch or more of precipitation (rain or the water equivalent of melted snow or ice pellets) 24 hours in advance across the contiguous United States. Through this measure, HPC focuses on relatively heavy amounts of precipitation, usually a half inch or more in a 24-hour period (short-term flood and flash flood warnings), because of the major safety and economic impacts such heavy precipitation can have in producing flooding, alleviating drought, and affecting river navigation.

Data Source	National Weather Service/Hydro-meteorological Prediction Center (HPC) and State Agencies
Frequency	Monthly
Data Storage	HPC
Internal Controls	The 48-year record of performance indicates there can be considerable variation in the performance measure from year to year. This variation is heavily dependent on the variation of weather regimes over the course of a year and from year to year. Scores are usually lower, for example, in years with considerable summertime precipitation not associated with tropical cyclones.
Data Limitations	The Threat Score varies from 0 (no correct forecasts), to 100 when the forecast area exactly matches the observed area of 1 inch precipitation over the conterminous U.S. The scores vary seasonally during the year with higher values generally occurring during the fall and winter when weather systems are generally larger and more well-defined and lower values occurring in the spring and summer when precipitation is scattered and on a smaller geographic scale
Actions to be Taken	NOAA will implement planned weather observation and numerical modeling improvements along with ongoing research projects. The Hydrometeorological Test Bed will be expanded to accelerate the transition of research advancements into the operational prediction of precipitation.

- **Winter storm warnings – Lead time (hours)**
- **Winter storm warnings – Accuracy (%)**

A winter storm warning provides NOAA customers and partners advanced notice of a hazardous winter weather event that endangers life or property, or provides an impediment to commerce. Winter storm warnings are issued for winter weather phenomena like blizzards, ice storms, heavy sleet, and heavy snow. These measures reflect advance warning lead time and the accuracy of winter storm events. Improving the accuracy and advance warnings of winter storms enables the public to take the necessary steps to prepare for disruptive winter weather conditions.

Data Source	National Weather Service (NWS) field offices
Frequency	Quarterly
Data Storage	NWS headquarters , NWS Regional headquarters, and the Office of Climate, Water, and Weather Services (OCWWS)
Internal Controls	While long-term performance has shown a steady increase in forecast accuracy, inter-annual scores tend to fluctuate due to varying weather patterns from year to year. Some weather patterns are more difficult to forecast than others. Due to improved data assimilation and modeling resolution and frequency lead time has exceeded goals for the past several years
Data Limitations	The number of winter storm events each fiscal year varies from 4,500 to 7,800. Forecasters perform better during large winter storm events due to consistency in model guidance, well defined winter storm radar images, and increased confidence based on winter storm reports. These three factors lead to longer lead times and higher accuracy. The peak level of winter storm events occurs December through March—mainly in the second quarter. Storms that occur in the first quarter—early in the winter season (October through December)—are difficult to forecast due to marginal cold air in low levels and local impacts of relatively warm water bodies, including oceans, bays, lakes, and rivers. Storms that occur in the third and fourth quarters (April through September) are rare and difficult to predict due to warming low levels and greater insolation which strongly influences daytime accumulations. Also, some areas, especially in the West, have considerable year to year and sometime multi-year variability.
Actions to be Taken	Review all warnings and storm data after each event to learn from past experiences. Use the information learned to improve forecast skill and product quality in the future.

- **Marine wind – percentage of accurate forecasts (%)**
- **Wave heights – percentage of accurate forecasts (%)**

These performance indicators measure the accuracy of wind and wave forecasts, which are important for marine commerce. The measure represents the Percentage of Accurate Forecasts, and accuracy is defined in terms of error. For the marine wind forecast, if the error is less than 5 knots, the forecast is accurate. This measure was revised two years ago from using a complex skill score that was difficult to deconstruct and analyze to reflect the individual wind speed and wave height components.

**Marine Wind:** This measure was introduced in FY07. The old measure for marine wind accuracy was based upon a skill score. The actuals from FY06 and earlier years should not be compared to the FY07 and later years performance statistics.

**Marine Wave:** This measure is new for FY07. The old measure for marine wave height accuracy was based upon a skill score. The actuals from FY06 and earlier years should not be compared to the FY07 and later years performance statistics.

Data Source	NWS Weather Service (NWS) Field Offices
Frequency	Monthly
Data Storage	NWS Headquarters
Internal Controls	Due to the large volume of data gathered and computed, documentation for the accuracy of forecast for wind and waves cannot be finalized until 1-2 months into the following fiscal year. Out-year measures depend on a stable funding profile and take into account new satellites, improved forecast models, new and continued research activities, investments in critical observing systems, and new and ongoing forecaster training. Within a Fiscal Year, scores drop in the late fall and winter then rise in late spring and summer. This is due to more volatile marine winds in winter.
Data Limitations	Marine wind speed forecast scores naturally vary (percent correct +/- 4% per year) due to fluctuations in the number of volatile wind speed conditions from year to year. Wind speed forecasts with an error margin of less than 5 knots are increasingly difficult to make as conditions increase from gale to storm to hurricane force speeds. In general, the more volatile the conditions, the greater the range in observed wind speeds, and the more difficult to forecast wind speeds.  Marine wave height forecast scores naturally vary (accuracy +/- 4% per year) due to fluctuations in the number of volatile wave height conditions from year to year. Wave height forecasts with an error margin of less than 2 feet are increasingly difficult to make as swell and wind-driven wave conditions increase and interact. In general, the more volatile the conditions, the greater the range in observed wave heights, and the more difficult to forecast wave heights.
Actions to be Taken	NOAA will continue to deploy enhanced versions of AWIPS, upgrade new forecast models, implement new wave forecast models, and improve communication and dissemination techniques to marine users.

- **Aviation forecast accuracy of ceiling/visibility (3 mi/1,000 feet or less) (%)**
- **Aviation forecast FAR for ceiling/visibility (3 mi/1,000 feet or less) (%)**

Visibility and cloud ceiling forecasts are critical for the safety of aircraft operations. Accurately forecasting the transition between Visual Flight Rule (VFR) and Instrument Flight Rule (IFR) conditions significantly improve general and commercial aviation flight planning capabilities, improving both flight safety and efficiencies. Performance statistics recalculated for the past few years of data (FY05-FY10) uncovered a direct relationship between IFR accuracy and false alarm ratios and the percent frequency of occurrence of IFR conditions. The forecast frequency of IFR occurrence and the observed frequency of IFR occurrence are within 0.5% of each other, indicating that forecast errors are likely in the timing of onset and duration rather than solely event occurrence. Because the direct relationship exists, aviation services correlated likely performance levels to the percent frequency of IFR occurrence, and recommends performance metrics that account for IFR frequency and creates a logical performance standard for those areas with very little IFR occurrence and the warm or cool seasons.

Data Source	NWS field offices
Frequency	Monthly
Data Storage	NWS headquarters and OCWWS
Internal Controls	Inter-annual scores tend to fluctuate due to varying weather patterns. Some patterns are more difficult to forecast than others. Month to month variability can swing from plus or minus 1% to plus or minus 15%, with season to season variability generally plus or minus 7% to plus or minus 10%, and year to year variability plus or minus 3% for both accuracy and FAR. At the same time the percent frequency of occurrence can vary plus or minus 10% or greater from year to year, season to season, or month to month depending on weather patterns. Typically 3rd and 4th quarter scores during the convective season have lower accuracy and increased FAR scores than the 1st and 2nd quarter cool season months.
Data Limitations	IFR conditions occur much more frequently (by order of magnitude) during the late fall through early spring and are typically associated with winter weather. Performance metric goals tied to the frequency of occurrence of IFR conditions accounts for areas with little IFR (e.g., Pacific Region or the desert southwest) and differences between the warm and cool seasons. After accounting for the frequency of IFR occurrence, the overall performance of accuracy and FAR variability is plus or minus 3 percent.
Actions to be Taken	IFR conditions occur much more frequently (by order of magnitude) during the late fall through early spring and are typically associated with winter weather. Performance metric goals tied to the frequency of occurrence of IFR conditions accounts for areas with little IFR (e.g., Pacific Region or the desert southwest) and differences between the warm and cool seasons. After accounting for the frequency of IFR occurrence, the overall performance of accuracy and FAR variability is plus or minus 3 percent.  Since Aviation Forecasters are already predicting IFR conditions within 0.5% of the actual frequency of occurrence, the skills and training needed to forecast IFR is at its peak for the current state-of-the-art of the science. The foreseeable adjustment to forecast performance now becomes an application of lead-time data as developed by researchers to metrics. The Aviation Services Branch will investigate various methods for apply the data, and develop a sound metric relating the amount of forecast overlap as shown by lead time calculations to the difference in the forecast and observed frequency of IFR occurrence. This would become a secondary metric supporting the existing POD and FAR GPRA measures.

**Geomagnetic storm forecast accuracy (%)**

Geomagnetic Storm Forecast Accuracy is the percentage of days that a geomagnetic storm event at Earth was correctly forecasted by the Space Weather Prediction Center (SWPC). The annual goal represents a minimum percentage of events for which a Geomagnetic Storm Forecast was successfully issued within the previous 48 hours of the event.

For this metric a geomagnetic storm is defined as an event equal to or exceeding the Minor Storming level as defined by the Daily Geomagnetic A-index  $\geq 30$  (equivalent to Geomagnetic K-index  $\geq 5$  or  $\geq G1$  Level on the NOAA Space Weather Scales). The NOAA G-scale indicates CME events between a minor level of plasma emission (G1), causing weak power fluctuations in the power grid and an extreme level of plasma emission (G5) where in affected areas, transformers are severely damaged, the electric grid collapses, pipeline currents corrode, and satellites experience orientation difficulties. To account for solar cycle variability and to maintain statistical significance, this metric will be assessed over either a minimum of a fiscal year or the 30 most-recent geomagnetic storms (during periods of solar minimum).

Data Source	National Weather Service field offices
Frequency	Annually
Data Storage	NWS Space Weather Prediction Center(SWPC)
Internal Controls	Annual goal represents a minimum percentage of cases for which a Geomagnetic Storm Forecast was successfully issued by the SWPC and verified over the following 48 hour period.
Data Limitations	Number of geomagnetic storms varies from year to year during the 11-year solar cycle. During solar maximum, significant geomagnetic storming will occur with greater frequency. During solar minimum, long time periods will occur with little to no geomagnetic storming. For this reason, yearly changes in this measure may not be as significant as longer term trend measurements that span the natural solar cycle. The next solar maximum is expected in 2013.
Actions to be Taken	Methods to improve performance for FY13-17: Enlil Solar Wind Model Deployment; Forecaster Training and Improved Model Interpretation and Application; Enlil Solar Wind Model Continuing Validation and Improvement; Interpretation and Application of NASA Solar Terrestrial Relations Observatory (STEREO) Observations (finite mission lifetime due to nature of orbit)

## PROGRAMMATIC THEME 3: ENVIRONMENTAL STEWARDSHIP

**Strategic Goal:** *Promote economically-sound environmental stewardship and science*

**Objective 16:** *Support climate adaption and mitigation (NOAA)*

***U.S. temperature forecasts (cumulative skill score computed over the regions where predictions are made)***

For each three month period, seasonal outlooks for U.S. surface temperature are produced by CPC and reported as either above normal, near normal, below normal or, where no definite seasonal guidance can be provided, equal chances. These forecasts are verified using a 48 month running mean of Heidke Skill scores computed for seasonal outlooks for each 3-month seasonal mean (e.g., January-February-March mean; February-March-April mean; March-April-May mean; and so on). It is calculated as follows: Heidke skill score:  $S = ((c-e)/(t-e)) \times 100$ , where c = number of grid points where forecast was correct and e = number of grid points expected to be correct by chance alone and t = total number of grid points where the forecast was made.

Data Source	Forecast data, observations from U.S. Weather Forecast Offices, and from a cooperative network maintained by volunteers across the nation
Frequency	Annually
Data Storage	NWS' National Centers for Environmental Prediction
Internal Controls	NOAA performs quality control on the observed data (for example, error checking, elimination of duplicates, and interstation comparison) both at the CPC and U.S. Weather Forecast Office level. In 2005, NOAA implemented an objective verification procedure to minimize the impact of human errors in the computation of skill score;
Data Limitations	Because of natural (and unpredictable) variability of climate regimes, the skill score can fluctuate considerably from one



	season to another. For example, for the periods influenced by a strong ENSO forcing, GPRA measure tends to be high. Lower scores occur during the periods when ENSO is in its neutral phase. For example, the FY 2006 actual was an anomaly as effects from the El Nino and La Nina dropped out of the 48 month averages.
Actions to be Taken	None

### ***Uncertainty in the magnitude of the North American carbon uptake***

Carbon dioxide is the most important of the greenhouse gases that are undergoing changes in abundance in the atmosphere due to human activity. On average, about one half of all the carbon dioxide emitted by human activity is taken up by the oceans and the terrestrial biosphere (trees, plants, and soils) – reservoirs of carbon known as carbon “sinks” – however, the variation in the uptake from year to year is very large and poorly understood. NOAA needs to assess and quantify the source of this variability if it is to provide scientific guidance to policymakers who are concerned with managing emissions and sequestration of carbon dioxide. NOAA accomplishes this by making regional-scale measurements of the vertical profile of carbon dioxide across the U.S. which, combined with improved transport models, can be used to determine carbon dioxide sources and sinks on a regional scale.

Data Source	NOAA's Global Carbon Cycle Research Program
Frequency	Annually
Data Storage	NOAA's Earth System Research Laboratory
Internal Controls	Quality assurance and calibration against known standards performed by NOAA
Data Limitations	Number of tall tower/aircraft sites and our ability to incorporate these data into advanced carbon models
Actions to be Taken	None

### ***Error in global measurement of sea surface temperature***

This measure is intended to document progress in accurately measuring the global sea surface temperature and reflects how improvements in ocean observations will decrease the uncertainty in global sea surface temperature measurements, which will ultimately play a role in calculations of the ocean-atmosphere exchange of heat and the heat storage in the global ocean. The sea surface, covering over 70% of the Earth surface, has a tremendous influence on global climate because it is where the atmosphere responds to the ocean, via the transfer of heat either to or from the atmosphere. Since sea-surface temperature is measured by buoys, ships, and satellites, this performance measure is well-suited as an indicator of the effectiveness of our integrated ocean observing system and the more accurate estimates of sea surface temperature and ocean heat content will improve our ability to respond to changes in the climate system. Success in this performance measure requires the maintenance and increase of in situ ocean sensors. The results of this performance measure reflect the ability of this program to maintain a level of accuracy and consistency in measurements despite an environment of declining budgets.

Data Source	NOAA's Climate Program Office
Frequency	Quarterly
Data Storage	NOAA's Climate Program Office
Internal Controls	Quarterly reporting mechanism on uncertainty in sea surface temperature measurements
Data Limitations	Number of deployed observing platforms in the global ocean
Actions to be Taken	None

### ***Regionally focused climate impacts and adaptation studies communicated to decision-makers***

This measure documents the success in working directly with stakeholders to develop and enhance a suite of climate data, monitoring, and prediction products that are valuable to customers and stakeholders by measuring the number of peer-reviewed decision support resources - regionally-focused climate impacts and adaptation studies – authored by funded investigators. NOAA provides state of the art science and discovery information products to a range of decisionmakers, from water resource managers and regional forecast offices, to national and international assessments such as the U.S. Climate Change Science Program (CCSP) and the Intergovernmental Panel on Climate Change (IPCC). In FY 2008, the program exceeded its target (35) by two for a total of 37; for 2009 and outyears the program is maintaining the original profile of targets.

Data Source	NOAA's Climate Program Office
Frequency	Annually
Data Storage	NOAA's Climate Program Office
Internal Controls	Annual examination of grants awarded and research activities undertaken that result in various outputs (e.g. peer review publications, workshops) showing evidence of research-based interactions with decision makers
Data Limitations	Challenge of Systematically collecting researchbased outputs showing evidence of interactions with stakeholders to communicate risks of climate variability and change and to develop means of coping with impacts.
Actions to be Taken	None

**Objective 17: Develop sustainable and resilient fisheries, habitats, and species (NOAA)**

***Fish stock sustainability index (FSSI)***

The FSSI tracks the rebuilding and maintaining of fish stocks at productive levels, along with critical components of NOAA’s efforts to achieve that outcome, such as managing fish harvest rates and increasing knowledge about the status of fish stocks. It is calculated by assigning a score between 0 and 4 to each of 230 stocks selected for their importance to commercial and recreational fisheries and then adding the scores together. Since effort is required to maintain an FSSI score, the score can fall with insufficient resources, and increasing the score without an increase in resources is a significant accomplishment. For more information: <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

Data Source	Stock assessments and status determinations
Frequency	Quarterly
Data Storage	NMFS Stock Information System (SIS) and Excel spreadsheet maintained by NMFS’ Office of Protected Resources
Internal Controls	Results will be reported quarterly in a signed memo from the Fishery Management Program Manager to the NMFS Chief Financial Officer and are housed and made available in a database managed by the NMFS Office of Management and Budget; monthly reporting on performance to NOAA Deputy Under Secretary
Data Limitations	Results can only be reported when the SIS is updated with new information from the field
Actions to be Taken	None

***Percentage of living marine resources (LMR) with adequate population assessments and forecasts***

This measure tracks the percentage of priority fish stocks and protected species stocks for which adequate assessments are available to determine the scientific basis for supporting and evaluating the impact of living marine resource management actions. To reach this standard, which is defined as “Level III” by the Fisheries and Protected Species Stock Assessment Improvement Plans (SAIPs), assessments must be based on recent quantitative information sufficient to determine current stock status (abundance and mortality) relative to established reference levels and to forecast stock status under different management scenarios. This measure covers the same 230 fish stocks tracked by the FSSI as well as the protected species stocks covered by MMPA and listed under ESA.

Data Source	Stock assessments reports and ESA status reviews
Frequency	Quarterly
Data Storage	NMFS Stock Information System (SIS) and Excel spreadsheet maintained by NMFS’ Office of Protected Resources
Internal Controls	Results will be approved by the NMFS Chief Science Advisor and reported quarterly in a signed memo from the Ecosystem Observations Program Manager to the NMFS Chief Financial Officer and are housed and made available in a database managed by the NMFS Office of Management and Budget; quarterly reporting on performance to NOAA Deputy Under Secretary
Data Limitations	Results can only be reported when the SIS is updated with new information from the field
Actions to be Taken	The existing requirements table is being developed into a working SIS module to house protected species data using technical assistance from NESDIS-NODC.

***Number of protected species designated as threatened, endangered, or depleted with stable or increasing population levels***

This measure tracks progress at achieving partial recovery of endangered, threatened or depleted protected species under the jurisdiction of the National Marine Fisheries Service. These species include those listed as threatened or endangered under the Endangered Species Act (ESA) as well as those marine mammal species listed as “depleted” under the Marine Mammal Protection Act, which includes any listed under ESA. Recovery of threatened, endangered or depleted species can take decades, so while it may not be possible to recover or de-list a species in the near term, progress can be made to stabilize or increase the species population. For some, it is trying to stop a steep decline (right whales, stellar sea lions); for others it is trying to increase their numbers/abundance (Ridley turtles).

Data Source	MMPA stock assessment reports and ESA status reviews
Frequency	Annually
Data Storage	Excel spreadsheet maintained by NMFS’ Office of Protected Resources
Internal Controls	Results are reported quarterly in a signed memo from the Protected Species Program Manager to the NMFS Chief Financial Officer and are housed and made available in a database managed by the NMFS Office of Management and Budget; quarterly reporting on performance to NOAA Deputy Under Secretary
Data Limitations	MMPA stock assessment reports are updated only once a year and ESA status reviews are updated only every one to five years depending on priority and fund availability
Actions to be Taken	The existing requirements table is being developed into a working SIS module to house protected species data using technical assistance from NESDIS-NODC.

**Number of habitat acres restored (annual/cumulative)**

NOAA restores habitat areas lost or degraded as a result of development and other human activities, as well as specific pollution incidents and sources. Activities are geared toward NOAA trust resources found across the marine environment and supportive of anadromous fish species. The intent of this measure is to summarize or project the geographic area over which ecosystem function has been or will be improved as the direct result of habitat restoration efforts.

Data Source	Interim and final progress reports from each project
Frequency	Quarterly
Data Storage	The Restoration Center Database (RCDB)
Internal Controls	Results are reported quarterly in a signed memo from the Habitat Program Manager to the NMFS Chief Financial Officer and are housed and made available in a database managed by the NMFS Office of Management and Budget; quarterly reporting on performance to NOAA Deputy Under Secretary.
Data Limitations	Data is primarily provided by Grantees
Actions to be Taken	None

**Objective 18: Support coastal communities that are environmentally and economically sustainable (NOAA)**

**Annual number of coastal, marine, and Great Lakes ecological characterizations that meet management needs**

Sound management of coastal, Great Lakes, and ocean ecosystems requires scientifically based information on their condition. To provide this information, ecosystem characterizations are: 1) inclusive of the identification of the ecosystem boundaries, spatial extent, and biological, chemical, and physical characteristics that improve understanding of the history, current state, and future condition of ecosystems, cornerstones to ecosystem-based approaches to management; 2) the basis for many coastal and ocean forecasts, assessments, and management plans; and 3) conducted in response to user community demand and priorities, including NOAA management programs, significance of issue, and consequences of management action or inaction. Key parameters for characterizing conditions and developing assessments of their present “health” will be identified with the key indicator being characterizations *that meet management needs* (whether conducted in essential fish habitat, National Marine Sanctuaries, National Estuarine Research Reserves, the Great Lakes, the depths of the oceans, the coastal zone, and coral reef ecosystems, where there are different management needs and associated ecological characterizations).

Data Source	Characterizations focus on ecosystem sites: National Marine Sanctuaries, National Estuarine Research Reserves, coral reef ecosystems, the coastal zone, Great Lakes, essential fish habitat, ecological species units, and unexplored areas.
Frequency	Annually
Data Storage	Metadata from all contributing sources to the measure is maintained by managers for the coastal and marine resources and ecosystem research programs and stored in an Excel database with limited access. The final performance data reported in quarterly and annual performance reports is managed in a secure NOS database for annual milestones and annual and long-term performance measures. Changes to reporting data require approval by the NOS administrator (managed by an e-mail workflow approval system).
Internal Controls	Results are reported quarterly to the Ecosystems Research program (ERP) program manager and NOAA Chief Financial Officers; quarterly reports on performance data are submitted to the NOAA Deputy Under Secretary.
Data Limitations	NOAA focuses on protected areas or areas where NOAA has a clear management mandate. NOAA works to identify key parameters for characterizing their conditions and develop assessments of their present health. NOAA is tracking characterizations from all contributors in this new measure in addition to criteria defining the indicator of what meets management needs for each ecosystem site because characterizations vary temporally and geographically.
Actions to be Taken	None

**Cumulative number of coastal, marine, and Great Lakes issue-based forecasting capabilities developed and used for management**

NOAA’s discrete forecast models allow resource managers to: 1) make decisions based on predicted environmental and socioeconomic impacts related to a particular issue; 2) use issue-based forecasts to predict the impacts of a single ecosystem stressor (e.g., climate change, extreme natural events, pollution, invasive species, and land and resource use) and 3) evaluate the potential options to manage those stressors to fulfill the ultimate goal for resource managers to use NOAA’s forecasts to better manage ecosystem use, condition, and productivity. These forecasts will be based on field and laboratory studies, existing data, and models predicting environmental conditions under different scenarios and will have capabilities specific to a geographic area and be counted for each ecosystem as they become operational. For

example, harmful algal bloom forecasts in the Gulf of Mexico and Gulf of Maine are two separate forecast capabilities and similarly, multiple, distinct forecast capabilities could be counted within a single ecosystem (i.e., harmful algal blooms, pink shrimp harvest, and hypoxia –all in the Gulf of Mexico).

Data Source	Ecosystem Research program components that produce forecasting capabilities [(National Ocean Service's (NOS) National Centers for Coastal Ocean Science (NCCOS) and the Oceans and Human Health Initiative; three programs of NOAA's Oceanic and Atmospheric Research (OAR) Sea Grant, Atlantic Oceanographic and Meteorological Laboratory (AOML, in part), and Great Lakes Environmental Research Laboratory (GLERL)] .
Frequency	Annually
Data Storage	Metadata from all contributing sources to the measure is managed by the Ecosystem Research program manager and stored in an Excel spreadsheet with limited access. The final performance data reported in quarterly and annual performance reports is managed in a secure NOS database for annual milestones and annual and longterm performance measures. Changes to reporting data require approval by the NOS Administrator (managed by an e-mail workflow approval system).
Internal Controls	Results are reported quarterly to the Ecosystems Research Program (ERP) Program Manager and NOAA Chief Financial Officers; quarterly reports on performance data are submitted to the NOAA Deputy Under Secretary.
Data Limitations	Forecasting capabilities under development focus on 1) habitat impacts from different types of human activity, such as land use; 2) recovery of ecosystem function once habitat restoration efforts have been implemented; and 3) NOAA Fisheries models that predict resource sustainability, such as for managed fisheries and protected species.
Actions to be Taken	NOAA will prioritize its efforts in developing new forecast capabilities and facilitating their transition to operational status based on user community priorities, including those for NOAA management, adequacy of data, significance of issue, and consequences of management action/inaction.

**Percentage of tools, technologies, and information services that are used by NOAA partners / customers to improve ecosystem-based management**

This measure tracks NOAA's success in providing tools, technologies, and information services such as those for coastal and marine resource managers that enable progress toward the principles of ecosystem-based management in coastal, marine, and Great Lakes ecosystems. Tracking accessibility and use of tools, technologies, and information by target audiences allows NOAA to expand its most effective programs and products. NOAA partners and customers include Federal, state, local and tribal authorities who make decisions affecting resources in the U.S. coastal zone, and other users impacting the condition of coastal ecosystems (e.g., private industry).

Data Source	NOAA's Line Offices (OAR and NOS) executing the NOAA programs through the Strategic Plan goal/program structure
Frequency	Annually
Data Storage	Each Line Office has an internal secure system for tracking the data contributions.
Internal Controls	Use values will be reported by program offices as X number of tools, technologies, and information services (TTIS) used out of X number of TTIS provided. Each Line Office will report total annual values to a central repository where a single percentage value will be determined and archived in a secure repository. Data is managed in a decentralized system by contributing line offices with validation and verification on any partner for TTIS to ensure no double counting of data.
Data Limitations	NOAA needs to ensure tracking systems are secure and data is validated and verified.
Actions to be Taken	A secure central NOAA repository for matrixed measures is under development for improved management and tracking purposes.

**Annual number of coastal, marine, and Great Lakes habitat acres acquired or designated for long-term protection**

Habitat restoration (GPRA 1D) and long-term protection (GPRA 1G) are critically needed to help maintain the function of important coastal and marine ecosystems, and NOAA protects and restores key habitats that provide critical ecosystem functions that support the health of endangered or threatened species, essential fish habitat, and provide other societal or economic benefits. NOAA maintains the health of coastal, marine, and Great Lakes habitats by designating and managing important areas for long-term conservation and by providing support to state and local governments to protect additional key habitats by purchasing land from willing sellers and uses this *long-term protection* measure to track the number of acres acquired with NOAA funds by state or local government agencies from willing sellers for long-term protection of important coastal habitats, or the number of acres designated for long-term protection by NOAA or by state partners, such as through the National Marine Sanctuary Program (NMSP) and National Estuarine Research Reserve System (NERRS).

Data Source	The cumulative total represents data on acres from the National Estuarine Research Reserve (NERRS) Program; National Marine Sanctuaries Program; and the Coastal and Estuarine Land Conservation Program.
Frequency	Annually by each program manager
Data Storage	Metadata from all contributing sources to the measure is managed by the Coastal and Marine Resources Program Manager and stored in an Excel spreadsheet with limited access. The final performance data reported annually in performance reports is managed in a secure NOS database for annual milestones and annual and long-term performance measures. Changes to reporting data require approval by the NOS administrator (managed by an e-mail workflow approval system).
Internal Controls	Results are reported annually to the contributing NOAA program (Coastal and Marine Resources Program (CMRP) and NOAA Chief Financial Officers for approval; monthly reports on performance data are submitted to the NOAA Deputy Under Secretary.
Data Limitations	The goal for the long-term protection indicator is variable, as the yearly target can vary from hundreds to thousands of acres

	each year. For example, the initial designation or acquisition for a new reserve or sanctuary may add hundreds of thousands of acres in one year, while in other years acquisition may result in several hundred or thousand acres protected. Other limitations are the timeliness of reporting by grant recipients, accuracy of conversion from hectares to acres for some data, and the time delay between funding and completion.
Actions to be Taken	Since this measure does not capture all NOAA's activities to protect habitat, NOAA plans to expand the measure in FY 2008 to capture the CZM program contributions. NOAA is looking at the feasibility of further harmonizing methodologies used among contributing program components.

**Percentage of U.S. coastal states and territories demonstrating 20% or more annual improvement in resilience capacity to weather and climate hazards (%/yr.)**

This new measure replaces "Cumulative Percentage of U.S. Shoreline and Inland Areas that Have Improved Ability to Reduce Coastal Hazard Impacts" to accurately measure a range of contributions to address coastal community risk, vulnerability, and resilience to coastal hazards. This replacement measure surpasses its predecessor by broadly measuring

NOAA's ability to quantify its contributions to this important goal across NOAA's coastal programs, measuring how NOAA is improving the nation's capacity for resilience to hazards and is contributing significantly to NOAA's efforts to improve integration of its coastal programs, and expanding beyond the three coastal integration programs providing inputs to the measure (CSC, OCRM, and Sea Grant).

Data Source	National Ocean Service (NOS) Coastal Services Center (CSC), and Office of Ocean and Coastal Resource Management (OCRM) Oceanic and Atmospheric Research (OAR) National Sea Grant College Program (NSGP).
Frequency	Annually
Data Storage	NOS and OAR will collect information, conduct assessments, and store data.
Internal Controls	A new Coastal Resilience Report Card assembles and tracks data to create a cohesive performance audit to track coordinated results at state and local levels. An annual progress calculation in the demonstration phase will translate indicator data into statistically valid annual improvement percentages. The annual progress calculation is the formula for determining whether or not a coastal state meets the 20% improvement target. The current draft calculation defines improvement as either 1) the percentage of a state's coastal jurisdictions pursuing successful resilience efforts or 2) the percentage of a state's coastal population impacted by successful resilience efforts. The 20% improvement target was an appropriately ambitious goal. Assessment methodologies will be peer reviewed for validation and verification performance by the NOAA Deputy Under Secretary quarterly and by the Department of Commerce through periodic audits.
Data Limitations	NOAA established an accurate performance baseline in FY 2010 for the measure's permanent data collection and validation and verification processes. An advisory group was established to provide customer input on collection and validation processes to encourage effective use of existing data sources and survey mechanisms where possible and to avoid burdensome reporting. NOAA's social science expertise means the potential use of proxy data sources, customer survey feedback, and statistical sampling techniques are scientifically grounded and statistically defensible. Based on results from NOAA supported resilience projects and activities, it is estimated that 8 of the 35 coastal states and territories meet the preliminary 20% resilience improvement target. This baseline estimate was adjusted for FY 2010 to account for: 1) revisions to the resilience improvement calculation and/or 2) an assessment of results in coastal states.
Actions to be Taken	In FY2009, NOAA used this pilot measure to track performance of a relatively small number of targeted activities. NOAA worked to establish a NOAA-wide baseline from which to set future goals and targets and to further investigate and define data collection methods. The NOAA team will engage state and local partners to help implement and evaluate the pilot resilience measure, pilot data collection and verification requirements, and develop a verifiable long-term process. Changes made during the FY 2009 were incorporated into NOAA's Annual Performance Plan as part of the FY 2010 President's Budget.

**Hydrographic survey backlog within navigationally significant areas (sq. nautl miles surveyed / year)**

NOAA conducts hydrographic surveys to determine the depths and configurations of the bottoms of water bodies, primarily for U.S. waters significant for navigation. This activity includes the detection, location, and identification of wrecks and obstructions with side scan and multi-beam sonar technology and the Global Positioning System (GPS). NOAA uses the data to produce traditional paper, raster, and electronic navigational charts for safe and efficient navigation, and in addition to the commercial shipping industry, other user communities that benefit include recreational boaters, the commercial fishing industry, port authorities, coastal zone managers, and emergency response planners.

Data Source	Progress reports on data collected from hydrographic survey platforms
Frequency	Monthly
Data Storage	National Ocean Service maintains hydrographic survey performance data at NOAA's Hydrographic Surveys Division.
Internal Controls	National Ocean Service applies its established verification and validation methods. The measure has a +/- 50 square nautical mile variance. Targets are set annually based on resources available; monthly reports on performance to NOAA Deputy Under Secretary.
Data Limitations	NOAA-owned ships and contractor survey assets can be affected by changes in vessel availability or condition. Weather can also affect scheduled surveys.

Actions to be Taken	National Ocean Service maintains hydrographic survey performance data at NOAA's Hydrographic Surveys Division.
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**Percentage of U.S. counties rated as fully enabled or substantially enabled with accurate positioning capacity**

This measure tracks progress of NOAA's Geodesy program in facilitating the capacity of state and local governments and the private sector to utilize accurate positioning information, and NOAA will track county level use of its Online Position User Service (OPUS), submitted accepted bluebook data, county scorecard submissions, and identification of county representatives and State Advisors/Coordinators to determine how well state and local governments and the private sector are enabled with accurate positioning capacity. The level of capacity varies across the nation, and this variation is measured as deficient, substantially enabled, and fully enabled. Deficient capacity to conduct accurate positioning indicates that the county has not demonstrated it has the NOAA-enabled infrastructure, tools, and local capacity needed for accurate positioning, and substantially enabled capacity to conduct accurate positioning indicates the county has demonstrated it has the NOAA-enabled infrastructure, tools, and local capacity needed for accurate positioning, while fully enabled capacity indicates the county has validated NOAA-enabled infrastructure, tools, and local capacity needed for accurate positioning.

Data Source	NOAA's Online Position User Service (OPUS)
Frequency	Quarterly
Data Storage	Automated database at National Ocean Service
Internal Controls	NOAA will validate a county's capacity for local positioning through direct coordination with localities, such as OPUS project acceptance by NOAA. By assessing the user needs of county surveyors, counties, and their associations through successive limited distributions of a county scorecard, NOAA will validate that the geodesy program is meeting local positioning needs; quarterly reporting on performance to NOAA Deputy Under Secretary.
Data Limitations	OPUS customer data is limited and will be expanded through Paperwork Reduction Act-approved surveys of customers.
Actions to be Taken	None

## THEME 4: CUSTOMER SERVICE

**Strategic Goal: Create a culture of outstanding communication and services to our internal and external customers**

While funding has been allotted to the following objectives, measures have not yet been developed for them that appear in this PAR.

- **Objective 19: Provide streamlined services and single point of contact assistance to customers through better interaction and communication utilizing CommerceConnect, partnerships, branding and other means of stakeholder involvement (DM)**
- **Objective 20: Promote information access and transparency through technology, understanding climate requirements, and creating new data products and services that deliver added value to customers (DM)**
- **Objective 21: Provide a high level of customer service to our internal and external customers through effective and efficient Department functions with empowered employees (DM)**

## THEME 4: ORGANIZATIONAL EXCELLENCE

**Strategic Goal: Create a high performing organization with integrated, efficient and effective service delivery**

**Objective 22: Strengthen financial and non-financial internal controls to maximize program efficiency, ensure compliance with statute and regulation, and prevent waste, fraud and abuse of government resources (DM, OIG)**

**Provide accurate and timely financial information and conform to federal standards, laws, and regulations governing accounting and financial management**

This measure tracks whether the Department provides accurate and timely financial information and that no significant deficiencies (i.e., deficiencies in the design or operation of internal controls) remain unaddressed. To determine if financial information is being provided in a timely and accurate manner, the Department will assess whether those individuals who can best use the information are receiving it within timeframes that render it relevant and useful in their day-to-day decisions.

Data Source	Consolidated financial statements and OIG reports
Frequency	Annual
Data Storage	Bureau or departmental financial systems
Internal Controls	OIG audits
Data Limitations	None
Actions to be Taken	Continue to comply with FFMA

**Effectively use competitiveness sourcing management**

This measure tracks the Department's success in competing commercial activities in accordance with the Federal Activities Inventory Reform (FAIR) Act, requiring all federal agencies to provide OMB with a timely inventory of the activities performed by government employees that could be carried out by commercial sources. The Department developed an annual reporting process that meets this requirement.

Data Source	FAIR Act inventory and competitive sourcing management plan
Frequency	Annual
Data Storage	DM chronology files
Internal Controls	Executive Secretariat
Data Limitations	None
Actions to be Taken	Request updates quarterly

- **Percentage of OIG recommendations accepted by Departmental and bureau management**
- **Dollar value of financial benefit identified by the OIG**

These two measures reflect the quality of OIG's work. This first measure tracks OIG's effectiveness in offering useful, practical recommendations for improvements, that being the extent to which they are accepted by DM. The second measure tracks the dollar return on investment. Financial benefits include: (1) questioned costs agreed to by management; (2) funds put to better use; and (3) administrative, civil, and criminal recoveries.

Data Source	OIG audit and inspection process
Frequency	As conducted
Data Storage	OIG files
Internal Controls	OIG review
Data Limitations	None
Actions to be Taken	Continue collecting the data

**Percentage of criminal and civil matters that are accepted for prosecution**

OIG investigative work identifies waste, fraud, and abuse activities that may be referred for civil or criminal prosecution or for administrative action by the Department. Some allegations that are investigated are deemed unsubstantiated with no further action taken. Currently, the percentage of investigative work resulting in civil or criminal referrals accepted for prosecution is one reflection of OIG investigative work.

Data Source	Investigative Case Data System
Frequency	As conducted
Data Storage	OIG database
Internal Controls	Investigative review process
Data Limitations	None

Actions to be Taken	To be replaced by a measure that will reflect the timeliness of all investigative work
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**Objective 23: Reengineer key business processes to increase efficiencies, manage risk, and strengthen effectiveness (DM)**

**Obligate funds through performance-based contracting (% of eligible service contracting \$)**

This measure tracks the extent to which the Department obligates funds through performance-based contracting, a method of procurement in which the government defines the results it is seeking rather than the process by which those results are to be attained. Via performance-based contracting, the government also defines the standards against which contractor performance will be measured and identifies the incentives that may be used.

Data Source	Commerce procurement data system
Frequency	Annual
Data Storage	Commerce procurement data system
Internal Controls	Supervisory audit
Data Limitations	None
Actions to be Taken	None

**Objective 24: Create and IT enterprise architecture that supports mission-critical business and programmatic requirements, including addressing cyber security threats (DM)**

**Improve the management of information technology**

This measure tracks the extent to which the Department properly manages its information technology. The Department's significant annual investment in information technology (IT) requires careful management and monitoring as part of the overall program to effectively manage IT resources to meet the mission needs of the Department and to fulfill its obligation to the taxpayer. Through the use of Earned Value Management and Operational Analysis, systems in the development and/or operational phases are monitored to ensure the required functionality is delivered on the schedule and at the cost projected. Program offices regularly report on the progress and status of their efforts against the cost, schedule, and performance goals, a process that provides early warning signals for corrective actions. Where needed, program managers must develop and implement corrective actions to meet the program goals. The successful implementation of each program critical to the Department's missions depends in some way on the adequacy and security of the IT systems that operate throughout the Department. If security of any of these systems were to be compromised, the effective accomplishment of the Department's mission would be in jeopardy. To ensure that these systems are adequately protected (and the Nation reaps the benefits of the Department's work), certification and accreditation requirements have been established. Certification represents the complete testing of all management, operational, and technical controls that protect a system. These controls are documented in the security plan. By approving the plan, the system owner warrants that the controls provide adequate protection for the system. Certification verifies the adequacy of these controls and also validates that the controls are implemented and functioning effectively. Accreditation is the senior program official's acknowledgement of the risk of operating the system. It provides official approval to run the system in the operational environment. Recertification and reaccreditation follow updates of risk assessments and security plans every three years or upon major system modification.

Data Source	Bureau IT offices
Frequency	Annual
Data Storage	Bureau IT offices, bureau files, and DM CIO files
Internal Controls	Departmental and outside reviews by GAO, OMB, contractors, IT research organizations, and various universities
Data Limitations	None
Actions to be Taken	Review bureau processes to assess need for action; review security certification and accreditation packages for completeness and conformance with NIST SP 800-53

**THEME 6: WORKFORCE EXCELLENCE**



**Strategic Goal: Develop and support a diverse, highly qualified workforce with the right skills in the right job to carry out the mission**

**Objective 25: Recruit, develop and retain a high-performing, diverse workforce with the critical skills necessary for mission success including growing the next generation of scientists and engineers (DM)**

**Acquire and maintain diverse and highly qualified staff in mission-critical occupations**

This measure represents a combination of indicators focusing on strategic recruitment, training and development, and the Department's efforts to achieve and maintain a diverse workforce. These indicators permit a comprehensive assessment of the Department's efforts to strategically manage its human capital. Such an assessment is critical to ensure that each hire brings the necessary skill sets to carry out the Department's mission.

Data Source	Inventory transmittal letters; Department plan for strategic employee training and development; National Finance Center automated reports
Frequency	Annual
Data Storage	Office chronology files, OHRM, bureaus
Internal Controls	Executive Secretariat
Data Limitations	None
Actions to be Taken	Measure trends over time, such as number of days to fill jobs

While funding has been allotted to the following objectives, measures have not yet been developed for them that appear in this PAR.

- **Objective 26: Create the best led Department in federal government by focusing on leadership development, accountability and succession planning (DM)**
- **Objective 27: Provide an environment that empowers employees and creates a productive and safe workforce (DM)**